STS Adult Cardiac Surgery Database Data Specifications

Version 2.81

This document current as of: 3/28/2014 4:22:29 PM

Note: - **ALL fields defined in these specifications with "Core: Yes" are to be collected by all sites.**

- **A data record must be created for each admission.**

- **Fields indicated with a gray background are no longer being collected.**

STS Adult Cardiac Surgery Database   Version: 2.81

Long Name: Software Vendor Identifier	*SeqNo:* 5
Short Name: **VendorID**	*Core:* Yes
Section Name: Administrative	*Harvest:* Yes

DBTableName AdultData

Definition: Name (assigned by STS) given to identify software vendor (up to 8 characters). Vendors should use standard name identification across sites. Changes to Vendor Name Identification must be approved by the STS.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	Automatic
ParentHarvestCodes:			

Long Name: Software Version	*SeqNo:* 10
Short Name: **SoftVrsn**	*Core:* Yes
Section Name: Administrative	*Harvest:* Yes

DBTableName AdultData

Definition: Vendor's software product name and version number identifying the software which created this record. Vendor controls the value in this field. Version passing certification/harvest testing will be noted at warehouse.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	Automatic
ParentHarvestCodes:			

Long Name:	STS Data Version	*SeqNo:*	15
Short Name:	**DataVrsn**	*Core:*	Yes
Section Name:	Administrative	*Harvest:*	Yes

DBTableName AdultData

Definition: Version number of the STS Data Specifications/Dictionary, to which each record conforms. It will identify which fields should have data, and what are the valid data for each field. This must be entered into the record automatically by the software.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	Automatic
ParentHarvestCodes:			

Long Name:	On-Demand Files Version Number	*SeqNo:*	20
Short Name:	**OnDemandVrsn**	*Core:*	Yes
Section Name:	Administrative	*Harvest:*	Yes

DBTableName AdultData

Definition: The version number of the On-Demand lists in use at the time this data record was created or edited. The value is inserted into the record at the time the record is created or is modified by the user. The version numbers will be specified by the STS.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	Automatic
ParentHarvestCodes:			

Long Name:	Participant ID	*SeqNo:*	25
Short Name:	**ParticID**	*Core:*	Yes
Section Name:	Administrative	*Harvest:*	Yes

DBTableName AdultData

Definition: Participant ID is a unique number assigned to each database participant by the STS. A database participant is defined as one entity that signs a Participation Agreement with the STS, submits one data file to the harvest, and gets back one report on their data. The participant ID must be entered into each record.

Each participant's data if submitted to harvest must be in one data file. If one participant keeps their data in more than one file (e.g. at two sites), then the participant must combine them back into one file for harvest submission.

If two or more participants share a single purchased software, and enter cases into one database, then the data must be extracted into two different files, one for each participant ID, with each record having the correct participant ID number.

LowValue:	10000	*UsualRangeLow:*	
HighValue:	39999	*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text - Length exactly 5
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User or Automatic
ParentHarvestCodes:			

Long Name:	Record ID	*SeqNo:*	30
Short Name:	**RecordID**	*Core:*	Yes
Section Name:	Administrative	*Harvest:*	Yes

DBTableName AdultData

Definition: An arbitrary, unique value generated by the software that permanently identifies each record in the participant's database (note that unlike the PatID value, this does not identify the individual patient). The value of the identifier is a combination of a code assigned to the software developer by the STS, and a value generated by the software to create a unique value. Once assigned to a record, this value can never be changed or reused. The data warehouse will use this value to communicate issues about individual records with the participant. It may also be used by the data warehouse to link this record to other clinical data.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	Automatic
ParentHarvestCodes:			

Long Name:	Cost Link	*SeqNo:*	35
Short Name:	**CostLink**	*Core:*	Yes
Section Name:	Administrative	*Harvest:*	Optional

DBTableName AdultData

Definition: A participant specified alpha-numeric code that can be used to link this record's clinical data with the participant's cost information for this patient admission. This information may be used in the future to perform procedure cost analysis (for which the actual cost data would have to be harvested separately). The value in this field must not be the patient's Medical Record Number, Social Security Number or any other patient identifying value.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Patient ID	*SeqNo:*	40
Short Name:	**PatID**	*Core:*	Yes
Section Name:	Administrative	*Harvest:*	Yes

DBTableName AdultData

Definition: An arbitrary value (not a recognizable ID like Social Security Number or Medical Record Number) that uniquely and permanently identifies each patient. The value of the identifier is a combination of a code assigned to the software developer by the STS, and a value generated by the software to create a unique value. Once assigned to a patient, this can never be changed or reused. If a patient is admitted to the hospital more than once, each record for that patient will have the same value in this field.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	Automatic
ParentHarvestCodes:			

Long Name:	Patient Participating In STS-Related Clinical Trial	*SeqNo:*	45
Short Name:	**ClinTrial**	*Core:*	Yes
Section Name:	Administrative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate which, if any, STS-related clinical trial in which the patient is participating. The STS will assign a code to each clinical trial as they begin collecting data.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	None
2	Trial 1
3	Trial 2
4	Trial 3
5	Trial 4
6	Trial 5
7	Trial 6

Long Name:	Patient Participating In STS-Related Clinical Trial - Patient ID	*SeqNo:*	46
Short Name:	**ClinTrialPatID**	*Core:*	Yes
Section Name:	Administrative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the patient identifier used to identify the patient in the clinical trial.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	Patient Participating In STS-Related Clinical Trial	*Format:*	Text
ParentShortName:	ClinTrial	*DataLength:*	
ParentValue:	<>"None" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>1 And Is Not Missing

Long Name:	Patient Last Name	*SeqNo:*	50
Short Name:	**PatLName**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Optional

DBTableName AdultData

Definition: Indicate the patient's last name documented in the medical record. This field should be collected in compliance with state/local privacy laws.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Patient First Name	*SeqNo:*	55
Short Name:	**PatFName**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Optional

DBTableName AdultData

Definition: Indicate the patient's first name documented in the medical record. This field should be collected in compliance with state/local privacy laws.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Patient Middle Name	*SeqNo:*	60
Short Name:	**PatMName**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Optional

DBTableName AdultData

Definition: Indicate the patient's middle name as documented in the medical record.
Leave "blank" if no middle name. This field should be collected in compliance with state/local privacy laws.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Date of Birth	*SeqNo:*	65
Short Name:	**DOB**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Optional

DBTableName AdultData

Definition: Indicate the patient's date of birth using 4-digit format for year. This field should be collected in compliance with state/local privacy laws.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Date mm/dd/yyyy
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Patient Age	*SeqNo:*	70
Short Name:	**Age**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the patient's age in years, at time of surgery. This should be calculated from the date of birth and the date of surgery, according to the convention used in the USA (the number of birthdate anniversaries reached by the date of surgery). If age is less than 18, the data record will be accepted into the database, but will not be included in the national analysis and report.

LowValue:	1	*UsualRangeLow:*	18
HighValue:	110	*UsualRangeHigh:*	100
Parent Long Name:		*Format:*	Integer
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User or Calculated
ParentHarvestCodes:			

Long Name:	Sex	*SeqNo:*	75
Short Name:	**Gender**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the patient's sex at birth as either male or female.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Male
2	Female

Long Name:	Social Security #	*SeqNo:*	80
Short Name:	**SSN**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Optional

DBTableName AdultData

Definition: Indicate the patient's Social Security Number (SSN). Although this is the Social Security Number in the USA, other countries may have a different National Patient Identifier Number. For example in Canada, this would be the Social Insurance Number. This field should be collected in compliance with state/local privacy laws.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Medical Record Number	*SeqNo:*	85
Short Name:	**MedRecN**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Optional

DBTableName AdultData

Definition: Indicate the patient's medical record number at the hospital where surgery occurred. This field should be collected in compliance with state/local privacy laws.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Patient's Street Address	*SeqNo:*	90
Short Name:	**PatAddr**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Optional

DBTableName AdultData

Definition: Indicate the street address at which the patient resides at time of admission. If patient is homeless, enter "Homeless".

This field should be collected in compliance with state/local privacy laws.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Patient's City	*SeqNo:*	95
Short Name:	**PatCity**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Optional

DBTableName AdultData

Definition: Indicate the city in which the patient resides at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Patient's Region	*SeqNo:*	100
Short Name:	**PatRegion**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the region of the country (i.e., state or province) in which the patient resides at time of admission.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Patient's ZIP Code	*SeqNo:*	105
Short Name:	**PatZIP**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Optional

DBTableName AdultData

Definition: Indicate the ZIP Code of the patient's local residence. Outside the USA, this data may be known by other names such as Postal Code.

This field should be collected in compliance with state/local privacy laws.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Patient's Country	*SeqNo:*	110
Short Name:	**PatCountry**	*Core:*	No
Section Name:	Demographics	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the patient's country of residence at time of admission.

List of countries provided by the United Nations, which is the following URL:
United Nations Statistics Division, 15 April 2009
(http://unstats.un.org/unsd/methods/m49/m49alpha.htm)

This field should be collected in compliance with state/local privacy laws.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	AFGHANISTAN
2	ÅLAND ISLAND
3	ALBANIA
4	ALGERIA
5	AMERICAN SAMOA
6	ANDORRA
7	ANGOLA
8	ANGUILLA
9	ANTARCTICA
10	ANTIGUA AND BARBUDA
11	ARGENTINA
12	ARMENIA
13	ARUBA
14	AUSTRALIA
15	AUSTRIA
16	AZERBAIJAN
17	BAHAMAS
18	BAHRAIN
19	BANGLADESH
20	BARBADOS

21 BELARUS

22 BELGIUM

23 BELIZE

24 BENIN

25 BERMUDA

26 BHUTAN

27 BOLIVIA
    (PLURINATIONAL STATE
    OF)

28 BOSNIA AND
    HERZEGOVINA

29 BOTSWANA

30 BOUVET ISLAND

31 BRAZIL

32 BRITISH INDIAN OCEAN
    TERRITORY

33 BRITISH VIRGIN ISLANDS

34 BRUNEI DARUSSALAM

35 BULGARIA

36 BURKINA FASO

37 BURUNDI

38 CAMBODIA

39 CAMEROON

40 CANADA

41 CAPE VERDE

42 CAYMAN ISLANDS

43 CENTRAL AFRICAN
    REPUBLIC

44 CHAD

45 CHILE

46 CHINA

47 CHRISTMAS ISLAND

48 COCOS (KEELING)
    ISLANDS

49 COLOMBIA

50 COMOROS

51 CONGO

52 COOK ISLANDS

53 COSTA RICA

54 CÔTE D'IVOIRE

55   CROATIA

56   CUBA

57   CYPRUS

58   CZECH REPUBLIC

59   DEMOCRATIC PEOPLE'S
     REPUBLIC OF KOREA

60   DEMOCRATIC REPUBLIC
     OF THE CONGO

61   DENMARK

62   DJIBOUTI

63   DOMINICA

64   DOMINICAN REPUBLIC

65   EAST TIMOR

66   ECUADOR

67   EGYPT

68   EL SALVADOR

69   EQUATORIAL GUINEA

70   ERITREA

71   ESTONIA

72   ETHIOPIA

73   FAEROE ISLANDS

74   FALKLAND ISLANDS
     (MALVINAS)

75   FIJI

76   FINLAND

77   FRANCE

78   FRANCE, METROPOLITAN

79   FRENCH GUIANA

80   FRENCH POLYNESIA

81   FRENCH SOUTHERN
     TERRITORIES

82   GABON

83   GAMBIA

84   GEORGIA

85   GERMANY

86   GHANA

87   GIBRALTAR

88   GREECE

89   GREENLAND

90	GRENADA
91	GUADELOUPE
92	GUAM
93	GUATEMALA
94	GUERNSE
95	GUINEA
96	GUINEA-BISSAU
97	GUYANA
98	HAITI
99	HEARD AND MC DONALD ISLANDS
100	HOLY SEE
101	HONDURAS
102	HONG KONG SPECIAL ADMINISTRATIVE REGION OF CHINA
103	HUNGARY
104	ICELAND
105	INDIA
106	INDONESIA
107	IRAN (ISLAMIC REPUBLIC OF)
108	IRAQ
109	IRELAND
110	ISLE OF MAN
111	ISRAEL
112	ITALY
113	JAMAICA
114	JAPAN
115	JERSEY
116	JORDAN
117	KAZAKHSTAN
118	KENYA
119	KIRIBATI
120	KUWAIT
121	KYRGYZSTAN
122	LAO PEOPLE'S DEMOCRATIC REPUBLIC
123	LATVIA

124	LEBANON
125	LESOTHO
126	LIBERIA
127	LIBYAN ARAB JAMAHIRIYA
128	LIECHTENSTEIN
129	LITHUANIA
130	LUXEMBOURG
131	MACAO SPECIAL ADMINISTRATIVE REGION OF CHINA
132	MADAGASCAR
133	MALAWI
134	MALAYSIA
135	MALDIVES
136	MALI
137	MALTA
138	MARSHALL ISLANDS
139	MARTINIQUE
140	MAURITANIA
141	MAURITIUS
142	MAYOTTE
143	MEXICO
144	MICRONESIA (FEDERATED STATES OF)
145	MONACO
146	MONGOLIA
147	MONTENEGRO
148	MONTSERRAT
149	MOROCCO
150	MOZAMBIQUE
151	MYANMAR
152	NAMIBIA
153	NAURU
154	NEPAL
155	NETHERLANDS
156	NETHERLANDS ANTILLES
157	NEW CALEDONIA
158	NEW ZEALAND

159	NICARAGUA
160	NIGER
161	NIGERIA
162	NIUE
163	NORFOLK ISLAND
164	NORTHERN MARIANA ISLANDS
165	NORWAY
166	OCCUPIED PALESTINIAN TERRITORY
167	OMAN
168	PAKISTAN
169	PALAU
170	PANAMA
171	PAPUA NEW GUINEA
172	PARAGUAY
173	PERU
174	PHILIPPINES
175	PITCAIRN
176	POLAND
177	PORTUGAL
178	PUERTO RICO
179	QATAR
180	REPUBLIC OF KOREA
181	REPUBLIC OF MOLDOVA
182	RÉUNION
183	ROMANIA
184	RUSSIAN FEDERATION
185	RWANDA
186	SAINT HELENA
187	SAINT KITTS AND NEVIS
188	SAINT LUCIA
189	SAINT PIERRE AND MIQUELON
190	SAINT VINCENT AND THE GRENADINES
191	SAINT-BARTHÉLEM
192	SAINT-MARTIN (FRENCH PART)

193	SAMOA
194	SAN MARINO
195	SAO TOME AND PRINCIPE
196	SAUDI ARABIA
197	SENEGAL
198	SERBIA
199	SEYCHELLES
200	SIERRA LEONE
201	SINGAPORE
202	SLOVAKIA
203	SLOVENIA
204	SOLOMON ISLANDS
205	SOMALIA
206	SOUTH AFRICA
207	SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS
208	SPAIN
209	SRI LANKA
210	SUDAN
211	SURINAME
212	SVALBARD AND JAN MAYEN ISLANDS
213	SWAZILAND
214	SWEDEN
215	SWITZERLAND
216	SYRIAN ARAB REPUBLIC
217	TAIWAN, PROVINCE OF CHINA
218	TAJIKISTAN
219	THAILAND
220	THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA
221	TIMOR-LEST
222	TOGO
223	TOKELAU
224	TONGA
225	TRINIDAD AND TOBAGO
226	TUNISIA

227	TURKEY
228	TURKMENISTAN
229	TURKS AND CAICOS ISLANDS
230	TUVALU
231	UGANDA
232	UKRAINE
233	UNITED ARAB EMIRATES
234	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
235	UNITED REPUBLIC OF TANZANIA
236	UNITED STATES MINOR OUTLYING ISLANDS
237	UNITED STATES OF AMERICA
238	UNITED STATES VIRGIN ISLANDS
239	URUGUAY
240	UZBEKISTAN
241	VANUATU
242	VENEZUELA (BOLIVARIAN REPUBLIC OF)
243	VIET NAM
244	WALLIS AND FUTUNA ISLANDS
245	WESTERN SAHARA
246	YEMEN
247	YUGOSLAVIA
248	ZAIRE
249	ZAMBIA
250	ZIMBABWE
999	OTHER

Long Name: Patient's Country

Short Name: **PatientCountry**

Section Name: Demographics

SeqNo: 115

Core: Yes

Harvest: Optional

DBTableName   AdultData

Definition: Indicate the patient's country of residence at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue:

UsualRangeLow:

HighValue:

UsualRangeHigh:

Parent Long Name:

Format: Text (categorical values specified by STS)

ParentShortName:

DataLength:

ParentValue:

Data Source: User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
237	United States Of America
1	Afghanistan
14	Australia
17	Bahamas
25	Bermuda
31	Brazil
40	Canada
88	Greece
92	Guam
93	Guatemala
105	India
109	Ireland
111	Israel
112	Italy
113	Jamaica
114	Japan
116	Jordan
143	Mexico
166	State of Palestine
173	Peru
176	Poland
178	Puerto Rico
184	Russian Federation

300	Scotland
215	Switzerland
225	Trinidad And Tobago
227	Turkey
231	Uganda
233	United Arab Emirates
234	United Kingdom Of Great Britain And Northern Ireland
235	United Republic Of Tanzania
236	United States Minor Outlying Islands
238	United States Virgin Islands
242	Venezuela (Bolivarian Republic Of)
246	Yemen
2	Åland Island
999	Other

Long Name: Permanent Address

SeqNo: 120

Short Name: **PermAddr**

Core: Yes

Section Name: Demographics

Harvest: Yes

DBTableName   AdultData

Definition: Indicate whether the patient considers the given address to be their permanent address.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code: Value:

1   Yes

2   No

3   Unknown

Long Name:	Patient's Permanent Street Address	*SeqNo:*	125
Short Name:	**PatPermAddr**	*Core:*	No
Section Name:	Demographics	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the street address at which the patient permanently resides at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Permanent Address		*Format:*	Text
ParentShortName: PermAddr		*DataLength:*	
ParentValue: = "No"		*Data Source:* User	

ParentHarvestCodes: 2

Long Name:	Patient's Permanent Address City	*SeqNo:*	130
Short Name:	**PatPermCity**	*Core:*	No
Section Name:	Demographics	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the city in which the patient permanently resides at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Permanent Address		*Format:*	Text
ParentShortName: PermAddr		*DataLength:*	
ParentValue: = "No"		*Data Source:* User	

ParentHarvestCodes: 2

Long Name:	Patient's Permanent Address Region	*SeqNo:*	135
Short Name:	**PatPermRegion**	*Core:*	No
Section Name:	Demographics	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the region of the country (i.e., state or province) in which the patient permanently resides at time of admission.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Permanent Address	*Format:*	Text
ParentShortName:	PermAddr	*DataLength:*	
ParentValue:	= "No"	*Data Source:*	User
ParentHarvestCodes:	2		

Long Name:	Patient's Permanent Address ZIP Code	*SeqNo:*	140
Short Name:	**PatPermZIP**	*Core:*	No
Section Name:	Demographics	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the ZIP Code of the patient's permanent residence. Outside the USA, this data may be known by other names such as Postal Code (needing 6 characters). Software should allow sites to collect at least up to 10 characters to allow for Zip+4 values.

This field should be collected in compliance with state/local privacy laws.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Permanent Address	*Format:*	Text
ParentShortName:	PermAddr	*DataLength:*	
ParentValue:	= "No"	*Data Source:*	User
ParentHarvestCodes:	2		

Long Name:	Patient's Permanent Address Country	*SeqNo:*	145
Short Name:	**PatPermCountry**	*Core:*	No
Section Name:	Demographics	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the patient's country of permanent residence at time of admission.

List of countries provided by the United Nations, which is the following URL:
United Nations Statistics Division, 15 April 2009
(http://unstats.un.org/unsd/methods/m49/m49alpha.htm).

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Permanent Address	*Format:*	Text (categorical values specified by STS)
ParentShortName: PermAddr	*DataLength:*	
ParentValue: = "No"	*Data Source:* User	

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	AFGHANISTAN
2	ÅLAND ISLAND
3	ALBANIA
4	ALGERIA
5	AMERICAN SAMOA
6	ANDORRA
7	ANGOLA
8	ANGUILLA
9	ANTARCTICA
10	ANTIGUA AND BARBUDA
11	ARGENTINA
12	ARMENIA
13	ARUBA
14	AUSTRALIA
15	AUSTRIA
16	AZERBAIJAN
17	BAHAMAS
18	BAHRAIN
19	BANGLADESH
20	BARBADOS
21	BELARUS
22	BELGIUM

23   BELIZE

24   BENIN

25   BERMUDA

26   BHUTAN

27   BOLIVIA (PLURINATIONAL STATE OF)

28   BOSNIA AND HERZEGOVINA

29   BOTSWANA

30   BOUVET ISLAND

31   BRAZIL

32   BRITISH INDIAN OCEAN TERRITORY

33   BRITISH VIRGIN ISLANDS

34   BRUNEI DARUSSALAM

35   BULGARIA

36   BURKINA FASO

37   BURUNDI

38   CAMBODIA

39   CAMEROON

40   CANADA

41   CAPE VERDE

42   CAYMAN ISLANDS

43   CENTRAL AFRICAN REPUBLIC

44   CHAD

45   CHILE

46   CHINA

47   CHRISTMAS ISLAND

48   COCOS (KEELING) ISLANDS

49   COLOMBIA

50   COMOROS

51   CONGO

52   COOK ISLANDS

53   COSTA RICA

54   CÔTE D'IVOIRE

55   CROATIA

56   CUBA

57   CYPRUS

58   CZECH REPUBLIC

59   DEMOCRATIC PEOPLE'S
      REPUBLIC OF KOREA

60   DEMOCRATIC REPUBLIC
      OF THE CONGO

61   DENMARK

62   DJIBOUTI

63   DOMINICA

64   DOMINICAN REPUBLIC

65   EAST TIMOR

66   ECUADOR

67   EGYPT

68   EL SALVADOR

69   EQUATORIAL GUINEA

70   ERITREA

71   ESTONIA

72   ETHIOPIA

73   FAEROE ISLANDS

74   FALKLAND ISLANDS
      (MALVINAS)

75   FIJI

76   FINLAND

77   FRANCE

78   FRANCE, METROPOLITAN

79   FRENCH GUIANA

80   FRENCH POLYNESIA

81   FRENCH SOUTHERN
      TERRITORIES

82   GABON

83   GAMBIA

84   GEORGIA

85   GERMANY

86   GHANA

87   GIBRALTAR

88   GREECE

89   GREENLAND

90   GRENADA

91   GUADELOUPE

92	GUAM
93	GUATEMALA
94	GUERNSE
95	GUINEA
96	GUINEA-BISSAU
97	GUYANA
98	HAITI
99	HEARD AND MC DONALD ISLANDS
100	HOLY SEE
101	HONDURAS
102	HONG KONG SPECIAL ADMINISTRATIVE REGION OF CHINA
103	HUNGARY
104	ICELAND
105	INDIA
106	INDONESIA
107	IRAN (ISLAMIC REPUBLIC OF)
108	IRAQ
109	IRELAND
110	ISLE OF MAN
111	ISRAEL
112	ITALY
113	JAMAICA
114	JAPAN
115	JERSEY
116	JORDAN
117	KAZAKHSTAN
118	KENYA
119	KIRIBATI
120	KUWAIT
121	KYRGYZSTAN
122	LAO PEOPLE'S DEMOCRATIC REPUBLIC
123	LATVIA
124	LEBANON
125	LESOTHO

126   LIBERIA

127   LIBYAN ARAB
       JAMAHIRIYA

128   LIECHTENSTEIN

129   LITHUANIA

130   LUXEMBOURG

131   MACAO SPECIAL
       ADMINISTRATIVE
       REGION OF CHINA

132   MADAGASCAR

133   MALAWI

134   MALAYSIA

135   MALDIVES

136   MALI

137   MALTA

138   MARSHALL ISLANDS

139   MARTINIQUE

140   MAURITANIA

141   MAURITIUS

142   MAYOTTE

143   MEXICO

144   MICRONESIA
       (FEDERATED STATES OF)

145   MONACO

146   MONGOLIA

147   MONTENEGRO

148   MONTSERRAT

149   MOROCCO

150   MOZAMBIQUE

151   MYANMAR

152   NAMIBIA

153   NAURU

154   NEPAL

155   NETHERLANDS

156   NETHERLANDS ANTILLES

157   NEW CALEDONIA

158   NEW ZEALAND

159   NICARAGUA

160   NIGER

161	NIGERIA
162	NIUE
163	NORFOLK ISLAND
164	NORTHERN MARIANA ISLANDS
165	NORWAY
166	OCCUPIED PALESTINIAN TERRITORY
167	OMAN
168	PAKISTAN
169	PALAU
170	PANAMA
171	PAPUA NEW GUINEA
172	PARAGUAY
173	PERU
174	PHILIPPINES
175	PITCAIRN
176	POLAND
177	PORTUGAL
178	PUERTO RICO
179	QATAR
180	REPUBLIC OF KOREA
181	REPUBLIC OF MOLDOVA
182	RÉUNION
183	ROMANIA
184	RUSSIAN FEDERATION
185	RWANDA
186	SAINT HELENA
187	SAINT KITTS AND NEVIS
188	SAINT LUCIA
189	SAINT PIERRE AND MIQUELON
190	SAINT VINCENT AND THE GRENADINES
191	SAINT-BARTHÉLEM
192	SAINT-MARTIN (FRENCH PART)
193	SAMOA
194	SAN MARINO

195	SAO TOME AND PRINCIPE
196	SAUDI ARABIA
197	SENEGAL
198	SERBIA
199	SEYCHELLES
200	SIERRA LEONE
201	SINGAPORE
202	SLOVAKIA
203	SLOVENIA
204	SOLOMON ISLANDS
205	SOMALIA
206	SOUTH AFRICA
207	SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS
208	SPAIN
209	SRI LANKA
210	SUDAN
211	SURINAME
212	SVALBARD AND JAN MAYEN ISLANDS
213	SWAZILAND
214	SWEDEN
215	SWITZERLAND
216	SYRIAN ARAB REPUBLIC
217	TAIWAN, PROVINCE OF CHINA
218	TAJIKISTAN
219	THAILAND
220	THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA
221	TIMOR-LEST
222	TOGO
223	TOKELAU
224	TONGA
225	TRINIDAD AND TOBAGO
226	TUNISIA
227	TURKEY
228	TURKMENISTAN

229	TURKS AND CAICOS ISLANDS
230	TUVALU
231	UGANDA
232	UKRAINE
233	UNITED ARAB EMIRATES
234	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
235	UNITED REPUBLIC OF TANZANIA
236	UNITED STATES MINOR OUTLYING ISLANDS
237	UNITED STATES OF AMERICA
238	UNITED STATES VIRGIN ISLANDS
239	URUGUAY
240	UZBEKISTAN
241	VANUATU
242	VENEZUELA (BOLIVARIAN REPUBLIC OF)
243	VIET NAM
244	WALLIS AND FUTUNA ISLANDS
245	WESTERN SAHARA
246	YEMEN
247	YUGOSLAVIA
248	ZAIRE
249	ZAMBIA
250	ZIMBABWE
999	OTHER

Long Name:	Race Documented	*SeqNo:*	150
Short Name:	**RaceDocumented**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether race is documented

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Patient declined to disclose

Long Name:	Race - White	*SeqNo:*	155
Short Name:	**RaceCaucasian**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes White. "White" refers to a person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicated their race(s) as "White" or reported entries such as Irish, German, Italian, Lebanese, Arab, Moroccan, or Caucasian. [The 2010 Census Redistricting Data (Public Law 94-171) Summary File]

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Race Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	RaceDocumented	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Race - Black / African American	*SeqNo:*	160
Short Name:	**RaceBlack**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes Black / African American. "Black or African American" refers to a person having origins in any of the Black racial groups of Africa. It includes people who indicated their race(s) as "Black, African Am., or Negro" or reported entries such as African American, Kenyan, Nigerian, or Haitian. [The 2010 Census Redistricting Data (Public Law 94-171) Summary File]

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Race Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName: RaceDocumented	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Race - Asian	*SeqNo:*	165
Short Name:	**RaceAsian**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes Asian. "Asian" refers to a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. It includes people who indicated their race(s) as "Asian" or reported entries such as "Asian Indian", "Chinese", "Filipino", "Korean", "Japanese", "Vietnamese", and "Other Asian" or provided other detailed Asian responses. [The 2010 Census Redistricting Data (Public Law 94-171) Summary File]

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Race Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName: RaceDocumented	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Race - American Indian / Alaskan Native   *SeqNo:*   170

Short Name: **RaceNativeAm**   *Core:*   Yes

Section Name: Demographics   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes American Indian / Alaskan Native. "American Indian or Alaska Native" refers to a person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment. This category includes people who indicated their race(s) as "American Indian or Alaska Native" or reported their enrolled or prin¬cipal tribe, such as Navajo, Blackfeet, Inupiat, Yup'ik, or Central American Indian groups or South American Indian groups. [The 2010 Census Redistricting Data (Public Law 94-171) Summary File]

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Race Documented   *Format:*   Text (categorical values specified by STS)

ParentShortName: RaceDocumented   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

   Harvest Codes:

      Code: Value:

         1   Yes

         2   No

Long Name:	Race - Native Hawaiian / Pacific Islander	*SeqNo:*	175
Short Name:	**RacNativePacific**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes Native Hawaiian / Pacific Islander. "Native Hawaiian or Other Pacific Islander" refers to a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicated their race(s) as "Pacific Islander" or reported entries such as "Native Hawaiian", "Guamanian or Chamorro", "Samoan", and "Other Pacific Islander" or provided other detailed Pacific Islander responses. [The 2010 Census Redistricting Data (Public Law 94-171) Summary File]

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Race Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	RaceDocumented	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Race - Other	*SeqNo:*	180
Short Name:	**RaceOther**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes any other race. "Some Other Race" includes all other responses not included in the White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander race categories described above. [The 2010 Census Redistricting Data (Public Law 94-171) Summary File]

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Race Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	RaceDocumented	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Hispanic or Latino or Spanish Ethnicity	*SeqNo:*	185
Short Name:	**Ethnicity**	*Core:*	Yes
Section Name:	Demographics	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate if the patient is of Hispanic, Latino or Spanish ethnicity as reported by the patient / family. "Hispanic, Latino or Spanish" refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race. [The 2010 Census Redistricting Data (Public Law 94-171) Summary File]

LowValue:		*UsualRangeLow:*			
HighValue:		*UsualRangeHigh:*			
Parent Long Name:			*Format:*	Text (categorical values specified by STS)	
ParentShortName:			*DataLength:*		
ParentValue:			*Data Source:*	User	
ParentHarvestCodes:					

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Not Documented

Long Name:	Referring Card-Cardiologist	*SeqNo:*	195
Short Name:	**RefCard**	*Core:*	No
Section Name:	Demographics	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the referring cardiologist's name.

LowValue:		*UsualRangeLow:*			
HighValue:		*UsualRangeHigh:*			
Parent Long Name:			*Format:*	Text (categorical values specified by User)	
ParentShortName:			*DataLength:*		
ParentValue:			*Data Source:*	User	
ParentHarvestCodes:					

Long Name:	Referring Physician	*SeqNo:*	200
Short Name:	**RefPhys**	*Core:*	No
Section Name:	Demographics	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the primary referring physician's (PCP) name.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by User)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Hospital Name	*SeqNo:*	205
Short Name:	**HospName**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the full name of the facility where the procedure was performed. Values should be full, official hospital names with no abbreviations or variations in spelling for a single hospital. Values should also be in mixed-case.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by User)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Hospital ZIP Code	*SeqNo:*	210
Short Name:	**HospZIP**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the ZIP Code of the hospital. Outside the USA, these data may be known by other names such as Postal Code. This field should be collected in compliance with state/local privacy laws.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Hospital Name	*Format:*	Text (categorical values specified by User)
ParentShortName:	HospName	*DataLength:*	
ParentValue:	Is Not Missing	*Data Source:*	Lookup

ParentHarvestCodes: Is Not Missing

Long Name:	Hospital Region	*SeqNo:*	215
Short Name:	**HospStat**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the region of the country (i.e., state or province) in which the hospital is located.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Hospital Name	*Format:*	Text
ParentShortName:	HospName	*DataLength:*	
ParentValue:	Is Not Missing	*Data Source:*	Lookup

ParentHarvestCodes: Is Not Missing

Long Name:	Hospital National Provider Identifier	*SeqNo:*	220
Short Name:	**HospNPI**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the hospital's National Provider Identifier (NPI). This number, assigned by the Center for Medicare and Medicaid Services (CMS), is used to uniquely identify facilities for Medicare billing purposes.
Non-US participants will have a unique hospital ID number assigned by STS.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Hospital Name		*Format:*	Text (categorical values specified by User)
ParentShortName: HospName		*DataLength:*	
ParentValue: Is Not Missing		*Data Source:* Lookup	

ParentHarvestCodes: Is Not Missing

Long Name:	Payor - Government Health Insurance	*SeqNo:*	225
Short Name:	**PayorGov**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether government insurance was used by the patient to pay for part or all of this admission. Government insurance refers to patients who are covered by government-reimbursed care. This includes Medicare, Medicaid, Military Health Care (e.g. TriCare), State-Specific Plan, and Indian Health Service.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:* User	

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Payor - Government Health Insurance - Medicare	*SeqNo:*	230
Short Name:	**PayorGovMcare**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Medicare.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Payor - Government Health Insurance	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PayorGov	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Health Insurance Claim Number	*SeqNo:*	235
Short Name:	**HICNumber**	*Core:*	No
Section Name:	Hospitalization	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the Health Insurance Claim (HIC) number of the primary beneficiary. This is an 11-digit number that uniquely identifies an individual for a claim.   This field should be collected in compliance with state/local privacy laws.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Payor - Government Health Insurance - Medicare	*Format:*	Text - Length exactly 11
ParentShortName:	PayorGovMcare	*DataLength:*	11
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Payor - Government Health Insurance - Medicare - Fee For Service	*SeqNo:*	240
Short Name:	**PayorGovMcareFFS**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate if patient is covered by Medicare Fee for Service (Medicare Part B).

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Payor - Government Health Insurance - Medicare	*Format:*	Text (categorical values specified by STS)
ParentShortName: PayorGovMcare	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Payor - Government Health Insurance - Medicaid	*SeqNo:*	245
Short Name:	**PayorGovMcaid**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Medicaid.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Payor - Government Health Insurance	*Format:*	Text (categorical values specified by STS)
ParentShortName: PayorGov	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

| *Long Name:* | Payor - Government Health Insurance - Military Health Care | *SeqNo:* | 250 |

Short Name: **PayorGovMil**   *Core:*   Yes

Section Name: Hospitalization   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Military Health Care.

| *LowValue:* | | *UsualRangeLow:* | |
| *HighValue:* | | *UsualRangeHigh:* | |

Parent Long Name: Payor - Government Health Insurance   *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

| *Long Name:* | Payor - Government Health Insurance - State-Specific Plan | *SeqNo:* | 255 |

Short Name: **PayorGovState**   *Core:*   Yes

Section Name: Hospitalization   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included State-Specific Plan (e.g., MI Health, TennCare, Mass).

| *LowValue:* | | *UsualRangeLow:* | |
| *HighValue:* | | *UsualRangeHigh:* | |

Parent Long Name: Payor - Government Health Insurance   *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Payor - Government Health Insurance - Indian Health Service	*SeqNo:*	260
Short Name:	**PayorGovIHS**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Indian Health Service.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Payor - Government Health Insurance	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PayorGov	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Payor - Government Health Insurance - Correctional Facility	*SeqNo:*	265
Short Name:	**PayorGovCor**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included a state or federal correctional facility.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Payor - Government Health Insurance	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PayorGov	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Payor - Government Health Insurance - Other		*SeqNo:*	270
Short Name:	**PayorGovOth**		*Core:*	Yes
Section Name:	Hospitalization		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included some other government plan.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Payor - Government Health Insurance	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PayorGov	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Payor - Commercial Health Insurance		*SeqNo:*	275
Short Name:	**PayorCom**		*Core:*	Yes
Section Name:	Hospitalization		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether commercial insurance was used by the patient to pay for part or all of this admission. Commercial insurance refers to all indemnity (fee-for-service) carriers and Preferred Provider Organizations (PPOs), (e.g., Blue Cross and Blue Shield).

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Payor - Health Maintenance Organization	*SeqNo:*	280
Short Name:	**PayorHMO**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a Health Maintenance Organization (HMO) insurance was used by the patient to pay for part or all of this admission. HMO refers to a Health Maintenance Organization characterized by coverage that provides health care services for members on a pre-paid basis.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Payor - Non-U.S. Insurance	*SeqNo:*	285
Short Name:	**PayorNonUS**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether any non-U.S. insurance was used by the patient to pay for part or all of this admission.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Payor - None / Self	*SeqNo:*	290
Short Name:	**PayorNS**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether no insurance was used by the patient to pay for this admission. None refers to individuals with no or limited health insurance; thus, the individual is the payor regardless of ability to pay. Only mark "None" when "self" or "none" is denoted as the first insurance in the medical record.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Arrival Date	*SeqNo:*	295
Short Name:	**ArrivalDt**	*Core:*	No
Section Name:	Hospitalization	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the date the patient arrived at your facility.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Date mm/dd/yyyy
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Long Name:	Arrival Time	*SeqNo:*	300
Short Name:	**ArrivalTm**	*Core:*	No
Section Name:	Hospitalization	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the time the patient arrived at your facility.

If the patient came to your facility for an elective or outpatient procedure and the time was not documented, code the scheduled time of arrival.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Time in 24-hour hh:mm format
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Date of Admission	*SeqNo:*	305
Short Name:	**AdmitDt**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Date of Admission. For those patients who originally enter the hospital in an out-patient capacity (i.e., catheterization), the admit date is the date the patient's status changes to in-patient.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Date mm/dd/yyyy
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Date of Surgery	*SeqNo:*	310
Short Name:	**SurgDt**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the date of index cardiac surgical procedure. Index cardiac surgical procedure is defined as the initial major cardiac surgical procedure of the hospitalization.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Date mm/dd/yyyy
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Date of Discharge	*SeqNo:*	315
Short Name:	**DischDt**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the date the patient was discharged from the hospital (acute care) even if the patient is going to a rehab or hospice or similar extended care unit within the same physical facility. If the patient died in the hospital, the discharge date is the date of death.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Date mm/dd/yyyy
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Admit Source	*SeqNo:*	320
Short Name:	**AdmitSrc**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the source of admission for the patient to your facility.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Elective Admission	
2	Emergency Department	The patient came to the facility for this episode of care via the emergency department (excludes transfers from other facilities).
3	Transfer in from another hospital / acute care facility	The patient was transferred from another acute care facility (even if he/she was transferred to the emergency department) for this episode of care.
4	Other	The patient came to the facility for this episode of care by any other means. This includes transfers from non-acute care facilities.

Long Name:	Other Hospital Performs Cardiac Surgery	*SeqNo:*	325
Short Name:	**OthHosCS**	*Core:*	Yes
Section Name:	Hospitalization	*Harvest:*	Yes

DBTableName AdultData

Definition: The transferring hospital has the necessary personnel and facilities to have been able to perform cardiac surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Admit Source	*Format:*	Text (categorical values specified by STS)
ParentShortName:	AdmitSrc	*DataLength:*	
ParentValue:	= "Transfer in from another hospital / acute care facility"	*Data Source:*	User
ParentHarvestCodes:	3		

Harvest Codes:

Code:	Value:
1	Yes

2   No

Long Name: Height (cm)	*SeqNo:*	330
Short Name: **HeightCm**	*Core:*	Yes
Section Name: Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the height of the patient in centimeters.

LowValue: 20.0   *UsualRangeLow:*   122.0

HighValue: 251.0   *UsualRangeHigh:* 213.0

Parent Long Name: *Format:*   Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Weight (kg)	*SeqNo:*	335
Short Name: **WeightKg**	*Core:*	Yes
Section Name: Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the weight of the patient in kilograms closest to the date of procedure.

LowValue: 10.0   *UsualRangeLow:*   40.0

HighValue: 250.0   *UsualRangeHigh:* 170.0

Parent Long Name: *Format:*   Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name:	Cigarette Smoker	*SeqNo:*	340
Short Name:	**CigSmoker**	*Core:*	No
Section Name:	Risk Factors	*Harvest:*	No

DBTableName AdultData

Definition: Indicate if the patient has smoked cigarettes anytime during the year prior to surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User

ParentHarvestCodes:

    Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Cigarette Smoker Current	*SeqNo:*	345
Short Name:	**CigSmokerCurr**	*Core:*	No
Section Name:	Risk Factors	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether the patient smoked cigarettes within two weeks prior to procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Cigarette Smoker	*Format:*	Text (categorical values specified by STS)
ParentShortName: CigSmoker	*DataLength:*	
ParentValue: = "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

    Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Tobacco Use	*SeqNo:*	350
Short Name:	**OthTobUse**	*Core:*	No
Section Name:	Risk Factors	*Harvest:*	No

DBTableName AdultData

Definition: Current or previous use of any tobacco product other than cigarettes, including cigars, pipes, and chewing tobacco.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	RF-Family History of Premature CAD	*SeqNo:*	355
Short Name:	**FHCAD**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate if the patient has any direct blood relatives (parents, siblings, children) who have had any of the following at age
<55 y for male relatives or <65 y for female relatives:
● Angina
● Acute MI
● Sudden cardiac death without obvious cause
● CABG surgery
● PCI
2013 ACCF/AHA Data Standards
Cannon et al. JACC Vol. 61, No. 9, 2013

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

3   Unknown

Long Name: RF-Diabetes   *SeqNo:*   360

Short Name: **Diabetes**   *Core:*   Yes

Section Name: Risk Factors   *Harvest:*   Yes

DBTableName   AdultData

Definition: History of diabetes diagnosed and/or treated by a healthcare provider. The American Diabetes
                Association criteria include
                documentation of the following:
                1. Hemoglobin A1c >=6.5%; or
                2. Fasting plasma glucose >=126 mg/dL (7.0 mmol/L); or
                3. 2-h Plasma glucose >=200 mg/dL (11.1 mmol/L) during an oral glucose tolerance test; or
                4. In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis, a random plasma
                glucose >=200 mg/dL
                (11.1 mmol/L)
                This does not include gestational diabetes.
                2013 ACCF/AHA Data Standards
                Cannon et al. JACC Vol. 61, No. 9, 2013

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

     Harvest Codes:

            Code: Value:

               1   Yes

               2   No

               3   Unknown

Long Name:	RF-Diabetes-Control	*SeqNo:*	365
Short Name:	**DiabCtrl**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the patient's diabetes control method as presented on admission. Patients placed on a preprocedure diabetic pathway of insulin drip at admission but whose diabetes was controlled by diet or oral methods are not coded as being treated with insulin.
Choose the most aggressive therapy from the order below
• Insulin: insulin treatment (includes any combination with insulin)
• Other subcutaneous medications (e.g., GLP-1 agonist)
• Oral: treatment with oral agent (includes oral agent with or without diet treatment)
• Diet only: Treatment with diet only
• None: no treatment for diabetes
• Other: other adjunctive treatment, non-oral/insulin/diet
• Unknown

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LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: RF-Diabetes	*Format:*	Text (categorical values specified by STS)
ParentShortName: Diabetes	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	None	No treatment for diabetes.
2	Diet only	Treatment with diet only
3	Oral	Treatment with oral agent (includes oral agent with or without diet treatment)
4	Insulin	Insulin treatment (includes any combination with insulin)
6	Other subcutaneous medication	Other subcutaneous medications (such as GLP-1 agonists; Byetta,Bydureon,Victoza,Symlin)
5	Other	Other adjunctive treatment, non-oral/insulin/diet
7	Unknown	

Long Name:	RF-Dyslipidemia	*SeqNo:*	370
Short Name:	**Dyslip**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate if the patient has a history of dyslipidemia that was diagnosed and/or treated by a physician. NCEP criteria include
documentation of the following:
● Total cholesterol >200 mg/dL (5.18 mmol/L); or
● LDL >=130 mg/dL (3.37 mmol/L);
● HDL <40 mg/dL (1.04 mmol/L) in men and <50 mg/dL (1.30 mmol/L) in women;
● Currently receiving antilipidemic treatment
2013 ACCF/AHA Data Standards
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LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Renal Fail-Dialysis	*SeqNo:*	375
Short Name:	**Dialysis**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient is currently (prior to surgery) undergoing dialysis.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

        3   Unknown

Long Name:	RF-Hypertension	*SeqNo:*	380
Short Name:	**Hypertn**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate if the patient has a current diagnosis of hypertension defined by any 1 of the following:
● History of hypertension diagnosed and treated with medication, diet, and/or exercise
● Prior documentation of blood pressure >140 mm Hg systolic and/or 90 mm Hg diastolic for patients without diabetes or chronic kidney disease, or prior documentation of blood pressure >130 mm Hg systolic or 80 mm Hg diastolic on at least 2 occasions for patients with diabetes or chronic kidney disease
● Currently undergoing pharmacological therapy for treatment of hypertension
2013 ACCF/AHA Data Standards
Cannon et al. JACC Vol. 61, No. 9, 2013

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF- Endocarditis	*SeqNo:*	385
Short Name:	**InfEndo**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of endocarditis:
Endocarditis must meet at least 1 of the following criteria:
1. Patient has organisms cultured from valve or vegetation.
2. Patient has 2 or more of the following signs or symptoms: fever (>38°C), new or changing murmur*, embolic phenomena*, skin manifestations* (i.e., petechiae, splinter hemorrhages, painful subcutaneous nodules), congestive heart failure*, or cardiac conduction abnormality*
* With no other recognized cause
and at least 1 of the following:
a. organisms cultured from 2 or more blood cultures
b. organisms seen on Gram's stain of valve when culture is negative or not done
c. valvular vegetation seen during an invasive procedure or autopsy
d. positive laboratory test on blood or urine (e.g., antigen tests for H influenzae, S pneumoniae, N meningitidis, or Group B Streptococcus)
e. evidence of new vegetation seen on echocardiogram
and if diagnosis is made antemortem, physician institutes appropriate antimicrobial therapy.
CDC, January 2013
Choose "Yes" for patients with pre-operative endocarditis who begin antibiotics post-op.
Code yes for patients who are diagnosed intraoperatively.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	RF-Infect Endocard Type	*SeqNo:*	390
Short Name:	**InfEndTy**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the type of endocarditis the patient has. If the patient is currently being treated for endocarditis, the disease is considered active. If no antibiotic medication (other than prophylactic medication) is being given at the time of surgery, then the infection is considered treated.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: RF- Endocarditis	*Format:*	Text (categorical values specified by STS)
ParentShortName: InfEndo	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Treated
2	Active

Long Name:	RF-Infect Endocard Culture	*SeqNo:*	395
Short Name:	**InfEndCult**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate culture results (may use cultures obtained in the OR).

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: RF- Endocarditis	*Format:*	Text (categorical values specified by STS)
ParentShortName: InfEndo	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Culture negative
2	Staphylococcus aureus
3	Streptococcus species
4	Coagulase negative staphylococcus
5	Enterococcus species
6	Fungal

       7   Other

       8   Unknown

Long Name:	RF-Tobacco Use	*SeqNo:*	400
Short Name:	**TobaccoUse**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate current (within 30 days prior to admission) or previous use of any tobacco product, including Cigarettes, Pipe, Cigars, Smokeless Cans, Other tobacco products (orbs, strips, sticks, hookah, etc.).Meaningful Use Definition Http://www.healthit.gov/providers-professionals/achieve-meaningful-use/core-measures/record-smoking-status

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

        1   Never smoker

        2   Current every day smoker

        3   Current some day smoker

        4   Smoker, current status (frequency) unknown

        5   Former smoker

        6   Smoking status unknown

Long Name:	RF-Chronic Lung Disease	*SeqNo:*	405
Short Name:	**ChrLungD**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has chronic lung disease, and the severity level according to the following classification:
No;
Mild: FEV1 60% to 75% of predicted, and/or on chronic inhaled or oral bronchodilator therapy.
Moderate: FEV1 50% to 59% of predicted, and/or on chronic steroid therapy aimed at lung disease.
Severe: FEV1 < 60 or Room Air pCO2 > 50.
CLD present, severity not documented
Unknown
A history of chronic inhalation reactive disease (asbestosis, mesothelioma, black lung disease or pneumoconiosis) may qualify as chronic lung disease. Radiation induced pneumonitis or radiation fibrosis also qualifies as chronic lung disease. (if above criteria is met) A history of atelectasis is a transient condition and does not qualify.
Chronic lung disease can include patients with chronic obstructive pulmonary disease, chronic bronchitis, or emphysema. It can also include a patient who is currently being chronically treated with inhaled or oral pharmacological therapy (e.g., beta-adrenergic agonist, anti-inflammatory agent, leukotriene receptor antagonist, or steroid). Patients with asthma or seasonal allergies are not considered to have chronic lung disease.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	No
2	Mild
3	Moderate
4	Severe
5	Lung disease documented, severity unknown
6	Unknown

Long Name:	RF-Chronic Lung Disease - Type	*SeqNo:*	410
Short Name:	**ChrLungDType**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the type of chronic lung disease.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: RF-Chronic Lung Disease	*Format:*	Text (categorical values specified by STS)
ParentShortName: ChrLungD	*DataLength:*	
ParentValue: = "Mild", "Moderate" or "Severe"	*Data Source:* User	

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Obstructive
2	Reactive
3	Interstitial Fibrosis
4	Other
5	Multiple
6	Not Documented

Long Name:	RF-Pulmonary Function Test	*SeqNo:*	415
Short Name:	**PFT**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether pulmonary function tests were performed.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:* User	

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	RF-Forced Expiratory Volume Predicted	*SeqNo:*	420
Short Name:	**FEV1**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FEV1 % predicted from the most recent pulmonary function test prior to procedure. Choose the highest value reported for % predicted, whether or not a bronchodilator was used.

LowValue:	1	*UsualRangeLow:*	
HighValue:	200	*UsualRangeHigh:*	
Parent Long Name:	RF-Pulmonary Function Test	*Format:*	Integer
ParentShortName:	PFT	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	DLCO Test Performed	*SeqNo:*	425
Short Name:	**DLCO**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a lung diffusion test (DLCO) was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	RF-Pulmonary Function Test	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PFT	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	DLCO Predicted	*SeqNo:*	430
Short Name:	**DLCOPred**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the % predicted DLCO value obtained for the patient. Choose the value that represents the highest % predicted whether or not it is the simple DLCO or the DLCO/VA.

LowValue:	10	*UsualRangeLow:*	
HighValue:	200	*UsualRangeHigh:*	
Parent Long Name:	DLCO Test Performed	*Format:*	Integer
ParentShortName:	DLCO	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	RF-Arterial Blood Gas	*SeqNo:*	435
Short Name:	**ABG**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a room-air arterial blood gas was performed prior to surgery. Answer no if the only available arterial blood gasses were drawn while patient was receiving supplemental oxygen.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	RF-Carbon Dioxide Level	*SeqNo:*	440
Short Name:	**PCO2**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate PCO2 on most recent room air blood gas prior to procedure.

LowValue: 20.0   *UsualRangeLow:*

HighValue: 120.0   *UsualRangeHigh:*

Parent Long Name: RF-Arterial Blood Gas   *Format:*   Real

ParentShortName: ABG   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	RF-Oxygen Level	*SeqNo:*	445
Short Name:	**PO2**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate PO2 result on most recent room air arterial blood gas prior to procedure.

LowValue: 40.0   *UsualRangeLow:*

HighValue: 500.0   *UsualRangeHigh:*

Parent Long Name: RF-Arterial Blood Gas   *Format:*   Real

ParentShortName: ABG   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	RF-Home Oxygen	*SeqNo:*	450
Short Name:	**HmO2**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether supplemental oxygen at home is prescribed and used.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
3	Yes, PRN
4	Yes, oxygen dependent
2	No
5	Unknown

Long Name:	RF-Inhaled Medication or Oral Bronchodilator Therapy	*SeqNo:*	455
Short Name:	**BDTx**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether oral and/or inhaled bronchodilator or inhaled (not oral or IV) steroid medications were in use by the patient routinely prior to this procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Sleep Apnea	*SeqNo:*	460
Short Name:	**SlpApn**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether patient has a diagnosis of sleep apnea (may be described as obstructive sleep apnea or OSA).

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Pneumonia	*SeqNo:*	465
Short Name:	**Pneumonia**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether patient has a recent (within 30 days) or remote (more than 30 days) history of pneumonia.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
2	Recent	Within 1 month of procedure
3	Remote	More than 1 month prior to procedure
1	No	
4	Unknown	

Long Name:	RF-Illicit Drug Use		*SeqNo:*	470
Short Name:	**IVDrugAb**		*Core:*	Yes
Section Name:	Risk Factors		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether documented history of use of illicit drugs, such as heroin, marijuana, cocaine, or methamphetamine, or abuse of a controlled substance.
Do not include rare historical use. Do not include prescribed medicinal marijuana.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
4	Recent	Within 30 days of procedure
5	Remote	More than 30 days prior to procedure
2	No	
3	Unknown	

Long Name:	RF-Depression		*SeqNo:*	475
Short Name:	**Depression**		*Core:*	Yes
Section Name:	Risk Factors		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether there is a current or previous history of depression or documentation of a depressed mood or affect.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Alcohol Use	*SeqNo:*	480
Short Name:	**Alcohol**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Specify alcohol consumption history.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	<= 1 drink/week
2	2-7 drinks/week
3	>= 8 drinks/week
4	None
5	Unknown

Long Name:	RF-Liver Disease	*SeqNo:*	485
Short Name:	**LiverDis**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of hepatitis B, hepatitis C, cirrhosis, portal hypertension, esophageal varices, chronic alcohol abuse or congestive hepatopathy. Exclude NASH in the absence of cirrhosis.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Immunocompromise	*SeqNo:*	490
Short Name:	**ImmSupp**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether immunocompromise is present due to immunosuppressive medication therapy within 30 days preceding the operative procedure or existing medical condition (see training manual). This includes, but is not limited to systemic steroid therapy, anti-rejection medications and chemotherapy. This does not include topical steroid applications, one time systemic therapy, inhaled steroid therapy or preprocedure protocol.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Mediastinal Radiation	*SeqNo:*	495
Short Name:	**MediastRad**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether patient has a history of radiation therapy to the mediastinum or chest.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Cancer Within 5 Years	*SeqNo:*	500
Short Name:	**Cancer**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of cancer diagnosed within 5 years of procedure. Do not capture low grade skin cancers such as basal cell or squamous cell carcinoma.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Peripheral Arterial Disease	*SeqNo:*	505
Short Name:	**PVD**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the patient has a history of peripheral arterial disease (includes upper and lower extremity, renal, mesenteric, and abdominal aortic systems). This can include:
1. Claudication , either with exertion or at rest,
2. Amputation for arterial vascular insufficiency,
3. Vascular reconstruction, bypass surgery, or percutaneous intervention to the extremities (excluding dialysis fistulas and vein stripping),
4. Documented abdominal aortic aneurysm with or without repair,
5. Positive noninvasive test (e.g., ankle brachial index =< 0.9, ultrasound, magnetic resonance or computed tomography imaging of > 50% diameter stenosis in any peripheral artery, i.e., renal, subclavian, femoral, iliac) or angiographic imaging

Peripheral arterial disease excludes disease in the carotid, cerebrovascular arteries or thoracic aorta. PVD does not include DVT.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Thoracic Aortic Disease	*SeqNo:*	510
Short Name:	**ThAoDisease**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of disease of the thoracic or thoracoabdominal aorta. Abdominal aortic disease without thoracic involvement is captured in peripheral artery disease.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Syncope	*SeqNo:*	515
Short Name:	**Syncope**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had a sudden loss of consciousness with loss of postural tone, not related to anesthesia, with spontaneous recovery and believed to be related to cardiac condition. Capture events occurring within the past one year as reported by patient or observer. Patient may experience syncope when supine.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name: RF-Unresponsive Neurologic State   *SeqNo:*   520

Short Name: **UnrespStat**   *Core:*   Yes

Section Name: Risk Factors   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of non-medically induced, unresponsive state within 24 hours of the time of surgery. Patient experienced complete mental unresponsiveness and no evidence of psychological or physiologically appropriate responses to stimulation, includes patients who experience sudden cardiac death.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:*   User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name: RF-Cerebrovascular Dis

SeqNo: 525

Short Name: **CVD**

Core: Yes

Section Name: Risk Factors

Harvest: Yes

DBTableName   AdultData

Definition: Indicate whether the patient has a current or previous history of any of the following:
a. Stroke: Stroke is an acute episode of focal or global neurological dysfunction caused by brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction, where the neurological dysfunction lasts for greater than 24 hours.
B. TIA: is defined as a transient episode of focal neurological dysfunction caused by brain, spinal cord, or retinal ischemia, without acute infarction, where the neurological dysfunction resolves within 24 hours.
C. Noninvasive or invasive arterial imaging test demonstrating >=50% stenosis of any of the major extracranial or intracranial vessels to the brain
d. Previous cervical or cerebral artery revascularization surgery or percutaneous intervention
This does not include chronic (nonvascular) neurological diseases or other acute neurological insults such as metabolic and anoxic ischemic encephalopathy.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

   Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Prior CVA	*SeqNo:*	530
Short Name:	**CVA**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of stroke. Stroke is an acute episode of focal or global neurological dysfunction caused by brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction, where the neurological dysfunction lasts for greater than 24 hours.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	RF-Cerebrovascular Dis	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CVD	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-Prior CVA-When	*SeqNo:*	535
Short Name:	**CVAWhen**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate when the CVA events occurred. Those events occurring within 30 days prior to the surgical procedure are considered recent, while all others are considered remote.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	RF-Prior CVA	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CVA	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
3	<= 30 days
4	> 30 days

Long Name:	RF-CVD TIA	*SeqNo:*	540
Short Name:	**CVDTIA**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of a Transient Ischemic Attack (TIA). Transient ischemic attack (TIA) is defined as a transient episode of focal neurological dysfunction caused by brain, spinal cord, or retinal ischemia, without acute infarction, where the neurological dysfunction resolves within 24 hours.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: RF-Cerebrovascular Dis	*Format:*	Text (categorical values specified by STS)
ParentShortName: CVD	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	RF-CVD Carotid Stenosis	*SeqNo:*	545
Short Name:	**CVDCarSten**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate which carotid artery was determined from any diagnostic test to be >= 50% stenotic.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: RF-Cerebrovascular Dis	*Format:*	Text (categorical values specified by STS)
ParentShortName: CVD	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
2	Right
3	Left
4	Both
1	None

Long Name: RF-CVD Carotid Stenosis - Right   *SeqNo:*   550

Short Name: **CVDStenRt**   *Core:*   Yes

Section Name: Risk Factors   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the severity of stenosis reported on the right carotid artery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: RF-CVD Carotid Stenosis   *Format:*   Text (categorical values specified by STS)

ParentShortName: CVDCarSten   *DataLength:*

ParentValue: = "Right" or "Both"   *Data Source:* User

ParentHarvestCodes: 2|4

Harvest Codes:

Code: Value:

3   50% to 79%

1   80% to 99%

2   100 %

4   Not documented

Long Name: RF-CVD Carotid Stenosis - Left   *SeqNo:*   555

Short Name: **CVDStenLft**   *Core:*   Yes

Section Name: Risk Factors   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the severity of stenosis reported on the left carotid artery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: RF-CVD Carotid Stenosis   *Format:*   Text (categorical values specified by STS)

ParentShortName: CVDCarSten   *DataLength:*

ParentValue: = "Left" or "Both"   *Data Source:* User

ParentHarvestCodes: 3|4

Harvest Codes:

Code: Value:

3   50% to 79%

1   80% to 99%

2   100%

4   Not documented

Long Name:	RF-CVD Prior Carotid Surgery	*SeqNo:*	560
Short Name:	**CVDPCarSurg**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of previous carotid artery surgery and/or stenting.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	RF-Cerebrovascular Dis	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CVD	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	RF-Last WBC Count	*SeqNo:*	565
Short Name:	**WBC**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the pre-operative White Blood Cell (WBC) count closest to the date and time prior to surgery but prior to anesthetic management (induction area or operating room).

LowValue:	0.10	*UsualRangeLow:*	4.00
HighValue:	99.99	*UsualRangeHigh:*	15.00
Parent Long Name:		*Format:*	Real
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Long Name:	RF-Hemoglobin	*SeqNo:*	570
Short Name:	**RFHemoglobin**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the pre-operative Hemoglobin level at the date and time closest to surgery but prior to anesthetic management (induction area or operating room). Capture only measured hemoglobin levels, not calculated values.

LowValue:	1.00	*UsualRangeLow:*	11.00	
HighValue:	50.00	*UsualRangeHigh:*	18.00	
Parent Long Name:			*Format:*	Real
ParentShortName:			*DataLength:*	
ParentValue:			*Data Source:*	User
ParentHarvestCodes:				

Long Name:	RF-Last Hematocrit	*SeqNo:*	575
Short Name:	**Hct**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the pre-operative Hematocrit level at the date and time closest to surgery but prior to anesthetic management (induction area or operating room). Capture only measured hematocrit levels, not calculated values.

LowValue:	1.00	*UsualRangeLow:*	39.00	
HighValue:	99.99	*UsualRangeHigh:*	53.00	
Parent Long Name:			*Format:*	Real
ParentShortName:			*DataLength:*	
ParentValue:			*Data Source:*	User
ParentHarvestCodes:				

Long Name:	RF-Platelets	*SeqNo:*	580
Short Name:	**Platelets**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the platelet count closest to the date and time prior to surgery but prior to anesthetic management (induction area or operating room).

LowValue:	1000	*UsualRangeLow:*	150000
HighValue:	900000	*UsualRangeHigh:*	400000

Parent Long Name:	*Format:*	Integer
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Long Name:	RF-Last Creat Level	*SeqNo:*	585
Short Name:	**CreatLst**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the creatinine level closest to the date and time prior surgery but prior to anesthetic management (induction area or operating room).

A creatinine level should be collected on all patients, even if they have no prior history of renal disease. A creatinine value is a high predictor of a patient's outcome and is used in the predicted risk models.

LowValue:	0.10	*UsualRangeLow:*	0.10
HighValue:	30.00	*UsualRangeHigh:*	9.00

Parent Long Name:	*Format:*	Real
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Long Name:	RF-Total Albumin	*SeqNo:*	590
Short Name:	**TotAlbumin**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the total albumin closest to the date and time prior to surgery but prior to anesthetic management (induction area or operating room).

LowValue:	1.00	*UsualRangeLow:*	3.50
HighValue:	10.00	*UsualRangeHigh:*	5.00

Parent Long Name:	*Format:*	Real
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Long Name:	RF-Total Bilirubin	*SeqNo:*	595
Short Name:	**TotBlrbn**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the total Bilirubin closest to the date and time prior to surgery but prior to anesthetic management (induction area or operating room).

LowValue:	0.10	*UsualRangeLow:*	0.20
HighValue:	50.00	*UsualRangeHigh:*	1.30

Parent Long Name:	*Format:*	Real
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Long Name:	RF-Last A1c Level	*SeqNo:*	600
Short Name:	**A1cLvl**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the pre-operative HbA1c level closest to the date and time prior surgery but prior to anesthetic management (induction area or operating room).

LowValue:	1.00	*UsualRangeLow:*	4.00
HighValue:	20.00	*UsualRangeHigh:*	8.00
Parent Long Name:		*Format:*	Real
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	RF-HIT Antibodies	*SeqNo:*	605
Short Name:	**HITAnti**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether Heparin Induced Thrombocytopenia (HIT) is confirmed by antibody testing.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Yes	Positive antibody testing
2	No	Negative antibody testing
3	Not Applicable	Antibody testing not performed

| *Long Name:* | RF-INR | *SeqNo:* | 610 |

Short Name: **INR**   *Core:*   Yes

Section Name: Risk Factors   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the International Normalized Ratio (INR) closest to the date and time prior to surgery but prior to anesthetic management (induction area or operating room).

LowValue: 0.50   *UsualRangeLow:*   0.90

HighValue: 30.00   *UsualRangeHigh:* 1.30

Parent Long Name: *Format:*   Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: RF-MELD Score   *SeqNo:*   615

Short Name: **MELDScr**   *Core:*   Yes

Section Name: Risk Factors   *Harvest:*   Yes

DBTableName AdultData

Definition: MELD score value calculated by software to indicate severity of liver disease.

LowValue: -50.00   *UsualRangeLow:*

HighValue: 150.00   *UsualRangeHigh:*

Parent Long Name: *Format:*   Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Calculated

ParentHarvestCodes:

Long Name:	RF-BNP	*SeqNo:*	620
Short Name:	**BNP**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the BNP value.

LowValue:	5	*UsualRangeLow:*	
HighValue:	70000	*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Integer
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	RF-N-Terminal Prohormone of Brain Natriuretic Peptide	*SeqNo:*	625
Short Name:	**NTproBNP**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: NT-proBNP level in the blood is used for screening, diagnosis of acute congestive heart failure (CHF) and may be useful to establish prognosis in heart failure, levels are typically higher in patients with worse outcome. The plasma concentration of NT-proBNP is typically increased in patients with asymptomatic or symptomatic left ventricular dysfunction and is associated with coronary artery disease and myocardial ischemia. Normal NTpBNP levels should be stratified by age and gender. Normal NTpBNP levels give high NPV in excluding significant cardiovascular disease. Most subjects with raised NTpBNP levels and almost all subjects with NTpBNP levels over four times the normal have significant cardiovascular disease.
Values are expressed in pg/mL.

LowValue:	5	*UsualRangeLow:*	
HighValue:	70000	*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Integer
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	RF-High-Sensitivity Troponin T	*SeqNo:*	630
Short Name:	**hsTnT**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: hsTnT concentrations are found to be related to several factors like severity of coronary artery disease, left ventricular mass, left ventricular ejection fraction and regional wall motion abnormality. In patients with acute chest pain, myocardial perfusion abnormalities and coronary artery disease are predicted by resting hsTnT levels. Do not code other troponins here.
Values are expressed in ng/L.

LowValue:	1	*UsualRangeLow:*	
HighValue:	200	*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Integer
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	RF-High-Sensitivity CRP or Ultra-sensitive CRP	*SeqNo:*	635
Short Name:	**hsCRP**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: The high-sensitivity C-reactive protein (hsCRP) assay is a quantitative analysis test of very low levels of C-reactive protein (CRP) in the blood. The hsCRP assay is being increasingly used as a marker for cardiac risk assessment and as a prognostic tool in heart disease. The CRP test, in addition to lipid evaluation and global risk scoring systems, helps in the evaluation of cardiovascular disease risk in an individual. C-reactive protein is an acute phase protein that appears in circulation in response to inflammatory cytokines, such as interleukin-6, and serves as a biomarker for systemic inflammation.

Only code hsCRP.

Values are expressed in mg/L.

LowValue:	0.10	*UsualRangeLow:*	
HighValue:	30.00	*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Real
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	RF-Growth Differentiation Factor 15	*SeqNo:*	640
Short Name:	**GDF15**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Growth differentiation factor 15 (GDF15) is a protein belonging to the transforming growth factor beta superfamily that has a role in regulating inflammatory and apoptotic pathways in injured tissues and during disease processes. GDF15 is also known as TGF-PL, MIC-1, PDF, PLAB, and PTGFB. GDF15 mRNA is most abundant in the liver, with lower levels seen in some other tissues. Its expression in liver can be significantly up-regulated in during injury of organs such as liver, kidney, heart and lung.
Moreover, increased circulating GDF-15 concentrations have been linked to an enhanced risk of future adverse cardiovascular events in elderly women and it is a new biomarker of the risk of death in patients with non-ST-elevation acute coronary syndrome.

Values are expressed in pg/mL.

LowValue:	100	*UsualRangeLow:*	
HighValue:	20000	*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Integer
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	RF-Five Meter Walk Test Done	*SeqNo:*	645
Short Name:	**FiveMWalkTest**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the five meter walk test was done.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Yes	
2	No	
3	Non-ambulatory patient	Physically or medically unable to perform the test.

Long Name:	RF-Five Meter Walk Time 1	*SeqNo:*	650
Short Name:	**FiveMWalk1**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the time in seconds it takes the patient to walk 5 meters for the first of three tests.

LowValue:	1	*UsualRangeLow:*	2
HighValue:	100	*UsualRangeHigh:*	20

Parent Long Name:	RF-Five Meter Walk Test Done	*Format:*	Integer
ParentShortName:	FiveMWalkTest	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	RF-Five Meter Walk Time 2	*SeqNo:*	655
Short Name:	**FiveMWalk2**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the time in seconds it takes the patient to walk 5 meters for the second of three tests.

LowValue:	1	*UsualRangeLow:*	2
HighValue:	100	*UsualRangeHigh:*	20

Parent Long Name:	RF-Five Meter Walk Test Done	*Format:*	Integer
ParentShortName:	FiveMWalkTest	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	RF-Five Meter Walk Time 3	*SeqNo:*	660
Short Name:	**FiveMWalk3**	*Core:*	Yes
Section Name:	Risk Factors	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the time in seconds it takes the patient to walk 5 meters for the third of three tests.

LowValue:	1	*UsualRangeLow:*	2
HighValue:	100	*UsualRangeHigh:*	20
Parent Long Name:	RF-Five Meter Walk Test Done	*Format:*	Integer
ParentShortName:	FiveMWalkTest	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Prev Cardiac Intervent	*SeqNo:*	665
Short Name:	**PrCVInt**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has undergone any previous cardiovascular intervention, either surgical or non-surgical, which may include those done during the current admission.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	Prev CAB	*SeqNo:*	670
Short Name:	**PrCAB**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had a previous Coronary Bypass Graft prior to the current admission.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Prev Cardiac Intervent	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrCVInt	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Prev Valve	*SeqNo:*	675
Short Name:	**PrValve**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had a previous surgical replacement and/or surgical repair of a cardiac valve. This may also include percutaneous valve procedures.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Prev Cardiac Intervent	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrCVInt	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Exact Date of Previous Valve Procedure Known	*SeqNo:*	680
Short Name:	**PrValDtKnown**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the exact date of the previous valve procedure is known.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Prev Valve		*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValve		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Date of Previous Valve Procedure	*SeqNo:*	685
Short Name:	**PrValveDate**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the date on which the previous valve procedure was performed.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Exact Date of Previous Valve Procedure Known		*Format:*	Date mm/dd/yyyy
ParentShortName: PrValDtKnown		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Long Name:	Estimate Number of Months Since Previous Valve Procedure	*SeqNo:*	690
Short Name:	**PrValveMonths**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the best estimate of the number of months since the most recent prior valve procedure was performed.

LowValue:	1	*UsualRangeLow:*	
HighValue:	240	*UsualRangeHigh:*	
Parent Long Name:	Exact Date of Previous Valve Procedure Known	*Format:*	Integer
ParentShortName:	PrValDtKnown	*DataLength:*	
ParentValue:	= "No"	*Data Source:*	User

ParentHarvestCodes: 2

Long Name:	Prev Valve Procedure 1	*SeqNo:*	695
Short Name:	**PrValveProc1**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the first previous valve procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Prev Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrValve	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
2	Aortic valve balloon valvotomy/valvuloplasty
3	Aortic valve repair, surgical
4	Aortic valve replacement, surgical
5	Aortic valve replacement, transcatheter
6	Mitral valve balloon valvotomy/valvuloplasty
7	Mitral valve commissurotomy, surgical
8	Mitral valve repair,

percutaneous

9   Mitral valve repair, surgical

10   Mitral valve replacement, surgical

11   Mitral valve replacement, transcatheter

12   Tricuspid valve balloon valvotomy/valvuloplasty

13   Tricuspid valve repair, percutaneous

14   Tricuspid valve repair, surgical

15   Tricuspid valve replacement, surgical

16   Tricuspid valve replacement, transcatheter

17   Tricuspid valvectomy

18   Pulmonary valve balloon valvotomy/valvuloplasty

19   Pulmonary valve repair, surgical

20   Pulmonary valve replacement, surgical

21   Pulmonary valve replacement, transcatheter

22   Pulmonary valvectomy

23   Other valve procedure

Long Name:	Prev Valve Procedure 2		*SeqNo:*	700
Short Name:	**PrValveProc2**		*Core:*	Yes
Section Name:	Previous Cardiac Interventions		*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the second previous valve procedure or select "No additional valve procedures"

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Prev Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValve	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   No additional valve procedure(s)

2   Aortic valve balloon valvotomy/valvuloplasty

3   Aortic valve repair, surgical

4   Aortic valve replacement, surgical

5   Aortic valve replacement, transcatheter

6   Mitral valve balloon valvotomy/valvuloplasty

7   Mitral valve commissurotomy, surgical

8   Mitral valve repair, percutaneous

9   Mitral valve repair, surgical

10   Mitral valve replacement, surgical

11   Mitral valve replacement, transcatheter

12   Tricuspid valve balloon valvotomy/valvuloplasty

13   Tricuspid valve repair, percutaneous

14   Tricuspid valve repair, surgical

15   Tricuspid valve replacement, surgical

16   Tricuspid valve replacement, transcatheter

17   Tricuspid valvectomy

18   Pulmonary valve balloon valvotomy/valvuloplasty

19   Pulmonary valve repair, surgical

20   Pulmonary valve replacement, surgical

21   Pulmonary valve replacement, transcatheter

22   Pulmonary valvectomy

23   Other valve procedure

Long Name: Prev Valve Procedure 3   *SeqNo:*   705

Short Name: **PrValveProc3**   *Core:*   Yes

Section Name: Previous Cardiac Interventions   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the third previous valve procedure or select "No additional valve procedures"

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Prev Valve Procedure 2   *Format:*   Text (categorical values specified by STS)

ParentShortName: PrValveProc2   *DataLength:*

ParentValue: <>"No additional valve   *Data Source:* User
                    procedure(s)" And Is Not
                    Missing

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code: Value:

1   No additional valve
     procedure(s)

2   Aortic valve balloon
     valvotomy/valvuloplasty

3   Aortic valve repair, surgical

4   Aortic valve replacement,
     surgical

5   Aortic valve replacement,
     transcatheter

6   Mitral valve balloon
     valvotomy/valvuloplasty

7   Mitral valve
     commissurotomy, surgical

8   Mitral valve repair,
     percutaneous

9   Mitral valve repair, surgical

10   Mitral valve replacement,
     surgical

11   Mitral valve replacement,
     transcatheter

12   Tricuspid valve balloon
     valvotomy/valvuloplasty

13   Tricuspid valve repair,
     percutaneous

14   Tricuspid valve repair,
     surgical

15   Tricuspid valve replacement,

surgical

16	Tricuspid valve replacement, transcatheter
17	Tricuspid valvectomy
18	Pulmonary valve balloon valvotomy/valvuloplasty
19	Pulmonary valve repair, surgical
20	Pulmonary valve replacement, surgical
21	Pulmonary valve replacement, transcatheter
22	Pulmonary valvectomy
23	Other valve procedure

Long Name: Prev Valve Procedure 4   *SeqNo:*   710

Short Name: **PrValveProc4**   *Core:*   Yes

Section Name: Previous Cardiac Interventions   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the fourth previous valve procedure or select "No additional valve procedures"

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Prev Valve Procedure 3   *Format:*   Text (categorical values specified by STS)

ParentShortName: PrValveProc3   *DataLength:*

ParentValue: <>"No additional valve   *Data Source:* User
                    procedure(s)" And Is Not
                    Missing

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code: Value:

1	No additional valve procedure(s)
2	Aortic valve balloon valvotomy/valvuloplasty
3	Aortic valve repair, surgical
4	Aortic valve replacement, surgical
5	Aortic valve replacement, transcatheter
6	Mitral valve balloon valvotomy/valvuloplasty
7	Mitral valve

commissurotomy, surgical

8   Mitral valve repair,
    percutaneous

9   Mitral valve repair, surgical

10 Mitral valve replacement,
    surgical

11 Mitral valve replacement,
    transcatheter

12 Tricuspid valve balloon
    valvotomy/valvuloplasty

13 Tricuspid valve repair,
    percutaneous

14 Tricuspid valve repair,
    surgical

15 Tricuspid valve replacement,
    surgical

16 Tricuspid valve replacement,
    transcatheter

17 Tricuspid valvectomy

18 Pulmonary valve balloon
    valvotomy/valvuloplasty

19 Pulmonary valve repair,
    surgical

20 Pulmonary valve
    replacement, surgical

21 Pulmonary valve
    replacement, transcatheter

22 Pulmonary valvectomy

23 Other valve procedure

Long Name: Prev Valve Procedure 5	*SeqNo:* 715
Short Name: **PrValveProc5**	*Core:* Yes
Section Name: Previous Cardiac Interventions	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate the fifth previous valve procedure or select "No additional valve procedures"

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: Prev Valve Procedure 4		*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValveProc4		*DataLength:*	
ParentValue:	<>"No additional valve procedure(s)" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code:	Value:
1	No additional valve procedure(s)
2	Aortic valve balloon valvotomy/valvuloplasty
3	Aortic valve repair, surgical
4	Aortic valve replacement, surgical
5	Aortic valve replacement, transcatheter
6	Mitral valve balloon valvotomy/valvuloplasty
7	Mitral valve commissurotomy, surgical
8	Mitral valve repair, percutaneous
9	Mitral valve repair, surgical
10	Mitral valve replacement, surgical
11	Mitral valve replacement, transcatheter
12	Tricuspid valve balloon valvotomy/valvuloplasty
13	Tricuspid valve repair, percutaneous
14	Tricuspid valve repair, surgical
15	Tricuspid valve replacement,

surgical

16   Tricuspid valve replacement, transcatheter

17   Tricuspid valvectomy

18   Pulmonary valve balloon valvotomy/valvuloplasty

19   Pulmonary valve repair, surgical

20   Pulmonary valve replacement, surgical

21   Pulmonary valve replacement, transcatheter

22   Pulmonary valvectomy

23   Other valve procedure

Long Name:	Previous procedure - Aortic Valve Replacement - Surgical	*SeqNo:*	720
Short Name:	**PrevProcAVReplace**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether a previous procedure included a surgical aortic valve replacement.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Prev Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrValve	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

    Harvest Codes:

      Code: Value:

       1   Yes

       2   No

Long Name:	Previous procedure - Aortic Valve Repair - Surgical	*SeqNo:*	725
Short Name:	**PrevProcAVRepair**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether a previous procedure included a surgical aortic valve repair.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Prev Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValve	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous Procedure - Aortic Valve Balloon Valvuloplasty	*SeqNo:*	730
Short Name:	**PrevProcAVBall**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether a previous procedure included an aortic balloon valvuloplasty.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Prev Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValve	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous procedure - Mitral Valve Replacement - Surgical	*SeqNo:*	735
Short Name:	**PrevProcMVReplace**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether a previous procedure included a surgical mitral valve replacement.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Prev Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValve	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous procedure - Mitral Valve Repair - Surgical	*SeqNo:*	740
Short Name:	**PrevProcMVRepair**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether a previous procedure included a surgical mitral valve repair.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Prev Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValve	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous Procedure - Mitral Valve Balloon Valvuloplasty	*SeqNo:* 745
Short Name:	**PrevProcMVBall**	*Core:* No
Section Name:	Previous Cardiac Interventions	*Harvest:* No

DBTableName   AdultData

Definition: Indicate whether a previous procedure included a mitral valve balloon valvuloplasty.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Prev Valve		*Format:* Text (categorical values specified by STS)
ParentShortName: PrValve		*DataLength:*
ParentValue: = "Yes"		*Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Previous procedure - Tricuspid Valve Replacement - Surgical	*SeqNo:* 750
Short Name:	**PrevProcTVReplace**	*Core:* No
Section Name:	Previous Cardiac Interventions	*Harvest:* No

DBTableName   AdultData

Definition: Indicate whether a previous procedure included a surgical tricuspid valve replacement.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Prev Valve		*Format:* Text (categorical values specified by STS)
ParentShortName: PrValve		*DataLength:*
ParentValue: = "Yes"		*Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Previous procedure - Tricuspid Valve Repair - Surgical	*SeqNo:*	755
Short Name:	**PrevProcTVRepair**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether a previous procedure included a surgical tricuspid valve repair.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name: Prev Valve		*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValve		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous procedure - Pulmonic Valve Repair / Replacement - Surgical	*SeqNo:*	760
Short Name:	**PrevProcPV**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether a previous procedure included a surgical pulmonic valve repair or replacement.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name: Prev Valve		*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValve		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous Procedure - Transcatheter Valve Replacement	*SeqNo:*	765
Short Name:	**PrevProcTCVRep**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether a previous procedure included a transcatheter valve replacement.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Prev Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValve	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous Procedure - Percutaneous Valve Repair	*SeqNo:*	770
Short Name:	**PrevProcPercVRepair**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether a previous procedure included a percutaneous valve repair.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Prev Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValve	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous PCI	*SeqNo:*	775
Short Name:	**POCPCI**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a previous Percutaneous Coronary Intervention (PCI) was performed any time prior to this surgical procedure.
Percutaneous coronary intervention (PCI) is the placement of an angioplasty guide wire, balloon, or other
device (e.g. stent, atherectomy, brachytherapy, or thrombectomy catheter) into a native coronary artery or
coronary artery bypass graft for the purpose of mechanical coronary revascularization.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Prev Cardiac Intervent	*Format:*	Text (categorical values specified by STS)
ParentShortName: PrCVInt	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous PCI-Within This Episode of Care	*SeqNo:*	780
Short Name:	**POCPCIWhen**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the previous Percutaneous Cardiac Intervention (PCI) was performed within this episode of care. Episode of care is defined as continuous inpatient hospitalization which includes transfer from one acute care hospital to another.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Previous PCI	*Format:*	Text (categorical values specified by STS)
ParentShortName: POCPCI	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes, at this facility
2	Yes, at some other acute care facility

        3   No

Long Name: Previous PCI-Indication For Surgery   *SeqNo:*   785

Short Name: **POCPCIndSurg**   *Core:*   Yes

Section Name: Previous Cardiac Interventions   *Harvest:*   Yes

DBTableName AdultData

Definition: Select the indication for surgery following the Percutaneous Cardiac Intervention (PCI).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Previous PCI-Within This   *Format:*   Text (categorical values specified by STS)
                         Episode of Care

ParentShortName: POCPCIWhen   *DataLength:*

ParentValue: = "Yes, at this facility" or "Yes,   *Data Source:* User
                  at some other acute care
                  facility"

ParentHarvestCodes: 1|2

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	PCI Complication	Complication during PCI necessitating surgical intervention such as dissection or acute occlusion
5	PCI Failure with Clinical Deterioration	PCI failed to yield expected and/or desired results, patient condition deteriorated.
4	PCI for STEMI, Multivessel disease	STEMI with primary PCI (of culprit lesion) and multivessel disease requiring CABG.
2	PCI Failure without Clinical Deterioration	PCI failed to yield expected and/or desired results, patient condition did not deteriorate.
3	PCI/Surgery Staged Procedure (not STEMI)	PCI and surgical procedures performed in a staged fashion in a patient not experiencing STEMI
9	Other	Other indication for surgery not described above

Long Name:	Previous PCI-Stent	*SeqNo:*	790
Short Name:	**POCPCISt**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether an intracoronary stent was used during the previous Percutaneous Cardiac Intervention (PCI).

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Previous PCI		*Format:*	Text (categorical values specified by STS)
ParentShortName: POCPCI		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous PCI-Stent Type	*SeqNo:*	795
Short Name:	**POCPCIStTy**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate type of intracoronary stent placed.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Previous PCI-Stent		*Format:*	Text (categorical values specified by STS)
ParentShortName: POCPCISt		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Bare metal
2	Drug-eluting
4	Bioresorbable
5	Multiple types
3	Unknown

Long Name:	Previous PCI-Interval	*SeqNo:*	800
Short Name:	**POCPCIIn**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the interval of time between the previous PCI and the current surgical procedure.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Previous PCI		*Format:*	Text (categorical values specified by STS)
ParentShortName: POCPCI		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

<u>Code:</u> <u>Value:</u>

1   <= 6 Hours

2   > 6 Hours

Long Name:	Previous Other Cardiac	*SeqNo:*	805
Short Name:	**POC**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the patient had any other previous cardiac intervention.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Prev Cardiac Intervent		*Format:*	Text (categorical values specified by STS)
ParentShortName: PrCVInt		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

<u>Code:</u> <u>Value:</u>

1   Yes

2   No

Long Name:	Previous Other Cardiac Intervention 1	*SeqNo:*	810
Short Name:	**POCInt1**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the first other cardiac intervention that was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Previous Other Cardiac	*Format:*	Text (categorical values specified by STS)
ParentShortName:	POC	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
2	Ablation, catheter, atrial fibrillation
3	Ablation, catheter, other or unknown
4	Ablation, catheter, ventricular
5	Ablation, surgical, atrial fibrillation
6	Ablation, surgical, other or unknown
7	Aneurysmectomy, LV
8	Aortic procedure, arch
9	Aortic procedure, ascending
10	Aortic procedure, descending
11	Aortic procedure, root
12	Aortic procedure, thoracoabdominal
13	Aortic Procedure, TEVAR
14	Aortic root procedure, valve sparing
15	Atrial appendage obliteration, Left, surgical
16	Atrial appendage obliteration, Left, transcatheter
17	Atrial appendage obliteration, Right, surgical
18	Atrial appendage obliteration, Right, transcatheter
19	Cardiac Tumor

20   Cardioversion(s)

21   Closure device, atrial septal defect

22   Closure device, ventricular septal defect

23   Congenital cardiac repair, surgical

24   Implantable Cardioverter Defibrillator (ICD) with or without pacer

25   Pacemaker

26   Pericardiectomy

27   Pulmonary thrombectomy

28   Total Artificial Heart (TAH)

29   Transmyocardial Laser Revascularization (TMR)

30   Transplant heart & lung

31   Transplant, heart

32   Transplant, lung(s)

33   Ventricular Assist Device (VAD), BiVAD

34   Ventricular Assist Device (VAD), left

35   Ventricular Assist Device (VAD), right

36   Other Cardiac Intervention (not listed)

Long Name:	Previous Other Cardiac Intervention 2	*SeqNo:*	815
Short Name:	**POCInt2**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the second other cardiac intervention that was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Previous Other Cardiac	*Format:*	Text (categorical values specified by STS)
ParentShortName:	POC	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No additional interventions
2	Ablation, catheter, atrial fibrillation
3	Ablation, catheter, other or unknown
4	Ablation, catheter, ventricular
5	Ablation, surgical, atrial fibrillation
6	Ablation, surgical, other or unknown
7	Aneurysmectomy, LV
8	Aortic procedure, arch
9	Aortic procedure, ascending
10	Aortic procedure, descending
11	Aortic procedure, root
12	Aortic procedure, thoracoabdominal
13	Aortic Procedure, TEVAR
14	Aortic root procedure, valve sparing
15	Atrial appendage obliteration, Left, surgical
16	Atrial appendage obliteration, Left, transcatheter
17	Atrial appendage obliteration, Right, surgical
18	Atrial appendage obliteration,

Right, transcatheter

19 Cardiac Tumor

20 Cardioversion(s)

21 Closure device, atrial septal defect

22 Closure device, ventricular septal defect

23 Congenital cardiac repair, surgical

24 Implantable Cardioverter Defibrillator (ICD) with or without pacer

25 Pacemaker

26 Pericardiectomy

27 Pulmonary thrombectomy

28 Total Artificial Heart (TAH)

29 Transmyocardial Laser Revascularization (TMR)

30 Transplant heart & lung

31 Transplant, heart

32 Transplant, lung(s)

33 Ventricular Assist Device (VAD), BiVAD

34 Ventricular Assist Device (VAD), left

35 Ventricular Assist Device (VAD), right

36 Other Cardiac Intervention (not listed)

Long Name:	Previous Other Cardiac Intervention 3	*SeqNo:*	820
Short Name:	**POCInt3**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the third other cardiac intervention that was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Previous Other Cardiac Intervention 2	*Format:*	Text (categorical values specified by STS)
ParentShortName:	POCInt2	*DataLength:*	
ParentValue:	<>"No additional interventions" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code:	Value:
1	No additional interventions
2	Ablation, catheter, atrial fibrillation
3	Ablation, catheter, other or unknown
4	Ablation, catheter, ventricular
5	Ablation, surgical, atrial fibrillation
6	Ablation, surgical, other or unknown
7	Aneurysmectomy, LV
8	Aortic procedure, arch
9	Aortic procedure, ascending
10	Aortic procedure, descending
11	Aortic procedure, root
12	Aortic procedure, thoracoabdominal
13	Aortic Procedure, TEVAR
14	Aortic root procedure, valve sparing
15	Atrial appendage obliteration, Left, surgical
16	Atrial appendage obliteration, Left, transcatheter
17	Atrial appendage obliteration,

Right, surgical

18   Atrial appendage obliteration,
     Right, transcatheter

19   Cardiac Tumor

20   Cardioversion(s)

21   Closure device, atrial septal
     defect

22   Closure device, ventricular
     septal defect

23   Congenital cardiac repair,
     surgical

24   Implantable Cardioverter
     Defibrillator (ICD) with or
     without pacer

25   Pacemaker

26   Pericardiectomy

27   Pulmonary thrombectomy

28   Total Artificial Heart (TAH)

29   Transmyocardial Laser
     Revascularization (TMR)

30   Transplant heart & lung

31   Transplant, heart

32   Transplant, lung(s)

33   Ventricular Assist Device
     (VAD), BiVAD

34   Ventricular Assist Device
     (VAD), left

35   Ventricular Assist Device
     (VAD), right

36   Other Cardiac Intervention
     (not listed)

Long Name:	Previous Other Cardiac Intervention 4	*SeqNo:*	825
Short Name:	**POCInt4**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the fourth other cardiac intervention that was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Previous Other Cardiac Intervention 3	*Format:*	Text (categorical values specified by STS)
ParentShortName:	POCInt3	*DataLength:*	
ParentValue:	<>"No additional interventions" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code:	Value:
1	No additional interventions
2	Ablation, catheter, atrial fibrillation
3	Ablation, catheter, other or unknown
4	Ablation, catheter, ventricular
5	Ablation, surgical, atrial fibrillation
6	Ablation, surgical, other or unknown
7	Aneurysmectomy, LV
8	Aortic procedure, arch
9	Aortic procedure, ascending
10	Aortic procedure, descending
11	Aortic procedure, root
12	Aortic procedure, thoracoabdominal
13	Aortic Procedure, TEVAR
14	Aortic root procedure, valve sparing
15	Atrial appendage obliteration, Left, surgical
16	Atrial appendage obliteration, Left, transcatheter
17	Atrial appendage obliteration,

Right, surgical

18   Atrial appendage obliteration,
      Right, transcatheter

19   Cardiac Tumor

20   Cardioversion(s)

21   Closure device, atrial septal
      defect

22   Closure device, ventricular
      septal defect

23   Congenital cardiac repair,
      surgical

24   Implantable Cardioverter
      Defibrillator (ICD) with or
      without pacer

25   Pacemaker

26   Pericardiectomy

27   Pulmonary thrombectomy

28   Total Artificial Heart (TAH)

29   Transmyocardial Laser
      Revascularization (TMR)

30   Transplant heart & lung

31   Transplant, heart

32   Transplant, lung(s)

33   Ventricular Assist Device
      (VAD), BiVAD

34   Ventricular Assist Device
      (VAD), left

35   Ventricular Assist Device
      (VAD), right

36   Other Cardiac Intervention
      (not listed)

Long Name:	Previous Other Cardiac Intervention 5	*SeqNo:*	830
Short Name:	**POCInt5**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the fifth other cardiac intervention that was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Previous Other Cardiac Intervention 4	*Format:*	Text (categorical values specified by STS)
ParentShortName:	POCInt4	*DataLength:*	
ParentValue:	<>"No additional interventions" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code:	Value:
1	No additional interventions
2	Ablation, catheter, atrial fibrillation
3	Ablation, catheter, other or unknown
4	Ablation, catheter, ventricular
5	Ablation, surgical, atrial fibrillation
6	Ablation, surgical, other or unknown
7	Aneurysmectomy, LV
8	Aortic procedure, arch
9	Aortic procedure, ascending
10	Aortic procedure, descending
11	Aortic procedure, root
12	Aortic procedure, thoracoabdominal
13	Aortic Procedure, TEVAR
14	Aortic root procedure, valve sparing
15	Atrial appendage obliteration, Left, surgical
16	Atrial appendage obliteration, Left, transcatheter
17	Atrial appendage obliteration,

Right, surgical

18   Atrial appendage obliteration,
      Right, transcatheter

19   Cardiac Tumor

20   Cardioversion(s)

21   Closure device, atrial septal
      defect

22   Closure device, ventricular
      septal defect

23   Congenital cardiac repair,
      surgical

24   Implantable Cardioverter
      Defibrillator (ICD) with or
      without pacer

25   Pacemaker

26   Pericardiectomy

27   Pulmonary thrombectomy

28   Total Artificial Heart (TAH)

29   Transmyocardial Laser
      Revascularization (TMR)

30   Transplant heart & lung

31   Transplant, heart

32   Transplant, lung(s)

33   Ventricular Assist Device
      (VAD), BiVAD

34   Ventricular Assist Device
      (VAD), left

35   Ventricular Assist Device
      (VAD), right

36   Other Cardiac Intervention
      (not listed)

Long Name:	Previous Other Cardiac Intervention 6	*SeqNo:*	835
Short Name:	**POCInt6**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the sixth other cardiac intervention that was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Previous Other Cardiac Intervention 5	*Format:*	Text (categorical values specified by STS)
ParentShortName:	POCInt5	*DataLength:*	
ParentValue:	<>"No additional interventions" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code:	Value:
1	No additional interventions
2	Ablation, catheter, atrial fibrillation
3	Ablation, catheter, other or unknown
4	Ablation, catheter, ventricular
5	Ablation, surgical, atrial fibrillation
6	Ablation, surgical, other or unknown
7	Aneurysmectomy, LV
8	Aortic procedure, arch
9	Aortic procedure, ascending
10	Aortic procedure, descending
11	Aortic procedure, root
12	Aortic procedure, thoracoabdominal
13	Aortic Procedure, TEVAR
14	Aortic root procedure, valve sparing
15	Atrial appendage obliteration, Left, surgical
16	Atrial appendage obliteration, Left, transcatheter
17	Atrial appendage obliteration,

Right, surgical

18   Atrial appendage obliteration,
      Right, transcatheter

19   Cardiac Tumor

20   Cardioversion(s)

21   Closure device, atrial septal
      defect

22   Closure device, ventricular
      septal defect

23   Congenital cardiac repair,
      surgical

24   Implantable Cardioverter
      Defibrillator (ICD) with or
      without pacer

25   Pacemaker

26   Pericardiectomy

27   Pulmonary thrombectomy

28   Total Artificial Heart (TAH)

29   Transmyocardial Laser
      Revascularization (TMR)

30   Transplant heart & lung

31   Transplant, heart

32   Transplant, lung(s)

33   Ventricular Assist Device
      (VAD), BiVAD

34   Ventricular Assist Device
      (VAD), left

35   Ventricular Assist Device
      (VAD), right

36   Other Cardiac Intervention
      (not listed)

Long Name:	Previous Other Cardiac Intervention 7	*SeqNo:*	840
Short Name:	**POCInt7**	*Core:*	Yes
Section Name:	Previous Cardiac Interventions	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the seventh other cardiac intervention that was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Previous Other Cardiac Intervention 6	*Format:*	Text (categorical values specified by STS)
ParentShortName:	POCInt6	*DataLength:*	
ParentValue:	<>"No additional interventions" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code:	Value:
1	No additional interventions
2	Ablation, catheter, atrial fibrillation
3	Ablation, catheter, other or unknown
4	Ablation, catheter, ventricular
5	Ablation, surgical, atrial fibrillation
6	Ablation, surgical, other or unknown
7	Aneurysmectomy, LV
8	Aortic procedure, arch
9	Aortic procedure, ascending
10	Aortic procedure, descending
11	Aortic procedure, root
12	Aortic procedure, thoracoabdominal
13	Aortic Procedure, TEVAR
14	Aortic root procedure, valve sparing
15	Atrial appendage obliteration, Left, surgical
16	Atrial appendage obliteration, Left, transcatheter
17	Atrial appendage obliteration,

Right, surgical

18   Atrial appendage obliteration, Right, transcatheter

19   Cardiac Tumor

20   Cardioversion(s)

21   Closure device, atrial septal defect

22   Closure device, ventricular septal defect

23   Congenital cardiac repair, surgical

24   Implantable Cardioverter Defibrillator (ICD) with or without pacer

25   Pacemaker

26   Pericardiectomy

27   Pulmonary thrombectomy

28   Total Artificial Heart (TAH)

29   Transmyocardial Laser Revascularization (TMR)

30   Transplant heart & lung

31   Transplant, heart

32   Transplant, lung(s)

33   Ventricular Assist Device (VAD), BiVAD

34   Ventricular Assist Device (VAD), left

35   Ventricular Assist Device (VAD), right

36   Other Cardiac Intervention (not listed)

Long Name:	Indication for Reoperation	*SeqNo:*	845
Short Name:	**IndReop**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the primary reason for repeat valve procedure.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Prev Valve		*Format:*	Text (categorical values specified by STS)
ParentShortName: PrValve		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Structural Prosthetic Valve Deterioration	Wear, fracture, poppet escape, calcification, leaflet tear, stent creep
2	Non-structural prosthetic valve dysfunction	entrapment by pannus, paravalvular leak, obstruction, inappropriate sizing,
3	Prosthetic valve endocarditis	Infection, active or treated
4	Valve Thrombosis	
5	Failed Repair	
6	Repeat valve procedure on a different valve	
7	Other	

Long Name:	Non-Structural Valve Dysfunction	*SeqNo:*	850
Short Name:	**NonStVDys**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the primary type of nonstructural valve dysfunction.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Indication for Reoperation		*Format:*	Text (categorical values specified by STS)
ParentShortName: IndReop		*DataLength:*	
ParentValue: = "Non-structural prosthetic valve dysfunction"		*Data Source:* User	

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Paravalvular Leak

2	Hemolysis
3	Entrapment by pannus, tissue, or suture
4	Sizing or positioning issue
5	Other

Long Name:	Prev Oth Card	*SeqNo:*	855
Short Name:	**PrOthCar**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether patient had a previous intrapericardial or great vessel (e.g., aorta, superior vena cava, inferior vena cava, pulmonary arteries and veins) procedure performed. This may include, but is not limited to LVA, acquired VSD, SVR, TMR, cardiac trauma, pericardial window, pericardiectomy, cardiac tumor, myectomy or heart transplant.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Prev Cardiac Intervent	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrCVInt	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous Arrhythmia Surgery	*SeqNo:*	860
Short Name:	**POArr**	*Core:*	No
Section Name:	Previous Cardiac Interventions	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether the patient had any other arrhythmia surgery (e.g., maze procedure).

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Prev Oth Card	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrOthCar	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes

2   No

Long Name:	Previous Congenital		*SeqNo:*	865
Short Name:	**PrOthCongen**		*Core:*	No
Section Name:	Previous Cardiac Interventions		*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether patient had a previous congenital heart surgery and/or percutaneous procedure performed. May include, but is not limited to VSD, ASD, TOF and PFO.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Prev Cardiac Intervent	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrCVInt	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   Yes
2   No

Long Name:	Prev Oth Card-ICD		*SeqNo:*	870
Short Name:	**PrOCAICD**		*Core:*	No
Section Name:	Previous Cardiac Interventions		*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the patient had a previous implant of an Implantable Cardioverter/Defibrillator. This does not include lead placement only.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Prev Cardiac Intervent	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrCVInt	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   Yes
2   No

Long Name:	Prev Oth Card-Pacemaker	*SeqNo:* 875
Short Name:	**PrOCPace**	*Core:* No
Section Name:	Previous Cardiac Interventions	*Harvest:* No

DBTableName AdultData

Definition: Indicate whether a previous permanent pacemaker was placed anytime prior to this surgical procedure. This does not include lead placement only.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Prev Cardiac Intervent		*Format:*	Text (categorical values specified by STS)
ParentShortName: PrCVInt		*DataLength:*	
ParentValue: = "Yes"		*Data Source:*	User
ParentHarvestCodes: 1			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Prev Oth Card-Other	*SeqNo:* 880
Short Name:	**POCO**	*Core:* No
Section Name:	Previous Cardiac Interventions	*Harvest:* No

DBTableName AdultData

Definition: Indicate whether the patient has undergone any other previous cardiovascular intervention.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Prev Cardiac Intervent		*Format:*	Text (categorical values specified by STS)
ParentShortName: PrCVInt		*DataLength:*	
ParentValue: = "Yes"		*Data Source:*	User
ParentHarvestCodes: 1			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Prior MI	*SeqNo:*	885
Short Name:	**PrevMI**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate if the patient has had at least one documented previous myocardial infarction at any time prior to this surgery. (Refer to training manual for MI definition.)

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	MI-When	*SeqNo:*	890
Short Name:	**MIWhen**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the time period between the last documented myocardial infarction and surgery.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Prior MI	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrevMI	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	<=6 Hrs
2	>6 Hrs but <24 Hrs
3	1 to 7 Days
4	8 to 21 Days
5	>21 Days

Long Name: Cardiac Presentation/Symptoms - At Time Of This Admission   *SeqNo:*   895

Short Name: **CardSympTimeOfAdm**   *Core:*   Yes

Section Name: Preoperative Cardiac Status   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the patient's cardiac symptoms at the time of this admission.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	No Symptoms	No Symptoms, no angina.
2	Stable Angina	Angina without a change in frequency or pattern for the prior 6 weeks. Angina is controlled by rest and/or oral or transcutaneous medications.
3	Unstable Angina	There are three principal presentations of unstable angina: 1. Rest angina (occurring at rest and prolonged, usually >20 minutes); 2. New-onset angina (within the past 2 months, of at least Canadian Cardiovascular Society Class III severity); or 3. Increasing angina (previously diagnosed angina that has become distinctly more frequent, longer in duration, or increased by 1 or more Canadian Cardiovascular Society class to at least CCS III severity).
4	Non-ST Elevation MI (Non-STEMI)	The patient was hospitalized for a non-ST elevation myocardial infarction (STEMI) as documented in the medical record. Non-STEMIs are characterized by the presence of both criteria: a. Cardiac biomarkers (creatinine kinase-myocardial band, Troponin T or I) exceed the upper limit of normal according to the individual hospital's laboratory parameters with a clinical presentation which is consistent or suggestive of ischemia. ECG changes and/or ischemic symptoms may or may not be present. b. Absence of ECG changes diagnostic of a STEMI (see STEMI).
5	ST Elevation MI (STEMI)	The patient presented with a ST elevation myocardial infarction (STEMI) or its equivalent as documented in the medical record. STEMIs are characterized by the presence of both criteria: a. ECG evidence of STEMI: New or presumed new ST-segment elevation or new left bundle branch block not

documented to be resolved within 20 minutes. ST-segment elevation is defined by new or presumed new sustained ST-segment elevation at the J-point in two contiguous electrocardiogram (ECG) leads with the cut-off points: >=0.2 mV in men or >= 0.15mV in women in leads V2-V3 and/or >= 0.1 mV in other leads and lasting greater than or equal to 20 minutes. If no exact ST-elevation measurement is recorded in the medical chart, physician's written documentation of ST-elevation or Q waves is acceptable. If only one ECG is performed, then the assumption that the ST elevation persisted at least the required 20 minutes is acceptable. Left bundle branch block (LBBB) refers to new or presumed new LBBB on the initial ECG.

b. Cardiac biomarkers (creatinine kinase-myocardial band, Troponin T or I) exceed the upper limit of normal according to the individual hospital's laboratory parameters a clinical presentation which is consistent or suggestive of ischemia.

Note: For purposes of the Registry, ST elevation in the posterior chest leads (V7 through V9), or ST depression that is maximal in V1-3, without ST-segment elevation in other leads, demonstrating posterobasal myocardial infarction, is considered a STEMI equivalent and qualifies the patient for reperfusion therapy.

Code	Value	Definition
6	Angina equivalent	
7	Other	Presentation/symptom not listed above.

Long Name:	Cardiac Symptoms - At Time Of Surgery	*SeqNo:*	900
Short Name:	**CardSympTimeOfSurg**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the patient's cardiac symptoms at the time of this procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	No Symptoms	No Symptoms, no angina.
2	Stable Angina	Angina without a change in frequency or pattern for the prior 6 weeks. Angina is controlled by rest and/or oral or transcutaneous medications.

3	Unstable Angina	There are three principal presentations of unstable angina: 1. Rest angina (occurring at rest and prolonged, usually >20 minutes); 2. New-onset angina (within the past 2 months, of at least Canadian Cardiovascular Society Class III severity); or 3. Increasing angina (previously diagnosed angina that has become distinctly more frequent, longer in duration, or increased by 1 or more Canadian Cardiovascular Society class to at least CCS III severity).
4	Non-ST Elevation MI (Non-STEMI)	The patient was hospitalized for a non-ST elevation myocardial infarction (STEMI) as documented in the medical record. Non-STEMIs are characterized by the presence of both criteria: a. Cardiac biomarkers (creatinine kinase-myocardial band, Troponin T or I) exceed the upper limit of normal according to the individual hospital's laboratory parameters with a clinical presentation which is consistent or suggestive of ischemia. ECG changes and/or ischemic symptoms may or may not be present. b. Absence of ECG changes diagnostic of a STEMI (see STEMI).
5	ST Elevation MI (STEMI)	The patient presented with a ST elevation myocardial infarction (STEMI) or its equivalent as documented in the medical record. STEMIs are characterized by the presence of both criteria: a. ECG evidence of STEMI: New or presumed new ST-segment elevation or new left bundle branch block not documented to be resolved within 20 minutes. ST-segment elevation is defined by new or presumed new sustained ST-segment elevation at the J-point in two contiguous electrocardiogram (ECG) leads with the cut-off points: >=0.2 mV in men or >= 0.15mV in women in leads V2-V3 and/or >= 0.1 mV in other leads and lasting greater than or equal to 20 minutes. If no exact ST-elevation measurement is recorded in the medical chart, physician's written documentation of ST-elevation or Q waves is acceptable. If only one ECG is performed, then the assumption that the ST elevation persisted at least the required 20 minutes is acceptable. Left bundle branch block (LBBB) refers to new or presumed new LBBB on the initial ECG. b. Cardiac biomarkers (creatinine kinase-myocardial band, Troponin T or I) exceed the upper limit of normal according to the individual hospital's laboratory parameters a clinical presentation which is consistent or suggestive of ischemia. Note: For purposes of the Registry, ST elevation in the posterior chest leads (V7 through V9), or ST depression that is maximal in V1-3, without ST-segment elevation in other leads, demonstrating posterobasal myocardial

infarction, is considered a STEMI equivalent and qualifies the patient for reperfusion therapy.

| 6 | Angina equivalent | |
| 7 | Other | Presentation/symptom not listed above. |

Long Name: Anginal Classification within 2 weeks   *SeqNo:* 905

Short Name: **AnginalClass**   *Core:* Yes

Section Name: Preoperative Cardiac Status   *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the patient's anginal classification or symptom status within the past 2 weeks.
The anginal classification or symptom status is classified as the highest grade of angina or chest pain by the Canadian Cardiovascular Angina Classification System (CCS).

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FINAL Version 1.1
Last Updated: July 6, 2012

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	CCS Class 0	The patient has no angina.
2	CCS Class I	Ordinary physical activity does not cause angina; for example walking or climbing stairs, angina occurs with strenuous or rapid or prolonged exertion at work or recreation.
3	CCS Class II	Slight limitation of ordinary activity; for example, angina occurs walking or stair climbing after meals, in cold, in wind, under emotional stress or only during the few hours after awakening, walking more than two blocks on the level or climbing more than one flight of ordinary stairs at a normal pace and in normal conditions.
4	CCS Class III	Marked limitation of ordinary activity; for example, angina occurs walking one or two blocks on the level or climbing one flight of stairs in normal conditions and at a normal pace.
5	CCS Class IV	Inability to carry on any physical activity without discomfort - angina syndrome may be present at rest.

Long Name:	Heart Failure within 2 weeks	*SeqNo:*	910
Short Name:	**CHF**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate if there is physician documentation or report that the patient has been in a state of heart failure within the past 2 weeks.

Heart failure is defined as physician documentation or report of any of the following clinical symptoms of heart failure described as unusual dyspnea on light exertion, recurrent dyspnea occurring in the supine position, fluid retention; or the description of rales, jugular venous distension, pulmonary edema on physical exam, or pulmonary edema on chest x-ray presumed to be cardiac dysfunction.

A low ejection fraction alone, without clinical evidence of heart failure does not qualify as heart failure.

An elevated BNP without other supporting documentation should not be coded as CHF.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	Classification-NYHA	*SeqNo:*	915
Short Name:	**ClassNYH**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the patient's worst dyspnea or functional class, coded as the New York Heart Association (NYHA) classification within the past 2 weeks. This is to be used for heart failure only, is not intended to classify angina.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Heart Failure within 2 weeks	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CHF	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:

1	Class I	Patient has cardiac disease but without resulting limitations of ordinary physical activity. Ordinary physical activity (e.g., walking several blocks or climbing stairs) does not cause undue fatigue, palpitation, or dyspnea.
2	Class II	Patient has cardiac disease resulting in slight limitation of ordinary physical activity. Patient is comfortable at rest. Ordinary physical activity such as walking more than two blocks or climbing more than one flight of stairs results in limiting symptoms (e.g., fatigue, palpitation, or dyspnea).
3	Class III	Patient has cardiac disease resulting in marked limitation of physical activity. Patient is comfortable at rest. Less than ordinary physical activity (e.g., walking one to two level blocks or climbing one flight of stairs) causes fatigue, palpitation, or dyspnea.
4	Class IV	Patient has cardiac disease resulting in inability to perform any physical activity without discomfort. Symptoms may be present even at rest or minimal exertion. If any physical activity is undertaken, discomfort is increased.

Long Name: Prior Heart failure   *SeqNo:*   920

Short Name: **PriorHF**   *Core:*   Yes

Section Name: Preoperative Cardiac Status   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate history of heart failure occurring more than 2 weeks prior to current episode of care.
A previous hospital admission with principal diagnosis of heart failure is considered evidence of heart failure history but is not essential.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	Cardiac Presentation on Admission	*SeqNo:*	925
Short Name:	**CardPres**	*Core:*	No
Section Name:	Preoperative Cardiac Status	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the type of angina present prior to this procedure.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	No Symptoms, no Angina	No Symptoms, no angina.
2	Symptoms Unlikely to be Ischemia	Pain, pressure or discomfort in the chest, neck or arms not clearly exertional or not otherwise consistent with pain or discomfort of myocardial ischemic origin. This includes patients with non-cardiac pain (e.g., pulmonary embolism, musculoskeletal, or esophageal discomfort), or cardiac pain not caused by myocardial ischemia (e.g., acute pericarditis).
3	Stable Angina	Stable Angina: Angina without a change in frequency or pattern for the six weeks prior to this surgical intervention. Angina is controlled by rest and/or oral or transcutaneous medications.
4	Unstable Angina	Unstable Angina - There are three principal presentations of unstable angina: 1) rest angina, 2) new-onset (less than 2 months) angina, and 3) increasing angina (in intensity, duration and/or frequency).
5	Non-ST Elevation MI (Non-STEMI)	Non-ST Elevation MI (Non-STEMI) - non-ST elevation myocardial infarction as documented in the medical record.
6	ST Elevation MI (STEMI)	STEMIs are characterized by the presence of both criteria: A. ECG evidence of STEMI B. Cardiac biomarkers

Long Name:	Cardiogenic Shock	*SeqNo:* 930
Short Name:	**CarShock**	*Core:* Yes
Section Name:	Preoperative Cardiac Status	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient developed cardiogenic shock. Cardiogenic shock is defined as a sustained (>30 min) episode of hypoperfusion evidenced by systolic blood pressure <90 mm Hg and/or, if available, cardiac index <2.2 L/min per square meter determined to be secondary to cardiac dysfunction and/or the requirement for parenteral inotropic or vasopressor agents or mechanical support (e.g., IABP, extracorporeal circulation, VADs) to maintain blood pressure and cardiac index above those specified levels.
Note: Transient episodes of hypotension reversed with IV fluid or atropine do not constitute cardiogenic shock. The hemodynamic compromise (with or without extraordinary supportive therapy) must persist for at least 30 min.
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LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:	*Format:* Text (categorical values specified by STS)
ParentShortName:	*DataLength:*
ParentValue:	*Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
3	Yes - At the time of the procedure
4	Yes, not at the time of the procedure but within prior 24 hours
2	No

Long Name:	Resuscitation
Short Name:	**Resusc**
Section Name:	Preoperative Cardiac Status

SeqNo: 935

Core: Yes

Harvest: Yes

DBTableName   AdultData

Definition: Indicate whether the patient required cardiopulmonary resuscitation before the start of the operative procedure which includes the institution of anesthetic management. Capture resuscitation timeframe: within 1 hour or 1-24 hours pre-op.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
3	Yes - Within 1 hour of the start of the procedure
4	Yes - More than 1 hour but less than 24 hours of the start of the procedure
2	No

Long Name:	Arrhythmia When	*SeqNo:*	940
Short Name:	**ArrhythWhen**	*Core:*	No
Section Name:	Preoperative Cardiac Status	*Harvest:*	No

DBTableName AdultData

Definition: Indicate when the patient had a preoperative history of arrhythmia (sustained ventricular tachycardia, ventricular fibrillation, or sudden cardiac death presumed to be lethal arrhythmia, atrial fibrillation, atrial flutter, third degree heart block, second degree heart block, sick sinus syndrome) that has been treated with any of the following modalities:
1. ablation therapy
2. AICD
3. pacemaker
4. pharmacological treatment
5. electrocardioversion
6. defibrillation

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	None	
2	Remote	More than 30 days prior to procedure.
3	Recent	Within 30 days prior to procedure.

Long Name:	Cardiac Arrhythmia	*SeqNo:*	945
Short Name:	**Arrhythmia**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of a cardiac rhythm disturbance before the start of the operative procedure which includes the institution of anesthetic management.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes

       2   No

       3   Unknown

Long Name:	Cardiac Arrhythmia - VTach / VFib	*SeqNo:*	950
Short Name:	**ArrhythVV**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether arrhythmia was VTach or VFib.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Cardiac Arrhythmia		*Format:*	Text (categorical values specified by STS)
ParentShortName: Arrhythmia		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

    Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	None	
2	Remote	More than 30 days prior to procedure.
3	Recent	Within 30 days of this procedure.

Long Name:	Cardiac Arrhythmia - Sick Sinus Syndrome	*SeqNo:*	955
Short Name:	**ArrhythSSS**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether arrhythmia was sick sinus syndrome.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Cardiac Arrhythmia		*Format:*	Text (categorical values specified by STS)
ParentShortName: Arrhythmia		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

    Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	None	
2	Remote	More than 30 days prior to procedure.
3	Recent	Within 30 days of this procedure.

Long Name:	Cardiac Arrhythmia - AFlutter	*SeqNo:*	960
Short Name:	**ArrhythAFlutter**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether arrhythmia was atrial flutter.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Cardiac Arrhythmia	*Format:*	Text (categorical values specified by STS)	
ParentShortName: Arrhythmia	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	None	
2	Remote	More than 30 days prior to procedure.
3	Recent	Within 30 days of this procedure.

Long Name:	Cardiac Arrhythmia - Second Degree Heart Block	*SeqNo:*	965
Short Name:	**ArrhythSecond**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether arrhythmia was second degree heart block.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Cardiac Arrhythmia	*Format:*	Text (categorical values specified by STS)	
ParentShortName: Arrhythmia	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	None	
2	Remote	More than 30 days prior to procedure.
3	Recent	Within 30 days of this procedure.

Long Name:	Cardiac Arrhythmia - Third Degree Heart Block	*SeqNo:*	970
Short Name:	**ArrhythThird**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether arrhythmia was third degree heart block.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Cardiac Arrhythmia		*Format:*	Text (categorical values specified by STS)
ParentShortName: Arrhythmia		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	None	
2	Remote	More than 30 days prior to procedure.
3	Recent	Within 30 days of this procedure.

Long Name:	Cardiac Arrhythmia - Permanently Paced Rhythm	*SeqNo:*	975
Short Name:	**ArrhythPPaced**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has a permanently paced rhythm, evidenced by pacemaker activity during heart rhythm evaluation.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Cardiac Arrhythmia		*Format:*	Text (categorical values specified by STS)
ParentShortName: Arrhythmia		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Cardiac Arrhythmia - Atrial Fibrillation	*SeqNo:*	980
Short Name:	**ArrhythAFib**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether arrhythmia was atrial fibrillation and if so, which type.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Cardiac Arrhythmia		*Format:*	Text (categorical values specified by STS)
ParentShortName: Arrhythmia		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   None

2   Paroxysmal

3   Continuous / persistent

Long Name:	Cardiac Arrhythmia - Atrial Fibrillation Duration	*SeqNo:*	985
Short Name:	**ArrhythAFibDur**	*Core:*	Yes
Section Name:	Preoperative Cardiac Status	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the duration of atrial fibrillation.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Cardiac Arrhythmia - Atrial Fibrillation		*Format:*	Text (categorical values specified by STS)
ParentShortName: ArrhythAFib		*DataLength:*	
ParentValue: = "Continuous / persistent"		*Data Source:* User	

ParentHarvestCodes: 3

Harvest Codes:

Code: Value:

1   Less than or equal to 1 year

2   More than one year

3   Unknown

Long Name:	Arrhythmia Type-Vtach/Vfib	*SeqNo:*	990
Short Name:	**ArrhyVtach**	*Core:*	No
Section Name:	Preoperative Cardiac Status	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether sustained ventricular tachycardia or fibrillation was present within 30 days of the procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Arrhythmia When	*Format:*	Text (categorical values specified by STS)
ParentShortName: ArrhythWhen	*DataLength:*	
ParentValue: = "Recent"	*Data Source:* User	

ParentHarvestCodes: 3

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Arrhythmia Type-Second Degree Heart Block	*SeqNo:*	995
Short Name:	**ArrhyVtachHrtBlk**	*Core:*	No
Section Name:	Preoperative Cardiac Status	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether Second Degree Heart Block was present within 30 days of the procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Arrhythmia When	*Format:*	Text (categorical values specified by STS)
ParentShortName: ArrhythWhen	*DataLength:*	
ParentValue: = "Recent"	*Data Source:* User	

ParentHarvestCodes: 3

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Arrhythmia Type-Sick Sinus Syndrome	*SeqNo:*	1000
Short Name:	**ArrhyVtachSicSinSyn**	*Core:*	No
Section Name:	Preoperative Cardiac Status	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether Sick Sinus Syndrome was present within 30 days of the procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Arrhythmia When	*Format:*	Text (categorical values specified by STS)
ParentShortName: ArrhythWhen	*DataLength:*	
ParentValue: = "Recent"	*Data Source:* User	

ParentHarvestCodes: 3

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Arrhythmia Type-Third Degree Heart Block	*SeqNo:*	1005
Short Name:	**ArrhyTHB**	*Core:*	No
Section Name:	Preoperative Cardiac Status	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether third degree heart block was present within thirty days of the procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Arrhythmia When	*Format:*	Text (categorical values specified by STS)
ParentShortName: ArrhythWhen	*DataLength:*	
ParentValue: = "Recent"	*Data Source:* User	

ParentHarvestCodes: 3

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Arrhythmia Type-Afib/Aflutter	*SeqNo:*	1010
Short Name:	**ArrhyAfib**	*Core:*	No
Section Name:	Preoperative Cardiac Status	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether atrial fibrillation or flutter was present within thirty days of the procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Arrhythmia When	*Format:*	Text (categorical values specified by STS)
ParentShortName: ArrhythWhen	*DataLength:*	
ParentValue: = "Recent"	*Data Source:* User	

ParentHarvestCodes: 3

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Afib/Aflutter Type	*SeqNo:*	1015
Short Name:	**ArrhyAfibTy**	*Core:*	No
Section Name:	Preoperative Cardiac Status	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether preoperative AFib/Aflutter is paroxysmal or continuous/persistent.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Arrhythmia Type-Afib/Aflutter	*Format:*	Text (categorical values specified by STS)
ParentShortName: ArrhyAfib	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Paroxysmal	I.e., sporadic
2	Continuous/persistent	Persistent longstanding permanent or continuous

Long Name:	Meds-ACE Inhibitors or ARB Within 48 Hours	*SeqNo:*	1020
Short Name:	**MedACEI48**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received ACE Inhibitors or ARB within 48 hours preceding surgery (e.g., if indicated for LV dysfunction or acute MI).

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
4	Unknown

Long Name:	Meds-ADP Inhibitors Within Five Days	*SeqNo:*	1025
Short Name:	**MedADP5Days**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has received ADP Inhibitors within 5 days preceding surgery.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
4	Unknown

Long Name:	Meds-ADP Inhibitors Discontinuation	*SeqNo:*	1030
Short Name:	**MedADPIDis**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the number of days prior to surgery ADP Inhibitor use was discontinued. If less than 24 hours, enter "0".

LowValue:	0	*UsualRangeLow:*	
HighValue:	5	*UsualRangeHigh:*	
Parent Long Name:	Meds-ADP Inhibitors Within Five Days	*Format:*	Integer
ParentShortName:	MedADP5Days	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Meds- Amiodarone	*SeqNo:*	1035
Short Name:	**MedAmiodarone**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether and when the patient received Amiodarone therapy prior to surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes, on home therapy
2	Yes, therapy started this admission
3	No
4	Unknown

Long Name:	Meds-Anticoagulants Within 48 Hours	*SeqNo:*	1040
Short Name:	**MedACoag**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received IV and/or subq anticoagulants within 48 hours preceding surgery.
Do NOT include Coumadin or one-time boluses of Heparin.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Meds-Anticoagulants-Medication Name	*SeqNo:*	1045
Short Name:	**MedACMN**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the name of the anticoagulant the patient received within 48 hours preceding surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	Meds-Anticoagulants Within 48 Hours	*Format:*	Text (categorical values specified by STS)
ParentShortName:	MedACoag	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Heparin (Unfractionated)
2	Heparin (Low Molecular)
9	Other

Long Name:	Meds-Antiplatelets Within 5 Days	*SeqNo:*	1050
Short Name:	**MedAplt5Days**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has received Antiplatelets within 5 days preceding surgery.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
4	Unknown

Long Name:	Meds-Aspirin	*SeqNo:*	1055
Short Name:	**MedASA**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether or not the patient received Aspirin or Ecotrin within 5 days preceding surgery.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
4	Unknown

Long Name:	Meds-Beta Blockers	*SeqNo:*	1060
Short Name:	**MedBeta**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether or not the patient received beta blockers within 24 hours preceding surgery, or if beta blocker was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, or physician assistant. A "hold order" is not considered a contraindication.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated

Long Name:	Meds-Beta Blocker Therapy	*SeqNo:*	1065
Short Name:	**MedBetaTher**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received beta blocker therapy for at least 2 weeks prior to surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
4	Unknown

Long Name:	Meds-Calcium Channel Blocker Therapy	*SeqNo:* 1070
Short Name:	**MedCChanTher**	*Core:* Yes
Section Name:	Preoperative Medications	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient received calcium channel blocker therapy for at least 2 weeks prior to surgery.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*
Parent Long Name:	*Format:* Text (categorical values specified by STS)
ParentShortName:	*DataLength:*
ParentValue:	*Data Source:* User
ParentHarvestCodes:	

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
4	Unknown

Long Name:	Meds-Coumadin	*SeqNo:* 1075
Short Name:	**MedCoum**	*Core:* Yes
Section Name:	Preoperative Medications	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient received Coumadin within 24 hours preceding surgery.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*
Parent Long Name:	*Format:* Text (categorical values specified by STS)
ParentShortName:	*DataLength:*
ParentValue:	*Data Source:* User
ParentHarvestCodes:	

Harvest Codes:

Code:	Value:
1	Yes
2	No
4	Unknown

Long Name:	Meds-Factor Xa Inhibitors	*SeqNo:*	1080
Short Name:	**MedXaInhibitors**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received factor Xa inhibitors within 24 hours preoperatively.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	Meds-Glycoprotein IIb/IIIa Inhibitor	*SeqNo:*	1085
Short Name:	**MedGP**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received Glycoprotein IIb/IIIa inhibitors within 24 hours preceding surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
4	Unknown

Long Name:	Meds-Glycoprotein IIb/IIIa Inhibitor-Medication Name	*SeqNo:* 1090
Short Name:	**MedGPMN**	*Core:* Yes
Section Name:	Preoperative Medications	*Harvest:* Yes

DBTableName   AdultData

Definition: Indicate the name of the Glycoprotein IIb/IIIa Inhibitor the patient received within 24 hours preceding surgery.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:	Meds-Glycoprotein IIb/IIIa Inhibitor	*Format:*	Text (categorical values specified by STS)
ParentShortName:	MedGP	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Abciximab (ReoPro)
2	Eptifibatide (Integrilin)
3	Tirofiban (Aggrastat)
4	Other

Long Name:	Meds-Inotropes	*SeqNo:* 1095
Short Name:	**MedInotr**	*Core:* Yes
Section Name:	Preoperative Medications	*Harvest:* Yes

DBTableName   AdultData

Definition: Indicate whether the patient received IV inotropic agents within 48 hours preceding surgery.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Meds-Lipid Lowering	*SeqNo:*	1100
Short Name:	**MedLipid**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether or not the patient received lipid lowering medication within 24 hours preceding surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
4	Unknown

Long Name:	Meds-Lipid Lowering-Medication Type	*SeqNo:*	1105
Short Name:	**MedLipMN**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the type of lipid lowering medication the patient received within 24 hours preceding surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Meds-Lipid Lowering	*Format:*	Text (categorical values specified by STS)
ParentShortName: MedLipid	*DataLength:*	
ParentValue: = "Yes"	*Data Source:*	User
ParentHarvestCodes: 1		

Harvest Codes:

Code:	Value:
1	Statin
2	Non-statin
4	Other
5	Combination

Long Name:	Meds-Long-Acting Nitrate Therapy	*SeqNo:*	1110
Short Name:	**MedLongActNit**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received long-acting nitrate therapy for at least 2 weeks prior to surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
4	Unknown

Long Name:	Meds-Nitrates-I.V.	*SeqNo:*	1115
Short Name:	**MedNitIV**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received IV Nitrates within 24 hours preceding surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Meds-Other Antianginal Medication Therapy	*SeqNo:*	1120
Short Name:	**MedOthAntiang**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received any other antianginal medication therapy for at least 2 weeks prior to surgery.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
4	Unknown

Long Name:	Meds-Preoperative Antiarrhythmics	*SeqNo:*	1125
Short Name:	**MedAArrhy**	*Core:*	No
Section Name:	Preoperative Medications	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether or not the patient was on antiarrhythmics preoperatively.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Meds-Steroids	*SeqNo:*	1130
Short Name:	**MedSter**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient was taking steroids within 24 hours of surgery. This does not include a one-time dose related to prophylaxis therapy (i.e. IV dye exposure for cath procedure or surgery pre-induction period). Non-systemic medications are not included in this category (i.e., nasal sprays, topical creams).

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
4	Unknown

Long Name:	Meds-Thrombin Inhibitors	*SeqNo:*	1135
Short Name:	**MedThrombinIn**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received thrombin inhibitors within 24 hours preoperatively.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
4	Unknown

Long Name:	Meds-Thrombolytics	*SeqNo:*	1140
Short Name:	**MedThrom**	*Core:*	Yes
Section Name:	Preoperative Medications	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received thrombolytics within 48 hours preoperatively.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Cardiac Catheterization Performed	*SeqNo:*	1145
Short Name:	**CarCathPer**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether cardiac catheterization and/or CT angio was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Cardiac Catheterization Date	*SeqNo:*	1150
Short Name:	**CarCathDt**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the date cardiac catheterization was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Cardiac Catheterization Performed	*Format:*	Date mm/dd/yyyy
ParentShortName:	CarCathPer	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Coronary Anatomy/Disease Known	*SeqNo:*	1155
Short Name:	**CorAnatDisKnown**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether coronary artery anatomy and/or disease is documented and available prior to surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Dominance	*SeqNo:*	1160
Short Name:	**Dominance**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether coronary artery dominance is documented prior to surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Coronary Anatomy/Disease Known	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CorAnatDisKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   Left
2   Right
3   Co-dominant
4   Not documented

Long Name:	Source(s) Used To Quantify Stenosis	*SeqNo:*	1165
Short Name:	**StenSource**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate source or sources used to quantify coronary artery stenosis.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Coronary Anatomy/Disease Known	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CorAnatDisKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   Angiogram
2   CT
3   IVUS
4   Progress/OP Note
5   Other

6   Multiple

Long Name:	Num Dis Vessels	*SeqNo:*	1170
Short Name:	**NumDisV**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the number of diseased major native coronary vessel systems: LAD system, Circumflex system, and/or Right system with >= 50% narrowing of any vessel preoperatively.
NOTE: Left main disease (>=50%) is counted as TWO vessels (LAD and Circumflex, which may include a Ramus Intermedius). For example, left main and RCA would count as three total.

A vessel that has ever been considered diseased, should always be considered diseased.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Coronary Anatomy/Disease Known	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CorAnatDisKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	None	No significant coronary obstructive disease.
2	One	
3	Two	
4	Three	

Long Name:	Percent Native Artery Stenosis Known	*SeqNo:*	1175
Short Name:	**PctStenKnown**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the percent stenosis of native coronary stenosis is known.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Num Dis Vessels	*Format:*	Text (categorical values specified by STS)
ParentShortName:	NumDisV	*DataLength:*	
ParentValue:	= "One", "Two" or "Three"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes

2   No

Long Name:	Graft(s) Present	*SeqNo:*	1180
Short Name:	**GraftsPrsnt**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether one or more coronary artery bypass grafts are present prior to this surgery.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name:	Num Dis Vessels	*Format:*	Text (categorical values specified by STS)
ParentShortName:	NumDisV	*DataLength:*	
ParentValue:	= "One", "Two" or "Three"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Stent(s) Present	*SeqNo:*	1185
Short Name:	**StentPrsnt**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether one or more intracoronary stents are present prior to this surgery.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name:	Num Dis Vessels	*Format:*	Text (categorical values specified by STS)
ParentShortName:	NumDisV	*DataLength:*	
ParentValue:	= "One", "Two" or "Three"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Fractional Flow Reserve (FFR) Performed	*SeqNo:*	1190
Short Name:	**FFRPerf**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether Fractional Flow Reserve (FFR) was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Num Dis Vessels	*Format:*	Text (categorical values specified by STS)
ParentShortName:	NumDisV	*DataLength:*	
ParentValue:	= "One", "Two" or "Three"	*Data Source:*	User
ParentHarvestCodes:	2|3|4		

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Percent Stenosis - Left Main	*SeqNo:*	1195
Short Name:	**PctStenLMain**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer
ParentShortName:	PctStenKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Graft Stenosis - Left Main	*SeqNo:*	1200
Short Name:	**GrftStenLMain**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Graft(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName: GraftsPrsnt	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	100% occlusion
4	Not documented

Long Name:	Stent Stenosis - Left Main	*SeqNo:*	1205
Short Name:	**StntStenLMain**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent of stent stenosis at the time of this surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Stent(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName: StentPrsnt	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	Not documented

Long Name:	Fractional Flow Reserve (FFR) - Left Main	*SeqNo:*	1210
Short Name:	**FFRLMain**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	1.00	*UsualRangeHigh:*	
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real
ParentShortName:	FFRPerf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Proximal LAD	*SeqNo:*	1215
Short Name:	**PctStenProxLAD**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer
ParentShortName:	PctStenKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name: Graft Stenosis - Proximal LAD   *SeqNo:*   1220

Short Name: **GrftStenProxLAD**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Graft(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: GraftsPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   Patent

          2   Stenosis >=50%

          3   100% occlusion

          4   Not documented

Long Name: Stent Stenosis - Proximal LAD   *SeqNo:*   1225

Short Name: **StntStenProxLAD**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the highest percent of stent stenosis at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Stent(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: StentPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   Patent

          2   Stenosis >=50%

          3   Not documented

Long Name:	Fractional Flow Reserve (FFR) - Proximal LAD	*SeqNo:*	1230
Short Name:	**FFRProxLAD**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	1.00	*UsualRangeHigh:*	
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real
ParentShortName:	FFRPerf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Mid LAD	*SeqNo:*	1235
Short Name:	**PctStenMidLAD**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer
ParentShortName:	PctStenKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name: Graft Stenosis - Mid LAD   *SeqNo:*   1240

Short Name: **GrftStenMidLAD**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Graft(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: GraftsPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

          1   Patent

          2   Stenosis >=50%

          3   100% occlusion

          4   Not documented

Long Name: Stent Stenosis - Mid LAD   *SeqNo:*   1245

Short Name: **StntStenMidLAD**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the highest percent of stent stenosis at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Stent(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: StentPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

          1   Patent

          2   Stenosis >=50%

          3   Not documented

Long Name:	Fractional Flow Reserve (FFR) - Mid LAD		*SeqNo:*	1250
Short Name:	**FFRMidLAD**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*		
HighValue:	1.00	*UsualRangeHigh:*		
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real	
ParentShortName:	FFRPerf	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Distal LAD		*SeqNo:*	1255
Short Name:	**PctStenDistLAD**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*		
HighValue:	100	*UsualRangeHigh:*		
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer	
ParentShortName:	PctStenKnown	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name: Graft Stenosis - Distal LAD   *SeqNo:*   1260

Short Name: **GrftStenDistLAD**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Graft(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: GraftsPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

          1   Patent

          2   Stenosis >=50%

          3   100% occlusion

          4   Not documented

Long Name: Stent Stenosis - Distal LAD   *SeqNo:*   1265

Short Name: **StntStenDistLAD**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Stent(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: StentPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

          1   Patent

          2   Stenosis >=50%

          3   Not documented

Long Name:	Fractional Flow Reserve (FFR) - Distal LAD	*SeqNo:*	1270
Short Name:	**FFRDistLAD**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	1.00	*UsualRangeHigh:*	
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real
ParentShortName:	FFRPerf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Percent Stenosis - Diagonal 1	*SeqNo:*	1275
Short Name:	**PctStenDiag1**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer
ParentShortName:	PctStenKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name: Graft Stenosis - Diagonal 1   *SeqNo:*   1280

Short Name: **GrftStenDiag1**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Graft(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: GraftsPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:*   User

ParentHarvestCodes: 1

   Harvest Codes:

      Code: Value:

       1   Patent

       2   Stenosis >=50%

       3   100% occlusion

       4   Not documented

Long Name: Stent Stenosis - Diagonal 1   *SeqNo:*   1285

Short Name: **StntStenDiag1**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Stent(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: StentPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:*   User

ParentHarvestCodes: 1

   Harvest Codes:

      Code: Value:

       1   Patent

       2   Stenosis >=50%

       3   Not documented

Long Name:	Fractional Flow Reserve (FFR) - Diagonal 1		*SeqNo:*	1290
Short Name:	**FFRDiag1**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	1.00	*UsualRangeHigh:*	

Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real
ParentShortName:	FFRPerf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Diagonal 2		*SeqNo:*	1295
Short Name:	**PctStenDiag2**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	

Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer
ParentShortName:	PctStenKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name: Graft Stenosis - Diagonal 2   *SeqNo:*   1300

Short Name: **GrftStenDiag2**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Graft(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: GraftsPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

> Harvest Codes:

> > Code: Value:

> > > 1   Patent

> > > 2   Stenosis >=50%

> > > 3   100% occlusion

> > > 4   Not documented

Long Name: Stent Stenosis - Diagonal 2   *SeqNo:*   1305

Short Name: **StntStenDiag2**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Stent(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: StentPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

> Harvest Codes:

> > Code: Value:

> > > 1   Patent

> > > 2   Stenosis >=50%

> > > 3   Not documented

Long Name:	Fractional Flow Reserve (FFR) - Diagonal 2		*SeqNo:*	1310
Short Name:	**FFRDiag2**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*		
HighValue:	1.00	*UsualRangeHigh:*		
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real	
ParentShortName:	FFRPerf	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Diagonal 3		*SeqNo:*	1315
Short Name:	**PctStenDiag3**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*		
HighValue:	100	*UsualRangeHigh:*		
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer	
ParentShortName:	PctStenKnown	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Graft Stenosis - Diagonal 3	*SeqNo:*	1320
Short Name:	**GrftStenDiag3**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:	Graft(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName:	GraftsPrsnt	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	100% occlusion
4	Not documented

Long Name:	Stent Stenosis - Diagonal 3	*SeqNo:*	1325
Short Name:	**StntStenDiag3**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:	Stent(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName:	StentPrsnt	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	Not documented

Long Name:	Fractional Flow Reserve (FFR) - Diagonal 3	*SeqNo:*	1330
Short Name:	**FFRDiag3**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	1.00	*UsualRangeHigh:*	
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real
ParentShortName:	FFRPerf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Circumflex	*SeqNo:*	1335
Short Name:	**PctStenCircflx**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer
ParentShortName:	PctStenKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Graft Stenosis - Circumflex	*SeqNo:*	1340
Short Name:	**GrftStenCircflx**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Graft(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName:	GraftsPrsnt	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	100% occlusion
4	Not documented

Long Name:	Stent Stenosis - Circumflex	*SeqNo:*	1345
Short Name:	**StntStenCircflx**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Stent(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName:	StentPrsnt	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	Not documented

Long Name:	Fractional Flow Reserve (FFR) - Circumflex		*SeqNo:*	1350
Short Name:	**FFRCircflx**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*		
HighValue:	1.00	*UsualRangeHigh:*		
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real	
ParentShortName:	FFRPerf	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Obtuse Marginal 1		*SeqNo:*	1355
Short Name:	**PctStenOM1**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*		
HighValue:	100	*UsualRangeHigh:*		
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer	
ParentShortName:	PctStenKnown	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Graft Stenosis - Obtuse Marginal 1	*SeqNo:*	1360
Short Name:	**GrftStenOM1**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Graft(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName:	GraftsPrsnt	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	100% occlusion
4	Not documented

Long Name:	Stent Stenosis - Obtuse Marginal 1	*SeqNo:*	1365
Short Name:	**StntStenOM1**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Stent(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName:	StentPrsnt	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	Not documented

Long Name:	Fractional Flow Reserve (FFR) - Obtuse Marginal 1	*SeqNo:*	1370
Short Name:	**FFROM1**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	1.00	*UsualRangeHigh:*	
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real
ParentShortName:	FFRPerf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Obtuse Marginal 2	*SeqNo:*	1375
Short Name:	**PctStenOM2**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer
ParentShortName:	PctStenKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name: Graft Stenosis - Obtuse Marginal 2   *SeqNo:*   1380

Short Name: **GrftStenOM2**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Graft(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: GraftsPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

       Harvest Codes:

               Code: Value:
                 1   Patent
                 2   Stenosis >=50%
                 3   100% occlusion
                 4   Not documented

Long Name: Stent Stenosis - Obtuse Marginal 2   *SeqNo:*   1385

Short Name: **StntStenOM2**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Stent(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: StentPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

       Harvest Codes:

               Code: Value:
                 1   Patent
                 2   Stenosis >=50%
                 3   Not documented

Long Name:	Fractional Flow Reserve (FFR) - Obtuse Marginal 2		*SeqNo:*	1390
Short Name:	**FFROM2**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*		
HighValue:	1.00	*UsualRangeHigh:*		
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real	
ParentShortName:	FFRPerf	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Obtuse Marginal 3		*SeqNo:*	1395
Short Name:	**PctStenOM3**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*		
HighValue:	100	*UsualRangeHigh:*		
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer	
ParentShortName:	PctStenKnown	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Graft Stenosis - Obtuse Marginal 3	*SeqNo:*	1400
Short Name:	**GrftStenOM3**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Graft(s) Present	*Format:*	Text (categorical values specified by STS)	
ParentShortName: GraftsPrsnt	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	100% occlusion
4	Not documented

Long Name:	Stent Stenosis - Obtuse Marginal 3	*SeqNo:*	1405
Short Name:	**StntStenOM3**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Stent(s) Present	*Format:*	Text (categorical values specified by STS)	
ParentShortName: StentPrsnt	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	Not documented

Long Name:	Fractional Flow Reserve (FFR) - Obtuse Marginal 3		*SeqNo:*	1410
Short Name:	**FFROM3**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*		
HighValue:	1.00	*UsualRangeHigh:*		
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real	
ParentShortName:	FFRPerf	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Ramus		*SeqNo:*	1415
Short Name:	**PctStenRamus**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*		
HighValue:	100	*UsualRangeHigh:*		
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer	
ParentShortName:	PctStenKnown	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name: Graft Stenosis - Ramus   *SeqNo:*   1420

Short Name: **GrftStenRamus**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Graft(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: GraftsPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Patent

         2   Stenosis >=50%

         3   100% occlusion

         4   Not documented

Long Name: Stent Stenosis - Ramus   *SeqNo:*   1425

Short Name: **StntStenRamus**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Stent(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: StentPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Patent

         2   Stenosis >=50%

         3   Not documented

Long Name:	Fractional Flow Reserve (FFR) - Ramus	*SeqNo:*	1430
Short Name:	**FFRRamus**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	1.00	*UsualRangeHigh:*	
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real
ParentShortName:	FFRPerf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Percent Stenosis - RCA	*SeqNo:*	1435
Short Name:	**PctStenRCA**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer
ParentShortName:	PctStenKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Graft Stenosis - RCA	*SeqNo:*	1440
Short Name:	**GrftStenRCA**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Graft(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName: GraftsPrsnt	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Patent

2   Stenosis >=50%

3   100% occlusion

4   Not documented

Long Name:	Stent Stenosis - RCA	*SeqNo:*	1445
Short Name:	**StntStenRCA**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Stent(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName: StentPrsnt	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Patent

2   Stenosis >=50%

3   Not documented

Long Name:	Fractional Flow Reserve (FFR) - RCA	*SeqNo:*	1450
Short Name:	**FFRRCA**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	1.00	*UsualRangeHigh:*	
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real
ParentShortName:	FFRPerf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Acute Marginal (AM)	*SeqNo:*	1455
Short Name:	**PctStenAM**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer
ParentShortName:	PctStenKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name: Graft Stenosis - Acute Marginal (AM)   *SeqNo:*   1460

Short Name: **GrftStenAM**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Graft(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: GraftsPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

   Harvest Codes:

      Code: Value:

         1   Patent

         2   Stenosis >=50%

         3   100% occlusion

         4   Not documented

Long Name: Stent Stenosis - Acute Marginal (AM)   *SeqNo:*   1465

Short Name: **StntStenAM**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Stent(s) Present   *Format:*   Text (categorical values specified by STS)

ParentShortName: StentPrsnt   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

   Harvest Codes:

      Code: Value:

         1   Patent

         2   Stenosis >=50%

         3   Not documented

Long Name:	Fractional Flow Reserve (FFR) - Acute Marginal (AM)	*SeqNo:* 1470
Short Name:	**FFRAM**	*Core:* Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue: 0.00   *UsualRangeLow:*

HighValue: 1.00   *UsualRangeHigh:*

Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:* Real
ParentShortName:	FFRPerf	*DataLength:*
ParentValue:	= "Yes"	*Data Source:* User

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Posterior Descending (PDA)	*SeqNo:* 1475
Short Name:	**PctStenPDA**	*Core:* Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue: 0   *UsualRangeLow:*

HighValue: 100   *UsualRangeHigh:*

Parent Long Name:	Percent Native Artery Stenosis Known	*Format:* Integer
ParentShortName:	PctStenKnown	*DataLength:*
ParentValue:	= "Yes"	*Data Source:* User

ParentHarvestCodes: 1

Long Name:	Graft Stenosis - Posterior Descending (PDA)		*SeqNo:*	1480
Short Name:	**GrftStenPDA**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Graft(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName: GraftsPrsnt	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	100% occlusion
4	Not documented

Long Name:	Stent Stenosis - Posterior Descending (PDA)		*SeqNo:*	1485
Short Name:	**StntStenPDA**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Stent(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName: StentPrsnt	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	Not documented

Long Name:	Fractional Flow Reserve (FFR) - Posterior Descending (PDA)	*SeqNo:*	1490
Short Name:	**FFRPDA**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	1.00	*UsualRangeHigh:*	
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real
ParentShortName:	FFRPerf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Percent Stenosis - Posterolateral (PLB)	*SeqNo:*	1495
Short Name:	**PctStenPLB**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this vessel at the time of this surgery.

LowValue:	0	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	Percent Native Artery Stenosis Known	*Format:*	Integer
ParentShortName:	PctStenKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Graft Stenosis - Posterolateral (PLB)	*SeqNo:*	1500
Short Name:	**GrftStenPLB**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent stenosis in this graft at the time of this surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Graft(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName: GraftsPrsnt	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	100% occlusion
4	Not documented

Long Name:	Stent Stenosis - Posterolateral (PLB)	*SeqNo:*	1505
Short Name:	**StntStenPLB**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest percent of stent stenosis in this vessel at the time of this surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Stent(s) Present	*Format:*	Text (categorical values specified by STS)
ParentShortName: StentPrsnt	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Patent
2	Stenosis >=50%
3	Not documented

Long Name:	Fractional Flow Reserve (FFR) - Posterolateral (PLB)	*SeqNo:*	1510
Short Name:	**FFRPLB**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the FFR in this vessel at the time of this surgery.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	1.00	*UsualRangeHigh:*	
Parent Long Name:	Fractional Flow Reserve (FFR) Performed	*Format:*	Real
ParentShortName:	FFRPerf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Syntax Score Known	*SeqNo:*	1515
Short Name:	**SyntaxScrKnown**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a syntax score is known.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Syntax Score	*SeqNo:*	1520
Short Name:	**SyntaxScr**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate syntax score documented prior to this surgery.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	100.00	*UsualRangeHigh:*	
Parent Long Name:	Syntax Score Known	*Format:*	Real
ParentShortName:	SyntaxScrKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Stress Test Performed	*SeqNo:*	1525
Short Name:	**StressTst**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a stress test was performed prior to this surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Stress Test Result	*SeqNo:*	1530
Short Name:	**StressTstRes**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the stress test result.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Stress Test Performed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	StressTst	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Normal

2   Abnormal

3   Unavailable

Long Name:	Risk / Extent Of Ischemia	*SeqNo:*	1535
Short Name:	**RiskIschemia**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the risk of ischemia documented on a stress test prior to this surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Stress Test Performed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	StressTst	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Low Risk

2   intermediate Risk

3   High Risk

4   Unavailable

Long Name:	Hemo Data-EF Done	*SeqNo:*	1540
Short Name:	**HDEFD**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the Ejection Fraction was measured prior to the induction of anesthesia.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Hemo Data-EF	*SeqNo:*	1545
Short Name:	**HDEF**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the percentage of the blood emptied from the left ventricle at the end of the contraction. Use the most recent determination prior to the surgical intervention documented on a diagnostic report.
Enter a percentage in the range of 1 - 99. If a percentage range is reported, report a whole number using the "mean" (i.e., 50-55% is reported as 53%).
● Hyperdynamic: >70%
● Normal: 50%–70% (midpoint 60%)
● Mild dysfunction: 40%–49% (midpoint 45%)
● Moderate dysfunction: 30%–39% (midpoint 35%)
● Severe dysfunction: <30%
Note: If no diagnostic report is in the medical record, a value documented in the medical record is acceptable.
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LowValue:	1.0	*UsualRangeLow:*	5.0
HighValue:	99.0	*UsualRangeHigh:*	90.0
Parent Long Name:	Hemo Data-EF Done	*Format:*	Real
ParentShortName:	HDEFD	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Hemo Data-EF Method	*SeqNo:*	1550
Short Name:	**HDEFMeth**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName AdultData

Definition: Indicate how the Ejection Fraction measurement information was obtained preoperatively.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Hemo Data-EF Done	*Format:*	Text (categorical values specified by STS)
ParentShortName: HDEFD	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
2	LV Gram	Left Ventriculogram
3	Radionucleotide	MUGA Scan
4	Estimate	From other calculations, based upon available clinical data.
5	ECHO	Echocardiogram
6	MRI/CT	
9	Other	

Long Name:	Hemo Data-Dimensions Available	*SeqNo:*	1555
Short Name:	**DimAvail**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether intracardiac dimensions are available.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:* User	

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Hemo Data-LV End Systolic Dimension		*SeqNo:*	1560
Short Name:	**LVSD**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate LV End -Systolic Dimension in mm.
LV end systolic dimension is the same as left ventricular internal dimension in end systole (LVIDs)

LowValue:	0.0	*UsualRangeLow:*	25.0	
HighValue:	90.0	*UsualRangeHigh:*	35.0	
Parent Long Name:	Hemo Data-Dimensions Available	*Format:*	Real	
ParentShortName:	DimAvail	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Hemo Data-LV End-Diastolic Dimension		*SeqNo:*	1565
Short Name:	**LVEDD**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Left Ventricular End-Diastolic Dimension in mm. LV end diastolic dimension is the same as left ventricular internal dimension in end diastole (LVIDs)

LowValue:	20.0	*UsualRangeLow:*	45.0	
HighValue:	100.0	*UsualRangeHigh:*	54.0	
Parent Long Name:	Hemo Data-Dimensions Available	*Format:*	Real	
ParentShortName:	DimAvail	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Hemo-PA Systolic Pressure Measured	*SeqNo:*	1570
Short Name:	**PASYSMeas**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the PA systolic pressure was measured prior to incision.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Hemo-PA Systolic Pressure	*SeqNo:*	1575
Short Name:	**PASYS**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Capture highest PA systolic pressure recorded prior to incision.

LowValue:	10.0	*UsualRangeLow:*	15.0
HighValue:	150.0	*UsualRangeHigh:*	30.0
Parent Long Name:	Hemo-PA Systolic Pressure Measured	*Format:*	Real
ParentShortName:	PASYSMeas	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Left Main Dis >= 50%	*SeqNo:*	1580
Short Name:	**LMainDis**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the patient has Left Main Coronary Disease. Left Main Coronary Disease is present when there is >= 50% compromise of vessel diameter preoperatively.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Proximal LAD Disease >=70%	*SeqNo:*	1585
Short Name:	**ProxLAD**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the percent luminal narrowing of the proximal left anterior descending artery at the point of maximal stenosis is greater than or equal to 70%.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VD-Insuff-Aortic	*SeqNo:*	1590
Short Name:	**VDInsufA**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether there is evidence of Aortic valve insufficiency/regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

Enter the highest level recorded in the chart. "Moderately severe" should be coded as "Severe".

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
0	None
1	Trivial/Trace
2	Mild
3	Moderate
4	Severe
5	Not documented

Long Name:	VD-Aortic	*SeqNo:*	1595
Short Name:	**VDAort**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether Aortic Valve disease is present.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VD-Stenosis-Aortic   *SeqNo:*   1600

Short Name: **VDStenA**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether Aortic Stenosis is present.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VD-Aortic   *Format:*   Text (categorical values specified by STS)

ParentShortName: VDAort   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: VD-Aortic Hemodynamic Data Available   *SeqNo:*   1605

Short Name: **AoHemoDatAvail**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether aortic valve hemodynamic measurements are available.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VD-Stenosis-Aortic   *Format:*   Text (categorical values specified by STS)

ParentShortName: VDStenA   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VD-Smallest Aortic Valve Area	*SeqNo:*	1610
Short Name:	**VDAoVA**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the smallest documented aortic valve area (in cm squared).

LowValue:	0.2	*UsualRangeLow:*	
HighValue:	5.0	*UsualRangeHigh:*	
Parent Long Name:	VD-Aortic Hemodynamic Data Available	*Format:*	Real
ParentShortName:	AoHemoDatAvail	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	VD-Aortic Gradient-Highest Mean	*SeqNo:*	1615
Short Name:	**VDGradA**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest documented MEAN gradient (in mmHg) across the aortic valve.

LowValue:	0	*UsualRangeLow:*	
HighValue:	200	*UsualRangeHigh:*	
Parent Long Name:	VD-Aortic Hemodynamic Data Available	*Format:*	Integer
ParentShortName:	AoHemoDatAvail	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	VD-Aortic Valve Disease Etiology 1	*SeqNo:*	1625
Short Name:	**VDAoEt1**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate etiology of aortic valve disease if known. Choose unknown if not documented.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Aortic	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDAort	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Unknown
3	Bicuspid valve disease
4	Congenital (other than bicuspid)
5	Degenerative- Calcified
6	Degenerative- Leaflet prolapse with or without annular dilation
7	Degenerative- Pure annular dilation without leaflet prolapse
8	Endocarditis with root abscess
9	Endocarditis without root abscess
10	LV Outflow Tract Pathology, HOCM
11	LV Outflow Tract Pathology, Sub-aortic membrane
12	LV Outflow Tract Pathology, Sub-aortic Tunnel
13	LV Outflow Tract Pathology, Other
14	Primary Aortic Disease, Aortic Dissection
15	Primary Aortic Disease, Atherosclerotic Aneurysm
16	Primary Aortic Disease, Ehler-Danlos Syndrome

17	Primary Aortic Disease, Hypertensive Aneurysm
18	Primary Aortic Disease, Idiopathic Root Dilation
19	Primary Aortic Disease, Inflammatory
20	Primary Aortic Disease, Loeys-Dietz Syndrome
21	Primary Aortic Disease, Marfan Syndrome
22	Primary Aortic Disease, Other Connective tissue disorder
23	Prior Aortic Intervention, Etiology Unknown
24	Rheumatic
25	Supravalvular Aortic Stenosis
26	Trauma
27	Tumor, Carcinoid
28	Tumor, Myxoma
29	Tumor, Papillary Fibroelastoma
30	Tumor, Other
31	Other

Long Name: VD-Aortic Valve Disease Etiology 2   *SeqNo:*   1630

Short Name: **VDAoEt2**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate additional etiology of aortic valve disease if any, otherwise choose no additional etiology.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VD-Aortic Valve Disease Etiology 1   *Format:*   Text (categorical values specified by STS)

ParentShortName: VDAoEt1   *DataLength:*

ParentValue: <>"Unknown" And Is Not Missing   *Data Source:*   User

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code: Value:

2   No additional etiology

3   Bicuspid valve disease

4   Congenital (other than
    bicuspid)

5   Degenerative- Calcified

6   Degenerative- Leaflet
    prolapse with or without
    annular dilation

7   Degenerative- Pure annular
    dilation without leaflet
    prolapse

8   Endocarditis with root abscess

9   Endocarditis without root
    abscess

10 LV Outflow Tract Pathology,
    HOCM

11 LV Outflow Tract Pathology,
    Sub-aortic membrane

12 LV Outflow Tract Pathology,
    Sub-aortic Tunnel

13 LV Outflow Tract Pathology,
    Other

14 Primary Aortic Disease,
    Aortic Dissection

15 Primary Aortic Disease,
    Atherosclerotic Aneurysm

16 Primary Aortic Disease, Ehler-
    Danlos Syndrome

17 Primary Aortic Disease,
    Hypertensive Aneurysm

18 Primary Aortic Disease,
    Idiopathic Root Dilation

19 Primary Aortic Disease,
    Inflammatory

20 Primary Aortic Disease,
    Loeys-Dietz Syndrome

21 Primary Aortic Disease,
    Marfan Syndrome

22 Primary Aortic Disease, Other
    Connective tissue disorder

23 Prior Aortic Intervention,
    Etiology Unknown

24 Rheumatic

25 Supravalvular Aortic Stenosis

26 Trauma

27 Tumor, Carcinoid

28   Tumor, Myxoma

29   Tumor, Papillary
      Fibroelastoma

30   Tumor, Other

31   Other

Long Name: VD-Aortic Valve Disease Etiology 3   *SeqNo:*   1635

Short Name: **VDAoEt3**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate additional etiology of aortic valve disease if any, otherwise choose no additional etiology.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VD-Aortic Valve Disease   *Format:*   Text (categorical values specified by STS)
                     Etiology 2

ParentShortName: VDAoEt2   *DataLength:*

ParentValue: <>"No additional etiology"   *Data Source:* User
                     And Is Not Missing

ParentHarvestCodes: <>2 And Is Not Missing

Harvest Codes:

Code: Value:

2   No additional etiology

3   Bicuspid valve disease

4   Congenital (other than
     bicuspid)

5   Degenerative- Calcified

6   Degenerative- Leaflet
     prolapse with or without
     annular dilation

7   Degenerative- Pure annular
     dilation without leaflet
     prolapse

8   Endocarditis with root abscess

9   Endocarditis without root
     abscess

10   LV Outflow Tract Pathology,
     HOCM

11   LV Outflow Tract Pathology,
     Sub-aortic membrane

12   LV Outflow Tract Pathology,
     Sub-aortic Tunnel

13   LV Outflow Tract Pathology,

Other

14	Primary Aortic Disease, Aortic Dissection
15	Primary Aortic Disease, Atherosclerotic Aneurysm
16	Primary Aortic Disease, Ehler-Danlos Syndrome
17	Primary Aortic Disease, Hypertensive Aneurysm
18	Primary Aortic Disease, Idiopathic Root Dilation
19	Primary Aortic Disease, Inflammatory
20	Primary Aortic Disease, Loeys-Dietz Syndrome
21	Primary Aortic Disease, Marfan Syndrome
22	Primary Aortic Disease, Other Connective tissue disorder
23	Prior Aortic Intervention, Etiology Unknown
24	Rheumatic
25	Supravalvular Aortic Stenosis
26	Trauma
27	Tumor, Carcinoid
28	Tumor, Myxoma
29	Tumor, Papillary Fibroelastoma
30	Tumor, Other
31	Other

Long Name:	VD-Aortic Valve Disease Etiology 4	*SeqNo:*	1640
Short Name:	**VDAoEt4**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate additional etiology of aortic valve disease if any, otherwise choose no additional etiology.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	VD-Aortic Valve Disease Etiology 3	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDAoEt3	*DataLength:*	
ParentValue:	<>"No additional etiology" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>2 And Is Not Missing

Harvest Codes:

Code: Value:

- 2   No additional etiology
- 3   Bicuspid valve disease
- 4   Congenital (other than bicuspid)
- 5   Degenerative- Calcified
- 6   Degenerative- Leaflet prolapse with or without annular dilation
- 7   Degenerative- Pure annular dilation without leaflet prolapse
- 8   Endocarditis with root abscess
- 9   Endocarditis without root abscess
- 10 LV Outflow Tract Pathology, HOCM
- 11 LV Outflow Tract Pathology, Sub-aortic membrane
- 12 LV Outflow Tract Pathology, Sub-aortic Tunnel
- 13 LV Outflow Tract Pathology, Other
- 14 Primary Aortic Disease, Aortic Dissection
- 15 Primary Aortic Disease, Atherosclerotic Aneurysm
- 16 Primary Aortic Disease, Ehler-

Danlos Syndrome

17	Primary Aortic Disease, Hypertensive Aneurysm
18	Primary Aortic Disease, Idiopathic Root Dilation
19	Primary Aortic Disease, Inflammatory
20	Primary Aortic Disease, Loeys-Dietz Syndrome
21	Primary Aortic Disease, Marfan Syndrome
22	Primary Aortic Disease, Other Connective tissue disorder
23	Prior Aortic Intervention, Etiology Unknown
24	Rheumatic
25	Supravalvular Aortic Stenosis
26	Trauma
27	Tumor, Carcinoid
28	Tumor, Myxoma
29	Tumor, Papillary Fibroelastoma
30	Tumor, Other
31	Other

Long Name:	VD-Aortic Valve Disease Etiology 5		*SeqNo:*	1645
Short Name:	**VDAoEt5**		*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate additional etiology of aortic valve disease if any, otherwise choose no additional etiology.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Aortic Valve Disease Etiology 4	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDAoEt4	*DataLength:*	
ParentValue:	<>"No additional etiology" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>2 And Is Not Missing

Harvest Codes:

Code: Value:

2   No additional etiology

3	Bicuspid valve disease
4	Congenital (other than bicuspid)
5	Degenerative- Calcified
6	Degenerative- Leaflet prolapse with or without annular dilation
7	Degenerative- Pure annular dilation without leaflet prolapse
8	Endocarditis with root abscess
9	Endocarditis without root abscess
10	LV Outflow Tract Pathology, HOCM
11	LV Outflow Tract Pathology, Sub-aortic membrane
12	LV Outflow Tract Pathology, Sub-aortic Tunnel
13	LV Outflow Tract Pathology, Other
14	Primary Aortic Disease, Aortic Dissection
15	Primary Aortic Disease, Atherosclerotic Aneurysm
16	Primary Aortic Disease, Ehler-Danlos Syndrome
17	Primary Aortic Disease, Hypertensive Aneurysm
18	Primary Aortic Disease, Idiopathic Root Dilation
19	Primary Aortic Disease, Inflammatory
20	Primary Aortic Disease, Loeys-Dietz Syndrome
21	Primary Aortic Disease, Marfan Syndrome
22	Primary Aortic Disease, Other Connective tissue disorder
23	Prior Aortic Intervention, Etiology Unknown
24	Rheumatic
25	Supravalvular Aortic Stenosis
26	Trauma

27   Tumor, Carcinoid

28   Tumor, Myxoma

29   Tumor, Papillary
      Fibroelastoma

30   Tumor, Other

31   Other

Long Name:	VD-Aortic Etiology	*SeqNo:*	1650
Short Name:	**VDAoEt**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate primary etiology of aortic valve disease.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: VD-Aortic	*Format:*	Text (categorical values specified by STS)
ParentShortName: VDAort	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Degenerative (senile)	Includes calcific, senile, and leaflet prolapse.
2	Endocarditis	
3	Congenital	
4	Rheumatic	
5	Primary Aortic Disease	
6	LV Outflow Tract Obstruction	
7	Supravalvular Aortic Stenosis	
8	Tumor	
9	Trauma	
10	Other	

Long Name:	VD-Endocarditis Root Abscess	*SeqNo:*	1655
Short Name:	**VDEndAB**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate if endocarditis is associated with an aortic root abscess.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VD-Aortic Etiology		*Format:*	Text (categorical values specified by STS)
ParentShortName: VDAoEt		*DataLength:*	
ParentValue: = "Endocarditis"		*Data Source:* User	

ParentHarvestCodes: 2

Harvest Codes:

Code: Value:
   1   Yes
   2   No

Long Name:	VD-Congenital Type	*SeqNo:*	1660
Short Name:	**VDCongenT**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate type of congenital Aortic Valve disease.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VD-Aortic Etiology		*Format:*	Text (categorical values specified by STS)
ParentShortName: VDAoEt		*DataLength:*	
ParentValue: = "Congenital"		*Data Source:* User	

ParentHarvestCodes: 3

Harvest Codes:

Code: Value:
   1   Bicuspid
   2   Other

Long Name:	VD-Primary aortic disease	*SeqNo:*	1665
Short Name:	**VDPrimAo**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName AdultData

Definition: Indicate type of Primary Aortic Disease.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Aortic Etiology	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDAoEt	*DataLength:*	
ParentValue:	= "Primary Aortic Disease"	*Data Source:*	User

ParentHarvestCodes: 5

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Marfans	
2	Other Connective tissue disorder	
3	Atherosclerotic Aneurysm	
4	Inflammatory	Syphilis, Takayasu
5	Aortic Dissection	
6	Idiopathic Root Dilation	

Long Name:	VD-LV Outflow Tract Obstruction Type	*SeqNo:*	1670
Short Name:	**VDLVOutOb**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName AdultData

Definition: Indicate type of LV outflow tract obstruction.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Aortic Etiology	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDAoEt	*DataLength:*	
ParentValue:	= "LV outflow tract obstruction"	*Data Source:*	User

ParentHarvestCodes: 6

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	HOCM	Hypertrophic Cardiomyopathy
2	Sub-aortic membrane	
3	Sub-aortic Tunnel	

Long Name:	VD-Aortic Valve Tumor Type		SeqNo:	1675
Short Name:	**VDAortTumor**		Core:	No
Section Name:	Hemodynamics/Cath/Echo		Harvest:	No

DBTableName   AdultData

Definition: Indicate the type of cardiac tumor.

LowValue:	UsualRangeLow:		
HighValue:	UsualRangeHigh:		
Parent Long Name: VD-Aortic Etiology		Format:	Text (categorical values specified by STS)
ParentShortName: VDAoEt		DataLength:	
ParentValue: = "Tumor"		Data Source: User	

ParentHarvestCodes: 8

Harvest Codes:

Code: Value:

1   Myxoma

2   Papillary fibroelastoma

3   Carcinoid

4   Other

Long Name:	VD-Insuff-Mitral	SeqNo:	1680
Short Name:	**VDInsufM**	Core:	Yes
Section Name:	Hemodynamics/Cath/Echo	Harvest:	Yes

DBTableName   AdultData

Definition: Indicate whether there is evidence of Mitral valve insufficiency/regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

Enter the highest level recorded in the chart. "Moderately severe" should be coded as "Severe".

LowValue:	UsualRangeLow:		
HighValue:	UsualRangeHigh:		
Parent Long Name:		Format:	Text (categorical values specified by STS)
ParentShortName:		DataLength:	
ParentValue:		Data Source: User	

ParentHarvestCodes:

Harvest Codes:

Code: Value:

0   None

1   Trivial/Trace

2   Mild

3   Moderate

    4   Severe

    5   Not documented

Long Name: VD-Mitral   *SeqNo:*   1685

Short Name: **VDMit**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether Mitral valve disease is present.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

    Harvest Codes:

        Code: Value:

         1   Yes

         2   No

Long Name: VD-Stenosis-Mitral   *SeqNo:*   1690

Short Name: **VDStenM**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether Mitral Stenosis is present.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VD-Mitral   *Format:*   Text (categorical values specified by STS)

ParentShortName: VDMit   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Yes

         2   No

Long Name:	VD-Mitral Hemodynamic Data Available	*SeqNo:*	1695
Short Name:	**MiHemoDatAvail**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether mitral valve hemodynamic measurements are available.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: VD-Stenosis-Mitral	*Format:*	Text (categorical values specified by STS)
ParentShortName: VDStenM	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VD-Smallest Mitral Valve Area	*SeqNo:*	1700
Short Name:	**VDMVA**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the smallest documented Mitral Valve Area.

LowValue: 0.6	*UsualRangeLow:*	
HighValue: 6.0	*UsualRangeHigh:*	
Parent Long Name: VD-Mitral Hemodynamic Data Available	*Format:*	Real
ParentShortName: MiHemoDatAvail	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Long Name:	VD-Mitral Gradient-Highest Mean	*SeqNo:*	1705
Short Name:	**VDGradM**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the highest documented mean gradient (in mm Hg) across the mitral valve.

LowValue:	0	*UsualRangeLow:*	
HighValue:	30	*UsualRangeHigh:*	
Parent Long Name:	VD-Mitral Hemodynamic Data Available	*Format:*	Integer
ParentShortName:	MiHemoDatAvail	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	VD-Mitral Papillary Muscle Rupture	*SeqNo:*	1710
Short Name:	**VDMitPMR**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether papillary muscle rupture occurred.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Mitral Valve Disease Ischemic Type	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDMitIsTy	*DataLength:*	
ParentValue:	= "Acute"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VD-Carpentier Mitral Leaflet Motion Classification	*SeqNo:*	1715
Short Name:	**VDMitFC**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Carpentier mitral leaflet motion classification, if documented.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Mitral	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDMit	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Type I	Normal leaflet motion
2	Type II	Excess Leaflet Motion
3	Type IIIa	Restricted leaflet motion systolic and diastolic
4	Type IIIb	Restricted leaflet motion systolic
5	Not documented	

Long Name:	VD-Mitral Valve Disease Etiology 1	*SeqNo:*	1720
Short Name:	**VDMiEt1**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the etiology of the mitral valve disease if known.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Mitral	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDMit	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Unknown
3	Degenerative
4	Rheumatic
5	Ischemic - acute, post infarction
6	Ischemic - chronic

7	Non-ischemic Cardiomyopathy
8	Endocarditis
9	Hypertrophic Obstructive Cardiomyopathy (HOCM)
10	Tumor, Carcinoid
11	Tumor, Myxoma
12	Tumor, Papillary fibroelastoma
13	Tumor, Other
14	Carcinoid
15	Trauma
16	Congenital
17	Prior Mitral Valve Intervention, Etiology Unknown
18	Other

Long Name:	VD-Mitral Valve Disease Etiology 2	*SeqNo:*	1725
Short Name:	**VDMiEt2**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate additional etiology of mitral valve disease if any, otherwise choose no additional etiology.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Mitral Valve Disease Etiology 1	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDMiEt1	*DataLength:*	
ParentValue:	<>"Unknown" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code:	Value:
2	No additional etiology
3	Degenerative
4	Rheumatic
5	Ischemic - acute, post infarction
6	Ischemic - chronic
7	Non-ischemic Cardiomyopathy

    8   Endocarditis

    9   Hypertrophic Obstructive
          Cardiomyopathy (HOCM)

   10   Tumor, Carcinoid

   11   Tumor, Myxoma

   12   Tumor, Papillary
          fibroelastoma

   13   Tumor, Other

   14   Carcinoid

   15   Trauma

   16   Congenital

   17   Prior Mitral Valve
          Intervention, Etiology
          Unknown

   18   Other

Long Name:	VD-Mitral Valve Disease Etiology 3	*SeqNo:*	1730
Short Name:	**VDMiEt3**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate additional etiology of mitral valve disease if any, otherwise choose no additional etiology.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	VD-Mitral Valve Disease Etiology 2	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDMiEt2	*DataLength:*	
ParentValue:	<>"No additional etiology" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>2 And Is Not Missing

   Harvest Codes:

     Code: Value:

    2   No additional etiology

    3   Degenerative

    4   Rheumatic

    5   Ischemic - acute, post
        infarction

    6   Ischemic - chronic

    7   Non-ischemic
        Cardiomyopathy

    8   Endocarditis

    9   Hypertrophic Obstructive

Cardiomyopathy (HOCM)

10	Tumor, Carcinoid
11	Tumor, Myxoma
12	Tumor, Papillary fibroelastoma
13	Tumor, Other
14	Carcinoid
15	Trauma
16	Congenital
17	Prior Mitral Valve Intervention, Etiology Unknown
18	Other

Long Name: VD-Mitral Valve Lesion 1   *SeqNo:*   1735

Short Name: **VDMiLes1**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the first mitral valve lesion type or choose unknown.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VD-Mitral   *Format:*   Text (categorical values specified by STS)

ParentShortName: VDMit   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1	Unknown
3	Leaflet prolapse, posterior
4	Leaflet prolapse, bileaflet
5	Leaflet prolapse, anterior
6	Elongated/ruptured chord(s)
7	Annular dilation
8	Leaflet calcification
9	Mitral annular calcification
10	Papillary muscle elongation
11	Papillary muscle rupture
12	Leaflet thickening/retraction
13	Chordal tethering

14   Chordal
      thickening/retraction/fusion

15   Commissural fusion

16   Other

Long Name: VD-Mitral Valve Lesion 2   *SeqNo:*   1740

Short Name: **VDMiLes2**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the second mitral valve lesion if there is one, or choose no additional lesions.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VD-Mitral Valve Lesion 1   *Format:*   Text (categorical values specified by STS)

ParentShortName: VDMiLes1   *DataLength:*

ParentValue: <>"Unknown" And Is Not   *Data Source:* User
                     Missing

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code: Value:

 2   No additional lesions

 3   Leaflet prolapse, posterior

 4   Leaflet prolapse, bileaflet

 5   Leaflet prolapse, anterior

 6   Elongated/ruptured chord(s)

 7   Annular dilation

 8   Leaflet calcification

 9   Mitral annular calcification

10   Papillary muscle elongation

11   Papillary muscle rupture

12   Leaflet thickening/retraction

13   Chordal tethering

14   Chordal
      thickening/retraction/fusion

15   Commissural fusion

16   Other

Long Name:	VD-Mitral Valve Lesion 3	*SeqNo:*	1745
Short Name:	**VDMiLes3**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the third mitral valve lesion if there is one, or choose no additional lesions.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: VD-Mitral Valve Lesion 2	*Format:*	Text (categorical values specified by STS)
ParentShortName: VDMiLes2	*DataLength:*	
ParentValue: <>"No additional lesions" And Is Not Missing	*Data Source:* User	

ParentHarvestCodes: <>2 And Is Not Missing

Harvest Codes:

Code:	Value:
2	No additional lesions
3	Leaflet prolapse, posterior
4	Leaflet prolapse, bileaflet
5	Leaflet prolapse, anterior
6	Elongated/ruptured chord(s)
7	Annular dilation
8	Leaflet calcification
9	Mitral annular calcification
10	Papillary muscle elongation
11	Papillary muscle rupture
12	Leaflet thickening/retraction
13	Chordal tethering
14	Chordal thickening/retraction/fusion
15	Commissural fusion
16	Other

Long Name:	VD-Mitral Valve Disease Etiology	*SeqNo:*	1750
Short Name:	**VDMitET**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate primary etiology of mitral valve disease.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name: VD-Mitral		*Format:*	Text (categorical values specified by STS)
ParentShortName: VDMit		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Annular or Degenerative Disease
2	Endocarditis
3	Rheumatic
4	Ischemic
5	Congenital
6	Hypertrophic Obstructive Cardiomyopathy (HOCM)
7	Tumor
8	Trauma
9	Non-ischemic cardiomyopathy
10	Other

Long Name:	VD-Mitral Valve Disease Degenerative Location	*SeqNo:*	1755
Short Name:	**VDMitDegLoc**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the location of the degenerative mitral disease.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Mitral Valve Disease Etiology	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDMitET	*DataLength:*	
ParentValue:	= "Annular or Degenerative Disease"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Posterior Leaflet
2	Anterior Leaflet
3	Bileaflet

Long Name:	VD-Mitral Annular Disease Type	*SeqNo:*	1760
Short Name:	**VDMitAnDegDis**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the type of mitral valve annular disease.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Mitral Valve Disease Etiology	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDMitET	*DataLength:*	
ParentValue:	= "Annular or Degenerative Disease"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Pure Annular Dilation
2	Mitral Annular Calcification

Long Name:	VD-Mitral Valve Disease Ischemic Type	*SeqNo:*	1765
Short Name:	**VDMitIsTy**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName AdultData

Definition: Indicate type of ischemic mitral disease.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	VD-Mitral Valve Disease Etiology	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDMitET	*DataLength:*	
ParentValue:	= "Ischemic"	*Data Source:*	User

ParentHarvestCodes: 4

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Acute	Within 30 days of MI
2	Chronic	Greater than 30 days after MI

Long Name:	VD-Mitral Valve Tumor Type	*SeqNo:*	1770
Short Name:	**VDMitTumor**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the type of cardiac tumor.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	VD-Mitral Valve Disease Etiology	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDMitET	*DataLength:*	
ParentValue:	= "Tumor"	*Data Source:*	User

ParentHarvestCodes: 7

Harvest Codes:

Code:	Value:
1	Myxoma
2	Papillary fibroelastoma
3	Carcinoid
4	Other

Long Name:	VD-Insuff-Tricuspid	*SeqNo:*	1775
Short Name:	**VDInsufT**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether there is evidence of Tricuspid valve insufficiency/regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

Enter the highest level recorded in the chart. "Moderately severe" should be coded as "Severe".

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
0	None
1	Trivial/Trace
2	Mild
3	Moderate
4	Severe
5	Not documented

Long Name:	VD-Tricuspid	*SeqNo:*	1780
Short Name:	**VDTr**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether Tricuspid Valve disease is present.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VD-Stenosis-Tricuspid	*SeqNo:*	1785
Short Name:	**VDStenT**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether Tricuspid Stenosis is present.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: VD-Tricuspid	*Format:*	Text (categorical values specified by STS)
ParentShortName: VDTr	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VD-Tricuspid Annular Measurement Available	*SeqNo:*	1790
Short Name:	**VDTrAnnMeas**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether a tricuspid annular diameter measurement is available.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: VD-Tricuspid	*Format:*	Text (categorical values specified by STS)
ParentShortName: VDTr	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VD-Tricuspid Annulus Size	*SeqNo:*	1795
Short Name:	**VDTrAnnSize**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate tricuspid annular diameter in cm.

LowValue:	1.5	*UsualRangeLow:*	
HighValue:	10.0	*UsualRangeHigh:*	
Parent Long Name:	VD-Tricuspid Annular Measurement Available	*Format:*	Real
ParentShortName:	VDTrAnnMeas	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Long Name:	VD-Tricuspid Valve Disease Etiology 1	*SeqNo:*	1800
Short Name:	**VDTrEt1**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the etiology of the tricuspid valve disease if known.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Tricuspid	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDTr	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Unknown
3	Functional
4	Endocarditis
5	Carcinoid
6	Congenital
7	Degenerative
8	Pacing wire/catheter induced dysfunction
9	Rheumatic
10	Tumor
11	Trauma
12	Prior Tricuspid Valve

Intervention, Etiology
Unknown

13   Other

Long Name: VD-Tricuspid Valve Disease Etiology 2   *SeqNo:*   1805

Short Name: **VDTrEt2**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate additional etiology of tricuspid valve disease if any, otherwise choose no additional
etiology.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VD-Tricuspid Valve Disease   *Format:*   Text (categorical values specified by STS)
Etiology 1

ParentShortName: VDTrEt1   *DataLength:*

ParentValue: <>"Unknown" And Is Not   *Data Source:* User
Missing

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

Code: Value:

2   No additional etiology

3   Functional

4   Endocarditis

5   Carcinoid

6   Congenital

7   Degenerative

8   Pacing wire/catheter induced
dysfunction

9   Rheumatic

10   Tumor

11   Trauma

12   Prior Tricuspid Valve
Intervention, Etiology
Unknown

13   Other

Long Name:	VD-Tricuspid Valve Disease Etiology 3	*SeqNo:*	1810
Short Name:	**VDTrEt3**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate additional etiology of tricuspid valve disease if any, otherwise choose no additional etiology.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Tricuspid Valve Disease Etiology 2	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDTrEt2	*DataLength:*	
ParentValue:	<>"No additional etiology" And Is Not Missing	*Data Source:*	User

ParentHarvestCodes: <>2 And Is Not Missing

Harvest Codes:

Code:	Value:
2	No additional etiology
3	Functional
4	Endocarditis
5	Carcinoid
6	Congenital
7	Degenerative
8	Pacing wire/catheter induced dysfunction
9	Rheumatic
10	Tumor
11	Trauma
12	Prior Tricuspid Valve Intervention, Etiology Unknown
13	Other

Long Name:	VD-Tricuspid Etiology	*SeqNo:*	1815
Short Name:	**VDTrEt**	*Core:*	No
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	No

DBTableName AdultData

Definition: Indicate primary etiology of tricuspid valve disease.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VD-Tricuspid		*Format:*	Text (categorical values specified by STS)
ParentShortName: VDTr		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Functional	annular dilatation with or without leaflet tethering
2	Endocarditis	
3	Congenital	
4	Tumor	
5	Trauma	
6	Other	

Long Name:	VD-Insuff-Pulmonic	*SeqNo:*	1820
Short Name:	**VDInsufP**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether there is evidence of Pulmonic valve insufficiency/regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

Enter the highest level recorded in the chart. "Moderately severe" should be coded as "Severe".

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:* User	

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
0	None
1	Trivial/Trace

2   Mild

3   Moderate

4   Severe

5   Not documented

Long Name: VD-Pulmonic   *SeqNo:*   1825

Short Name: **VDPulm**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether Pulmonic Valve disease is present.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: VD-Pulmonic-RVEDD Known   *SeqNo:*   1830

Short Name: **RVEDDKnown**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the Right Ventricular End-Diastolic Dimension (RVEDD) is available.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VD-Pulmonic   *Format:*   Text (categorical values specified by STS)

ParentShortName: VDPulm   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: VD-Pulmonic-RVEDD Indexed To BSA   *SeqNo:*   1835

Short Name: **RVEDD**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:* Yes

DBTableName   AdultData

Definition: Indicate (in cm squared) the RVEDD indexed to BSA.

LowValue: 0.5   *UsualRangeLow:*

HighValue: 5.0   *UsualRangeHigh:*

Parent Long Name: VD-Pulmonic-RVEDD Known   *Format:*   Real

ParentShortName: RVEDDKnown   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name: VD-Stenosis-Pulmonic   *SeqNo:*   1840

Short Name: **VDStenP**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:* Yes

DBTableName   AdultData

Definition: Indicate whether Pulmonic Stenosis is present.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VD-Pulmonic   *Format:*   Text (categorical values specified by STS)

ParentShortName: VDPulm   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VD-Pulmonic Hemodynamic Data Available	*SeqNo:*	1845
Short Name:	**PuHemoDatAvail**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether pulmonary valve gradient is available.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VD-Stenosis-Pulmonic	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VDStenP	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VD-Pulmonic Gradient-Highest Mean	*SeqNo:*	1850
Short Name:	**VDGradP**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate highest mean PV gradient documented prior to incision.

LowValue:	0	*UsualRangeLow:*	
HighValue:	200	*UsualRangeHigh:*	
Parent Long Name:	VD-Pulmonic Hemodynamic Data Available	*Format:*	Integer
ParentShortName:	PuHemoDatAvail	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	VD-Pulmonic Valve Disease Etiology	*SeqNo:*	1855
Short Name:	**VDPuEt**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the etiology of pulmonary valve disease if known.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name: VD-Pulmonic		*Format:*	Text (categorical values specified by STS)
ParentShortName: VDPulm		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Acquired
2	Congenital, s/p Tetralogy of Fallot (TOF) repair
3	Congenital, no prior Tetralogy of Fallot (TOF) repair
4	Prior Pulmonic Valve Intervention, Etiology Unknown
5	Other
6	Unknown

Long Name:	Disease Of The Aorta	*SeqNo:*	1860
Short Name:	**AortaDisease**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether there is a documented disease or lesion of the aorta above the diaphragm.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:* User	

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes

2   No

Long Name:	Disease Of The Aorta - Presentation	*SeqNo:*	1865
Short Name:	**ADPres**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the patient's aortic disease presentation.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name:	Disease Of The Aorta	*Format:*	Text (categorical values specified by STS)
ParentShortName:	AortaDisease	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Asymptomatic

2   Symptomatic, hemodynamics stable

3   Symptomatic, hemodynamics unstable

Long Name:	Disease Of The Aorta - Location - Root	*SeqNo:*	1870
Short Name:	**ADLocRoot**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the aortic disease/lesion is present in the aortic root.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name:	Disease Of The Aorta	*Format:*	Text (categorical values specified by STS)
ParentShortName:	AortaDisease	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Disease Of The Aorta - Location - Ascending	*SeqNo:*	1875
Short Name:	**ADLocAsc**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic disease/lesion is present in the ascending aorta.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Disease Of The Aorta	*Format:*	Text (categorical values specified by STS)
ParentShortName: AortaDisease	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Disease Of The Aorta - Location - Arch	*SeqNo:*	1880
Short Name:	**ADLocArch**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic disease/lesion is present in the aortic arch.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Disease Of The Aorta	*Format:*	Text (categorical values specified by STS)
ParentShortName: AortaDisease	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Disease Of The Aorta - Location - Descending Thoracic   *SeqNo:*   1885

Short Name: **ADLocDesThor**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the aortic disease/lesion is present in the descending aorta.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Disease Of The Aorta   *Format:*   Text (categorical values specified by STS)

ParentShortName: AortaDisease   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Yes

         2   No

Long Name: Disease Of The Aorta - Location - Thoracoabdominal   *SeqNo:*   1890

Short Name: **ADLocThora**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the aortic disease/lesion is present in the thoracoabdominal aorta.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Disease Of The Aorta   *Format:*   Text (categorical values specified by STS)

ParentShortName: AortaDisease   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Yes

         2   No

Long Name:	Disease Of The Aorta - Lesion Type - Aneurysm	*SeqNo:*	1895
Short Name:	**ADLesTAneur**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the aortic lesion is an aneurysm.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Disease Of The Aorta	*Format:*	Text (categorical values specified by STS)	
ParentShortName: AortaDisease	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Disease Of The Aorta - Lesion Type - Coarctation/Narrowing	*SeqNo:*	1900
Short Name:	**ADLesTCoarcNar**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the aortic lesion is a coarctation or narrowing.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Disease Of The Aorta	*Format:*	Text (categorical values specified by STS)	
ParentShortName: AortaDisease	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Disease Of The Aorta - Lesion Type - Rupture	*SeqNo:*	1905
Short Name:	**ADLesTRup**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic lesion is an aortic rupture.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Disease Of The Aorta	*Format:*	Text (categorical values specified by STS)
ParentShortName: AortaDisease	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Disease Of The Aorta - Lesion Type - Pseudoaneurysm	*SeqNo:*	1910
Short Name:	**ADLesTPseudo**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic lesion is a pseudoaneurysm.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Disease Of The Aorta	*Format:*	Text (categorical values specified by STS)
ParentShortName: AortaDisease	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Disease Of The Aorta - Lesion Type - Penetrating Ulcer	*SeqNo:*	1915
Short Name:	**ADLesTPenUlcer**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the aortic lesion is a penetrating ulcer.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Disease Of The Aorta		*Format:*	Text (categorical values specified by STS)
ParentShortName: AortaDisease		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Disease Of The Aorta - Lesion Type - Intramural Hematoma	*SeqNo:*	1920
Short Name:	**ADLesTIntraHema**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the aortic lesion is an intramural hematoma.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Disease Of The Aorta		*Format:*	Text (categorical values specified by STS)
ParentShortName: AortaDisease		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Disease Of The Aorta - Lesion Type - Dissection	*SeqNo:*	1925
Short Name:	**ADLesTDis**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the aortic lesion is a dissection.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Disease Of The Aorta	*Format:*	Text (categorical values specified by STS)
ParentShortName: AortaDisease	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Disease Of The Aorta - Lesion Type - Dissection Timing	*SeqNo:*	1930
Short Name:	**ADLesTDisTmg**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate dissection timing.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Disease Of The Aorta - Lesion Type - Dissection	*Format:*	Text (categorical values specified by STS)
ParentShortName: ADLesTDis	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Acute

2   Chronic

3   Acute on chronic

4   Not documented

Long Name:	Disease Of The Aorta - Lesion Type - Dissection Type	*SeqNo:*	1935
Short Name:	**ADLesTDisTy**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the type of aortic dissection.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Disease Of The Aorta - Lesion Type - Dissection	*Format:*	Text (categorical values specified by STS)
ParentShortName:	ADLesTDis	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Stanford Type A

2   Stanford Type B

Long Name:	Aorta Etiology 1	*SeqNo:*	1940
Short Name:	**ADEt1**	*Core:*	Yes
Section Name:	Hemodynamics/Cath/Echo	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the etiology of aortic disease/lesion if known.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Disease Of The Aorta	*Format:*	Text (categorical values specified by STS)
ParentShortName:	AortaDisease	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Unknown

3   Aberrant Subclavian artery

4   Atherosclerosis

5   Bicuspid aortic valve syndrome

6   Ehler-Danlos syndrome

7   Endocarditis

8   Hypertensive aneurysm

    9   Inflammatory

   10   Loeys-Dietz Syndrome

   11   Marfan Syndrome

   12   Trauma

   13   Other Congenital Disorder

   14   Other Connective Tissue
          Disorder

   15   Other

Long Name: Aorta Etiology 2   *SeqNo:*   1945

Short Name: **ADEt2**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate additional etiology of aortic disease/lesion if any, otherwise choose no additional etiology.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Aorta Etiology 1   *Format:*   Text (categorical values specified by STS)

ParentShortName: ADEt1   *DataLength:*

ParentValue: <>"Unknown" And Is Not   *Data Source:* User
            Missing

ParentHarvestCodes: <>1 And Is Not Missing

Harvest Codes:

    Code: Value:

    2   No additional etiologies

    3   Aberrant Subclavian artery

    4   Atherosclerosis

    5   Bicuspid aortic valve
         syndrome

    6   Ehler-Danlos syndrome

    7   Endocarditis

    8   Hypertensive aneurysm

    9   Inflammatory

   10   Loeys-Dietz Syndrome

   11   Marfan Syndrome

   12   Trauma

   13   Other Congenital Disorder

   14   Other Connective Tissue
          Disorder

   15   Other

Long Name: Aorta Etiology 3   *SeqNo:*   1950

Short Name: **ADEt3**   *Core:*   Yes

Section Name: Hemodynamics/Cath/Echo   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate additional etiology of aortic disease/lesion if any, otherwise choose no additional etiology.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Aorta Etiology 2   *Format:*   Text (categorical values specified by STS)

ParentShortName: ADEt2   *DataLength:*

ParentValue: ◇"No additional etiology"   *Data Source:* User
                     And Is Not Missing

ParentHarvestCodes: ◇2 And Is Not Missing

    Harvest Codes:

        Code: Value:

          2 No additional etiologies

          3 Aberrant Subclavian artery

          4 Atherosclerosis

          5 Bicuspid aortic valve syndrome

          6 Ehler-Danlos syndrome

          7 Endocarditis

          8 Hypertensive aneurysm

          9 Inflammatory

        10 Loeys-Dietz Syndrome

        11 Marfan Syndrome

        12 Trauma

        13 Other Congenital Disorder

        14 Other Connective Tissue Disorder

        15 Other

Long Name:	Surgeon	*SeqNo:*	1955
Short Name:	**Surgeon**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the name of the surgeon responsible for the patient's care.

This field must have controlled data entry where a user selects the surgeon name from a user list. This will remove variation in spelling, abbreviations and punctuation within the field.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by User)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Surgeon's National Provider Identifier	*SeqNo:*	1960
Short Name:	**SurgNPI**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the individual-level National Provider Identifier of the surgeon performing the procedure. For Non-US surgeons a unique identifier will be assigned by STS.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Surgeon	*Format:*	Text (categorical values specified by User)
ParentShortName:	Surgeon	*DataLength:*	
ParentValue:	Is Not Missing	*Data Source:*	Lookup
ParentHarvestCodes:	Is Not Missing		

Long Name:	Taxpayer Identification Number	*SeqNo:*	1965
Short Name:	**TIN**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Taxpayer Identification Number for the Taxpayer holder of record for the Surgeon's National Provider Identifier that performed the procedure. This may be an individual TIN or a group TIN depending on billing. This information is vital for PQRS reporting.
This field will be blank for Non-US participants

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by User)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	Lookup
ParentHarvestCodes:			

Long Name:	Incidence	*SeqNo:*	1970
Short Name:	**Incidenc**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate if this is the patient's:
-first surgery
-first re-op surgery
-second re-op surgery
-third re-op surgery
-fourth or more re-op surgery.

Surgery is defined as cardiothoracic operations (heart or great vessels) surgical procedures performed with or without cardiopulmonary bypass (CPB). Also include lung procedures utilizing CPB or tracheal procedures utilizing CPB. Reoperation increases risk due to the presence of scar tissue and adhesions.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	First cardiovascular surgery
2	First re-op cardiovascular surgery

3	Second re-op cardiovascular surgery
4	Third re-op cardiovascular surgery
5	Fourth or more re-op cardiovascular surgery

Long Name: Status   *SeqNo:*   1975

Short Name: **Status**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the clinical status of the patient prior to entering the operating room.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Elective	The patient's cardiac function has been stable in the days or weeks prior to the operation. The procedure could be deferred without increased risk of compromised cardiac outcome.
2	Urgent	Procedure required during same hospitalization in order to minimize chance of further clinical deterioration. Examples include but are not limited to: Worsening, sudden chest pain, CHF, acute myocardial infarction (AMI), anatomy, IABP, unstable angina (USA) with intravenous (IV) nitroglycerin (NTG) or rest angina.
3	Emergent	Patients requiring emergency operations will have ongoing, refractory (difficult, complicated, and/or unmanageable) unrelenting cardiac compromise, with or without hemodynamic instability, and not responsive to any form of therapy except cardiac surgery. An emergency operation is one in which there should be no delay in providing operative intervention.
4	Emergent Salvage	The patient is undergoing CPR en route to the OR or prior to anesthesia induction or has ongoing ECMO to maintain life.

Long Name:	Urgent Reason	*SeqNo:*	1980
Short Name:	**UrgntRsn**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the PRIMARY reason why the patient had an urgent status.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Status	*Format:*	Text (categorical values specified by STS)
ParentShortName:	Status	*DataLength:*	
ParentValue:	= "Urgent"	*Data Source:*	User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	AMI
2	IABP
3	Worsening CP
4	CHF
5	Anatomy
6	USA (unstable angina)
7	Rest Angina
8	Valve Dysfunction
9	Aortic Dissection
10	Angiographic Accident
11	Cardiac Trauma
12	Infected Device
13	Syncope
14	PCI/CABG Hybrid
15	PCI Failure without clinical deterioration

Long Name:	Emergent Reason	*SeqNo:*	1985
Short Name:	**EmergRsn**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the PRIMARY reason why the patient had Emergent Status.

Patients requiring emergency operations will have ongoing, refractory (difficult, complicated, and/or unmanageable) unrelenting cardiac compromise, with or without hemodynamic instability, and not responsive to any form of therapy except cardiac surgery. An emergency operation is one in which there should be no delay in providing operative intervention.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name: Status		*Format:*	Text (categorical values specified by STS)
ParentShortName: Status		*DataLength:*	
ParentValue: = "Emergent"		*Data Source:* User	

ParentHarvestCodes: 3

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Shock Circ Support	
2	Shock No Circ Support	
3	Pulmonary Edema	
4	Acute Evolving Myocardial Infarction (AEMI)	Acute Evolving Myocardial Infarction within 24 hours before surgery
5	Ongoing Ischemia	
6	Valve Dysfunction	
7	Aortic Dissection	
8	Angiographic Accident	
9	Cardiac Trauma	
10	Infected Device	
11	Syncope	
12	PCI/CABG Hybrid	
13	Anatomy	

Long Name:	Urgent Or Emergent Reason	*SeqNo:*	1990
Short Name:	**UrgEmergRsn**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Choose one reason from the list below that best describes why this operation was considered urgent or emergent.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Status	*Format:*	Text (categorical values specified by STS)
ParentShortName:	Status	*DataLength:*	
ParentValue:	= "Urgent" or "Emergent"	*Data Source:*	User

ParentHarvestCodes: 2|3

Harvest Codes:

Code:	Value:
1	AMI
2	Anatomy
3	Aortic Aneurysm
4	Aortic Dissection
5	CHF
6	Device Failure
7	Diagnostic/Interventional Procedure Complication
8	Endocarditis
9	Failed Transcatheter Valve Therapy
10	IABP
11	Infected Device
12	Intracardiac mass or thrombus
13	Ongoing Ischemia
14	PCI Incomplete without clinical deterioration
15	PCI or attempted PCI with Clinical Deterioration
16	Pulmonary Edema
17	Pulmonary Embolus
18	Rest Angina
19	Shock Circulatory Support
20	Shock No Circulatory Support
21	Syncope

22   Transplant

23   Trauma

24   USA

25   Valve Dysfunction

26   Worsening CP

27   Other

Long Name: Previously Attempted Case Canceled   *SeqNo:*   1995

Short Name: **PCancCase**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether this case was previously attempted during this admission and canceled or aborted
after patient entered the operating room.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: Previously Attempted Canceled Case Date   *SeqNo:*   2000

Short Name: **PCancCaseDt**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Enter date previously attempted case was canceled.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Previously Attempted Case   *Format:*   Date mm/dd/yyyy
Canceled

ParentShortName: PCancCase   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name: Previously Attempted Canceled Case Timing   *SeqNo:*   2005

Short Name: **PCancCaseTmg**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate at what point previously attempted case was canceled or aborted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Previously Attempted Case   *Format:*   Text (categorical values specified by STS)
                     Canceled

ParentShortName: PCancCase   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

        1   Prior to Induction of
               Anesthesia

        2   After Induction, Prior to
               Incision

        3   After Incision Made

Long Name: Previously Attempted Canceled Case Reason   *SeqNo:*   2010

Short Name: **PCancCaseRsn**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the reason why the previously attempted case was canceled or aborted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Previously Attempted Case   *Format:*   Text (categorical values specified by STS)
                     Canceled

ParentShortName: PCancCase   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes and Value Definitions:

        Code: Value: Definition:

        1   Anesthesiology event   Includes airway, line insertion and medication issues
                                         encountered during induction

        2   Cardiac arrest   Patient deterioration unrelated to induction

        3   Equipment/supply issue   Device malfunction or supply issue including devices
                                         and blood products

        6   Access issue

4	Unanticipated tumor
7	Donor organ unacceptable
8	Abnormal labs
5	Other

Long Name: Previously Attempted Canceled Case Procedure - CABG   *SeqNo:*   2015

Short Name: **PCancCaseCAB**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the plan for the previously attempted procedure included coronary artery bypass grafting.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Previously Attempted Case   *Format:*   Text (categorical values specified by STS)
                     Canceled

ParentShortName: PCancCase   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Yes

         2   No

Long Name: Previously Attempted Canceled Case Procedure - Mechanical Assist   *SeqNo:*   2020
                Device

Short Name: **PCancCaseMech**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the plan for the previously attempted procedure included implanting or explanting a mechanical assist device.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Previously Attempted Case   *Format:*   Text (categorical values specified by STS)
                     Canceled

ParentShortName: PCancCase   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Yes

2   No

Long Name: Previously Attempted Canceled Case Procedure - Other Non-Cardiac   *SeqNo:*   2025

Short Name: **PCancCaseONC**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included any other non-cardiac
procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Previously Attempted Case   *Format:*   Text (categorical values specified by STS)
Canceled

ParentShortName: PCancCase   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

        1   Yes

        2   No

Long Name: Previously Attempted Canceled Case Procedure - Valve, Surgical   *SeqNo:*   2030

Short Name: **PCancCaseValSur**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included a surgical valve
procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Previously Attempted Case   *Format:*   Text (categorical values specified by STS)
Canceled

ParentShortName: PCancCase   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

        1   Yes

        2   No

Long Name:	Previously Attempted Canceled Case Procedure - Valve, Transcatheter	*SeqNo:*	2035
Short Name:	**PCancCaseValTrans**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included a transcatheter valve procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Previously Attempted Case Canceled	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PCancCase	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previously Attempted Canceled Case Procedure - Other Cardiac	*SeqNo:*	2040
Short Name:	**PCancCaseOC**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included any other cardiac procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Previously Attempted Case Canceled	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PCancCase	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previously Attempted Canceled Case Procedure - Valve	*SeqNo:*	2045
Short Name:	**PCancCaseVal**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included a valve repair or replacement.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Previously Attempted Case Canceled	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PCancCase	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Current Case Canceled	*SeqNo:*	2050
Short Name:	**CCancCase**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the current case was canceled or aborted after patient entered the operating room.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Current Case Canceled Timing	*SeqNo:*	2055
Short Name:	**CCancCaseTmg**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate at what point the current case was canceled or aborted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name: Current Case Canceled		*Format:*	Text (categorical values specified by STS)
ParentShortName: CCancCase		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Prior to Induction of Anesthesia
2	After Induction, Prior to Incision
3	After Incision Made

Long Name:	Current Case Canceled Reason	*SeqNo:*	2060
Short Name:	**CCancCaseRsn**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the reason why the current case was canceled or aborted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name: Current Case Canceled		*Format:*	Text (categorical values specified by STS)
ParentShortName: CCancCase		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Anesthesiology event	Includes airway, line insertion and medication issues encountered during induction
2	Cardiac arrest	Patient deterioration unrelated to induction
3	Equipment/supply issue	Device malfunction or supply issue including devices and blood products
6	Access issue	
4	Unanticipated tumor	

    7   Donor organ unacceptable

    8   Abnormal labs

    5   Other

Long Name: Current Case Canceled Procedure - CABG   *SeqNo:*   2065

Short Name: **CCancCaseCAB**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included coronary artery bypass grafting.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Current Case Canceled   *Format:*   Text (categorical values specified by STS)

ParentShortName: CCancCase   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

        1   Yes

        2   No

Long Name: Current Case Canceled Procedure - Valve   *SeqNo:*   2070

Short Name: **CCancCaseVal**   *Core:*   No

Section Name: Operative   *Harvest:*   No

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included a valve repair or replacement.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Current Case Canceled   *Format:*   Text (categorical values specified by STS)

ParentShortName: CCancCase   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

        1   Yes

        2   No

Long Name:	Current Case Canceled Procedure - Mechanical Assist Device	*SeqNo:*	2075
Short Name:	**CCancCaseMech**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included implanting or explanting a mechanical assist device.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Current Case Canceled		*Format:*	Text (categorical values specified by STS)
ParentShortName: CCancCase		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Current Case Canceled Procedure - Other Non-cardiac	*SeqNo:*	2080
Short Name:	**CCancCaseONC**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included any other non-cardiac procedure.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Current Case Canceled		*Format:*	Text (categorical values specified by STS)
ParentShortName: CCancCase		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Current Case Canceled Procedure - Valve, Surgical	*SeqNo:*	2085
Short Name:	**CCancCaseValSur**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included a surgical valve procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Current Case Canceled	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CCancCase	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Current Case Canceled Procedure - Valve, Transcatheter	*SeqNo:*	2090
Short Name:	**CCancCaseValTrans**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included a transcatheter valve procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Current Case Canceled	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CCancCase	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Current Case Canceled Procedure - Other Cardiac   *SeqNo:*   2095

Short Name: **CCancCaseOC**   *Core:*   Yes

Section Name: Operative   *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included any other cardiac procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Current Case Canceled   *Format:*   Text (categorical values specified by STS)

ParentShortName: CCancCase   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

   Harvest Codes:

        Code: Value:
          1   Yes
          2   No

Long Name: Operative Approach   *SeqNo:*   2100

Short Name: **OPApp**   *Core:*   Yes

Section Name: Operative   *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the initial operative approach.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

   Harvest Codes:

        Code: Value:
          1   Full conventional sternotomy
          2   Partial sternotomy
          6   Transverse sternotomy
               (includes clamshell)
          3   Right or left parasternal
               incision
          8   Sub-xiphoid
          9   Sub-costal
          4   Left thoracotomy

5	Right thoracotomy
10	Bilateral thoracotomy
11	Limited (mini) thoracotomy, right
12	Limited (mini) thoracotomy, left
13	Limited (mini) thoracotomy, bilateral
14	Thoracoabdominal incision
15	Percutaneous
16	Port access
17	Other
18	None (canceled case)

Long Name: Operative Approach Converted   *SeqNo:*   2105

Short Name: **ApproachCon**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the operative approach was converted during the procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code: Value:

1	Yes, planned
2	Yes, unplanned
3	No

Long Name: Robot Used   *SeqNo:*   2110

Short Name: **Robotic**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether a robot was used during cardiac surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   Yes

          2   No

Long Name: Robot Use Time Frame   *SeqNo:*   2115

Short Name: **RobotTim**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the time frame of robotic use.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Robot Used   *Format:*   Text (categorical values specified by STS)

ParentShortName: Robotic   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   Used for entire operation

          2   Used for part of the operation

Long Name:	CAB	*SeqNo:*	2120
Short Name:	**OpCAB**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether coronary artery bypass grafting was done.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
3	Yes, planned
4	Yes, unplanned due to surgical complication
5	Yes, unplanned due to unsuspected disease or anatomy
2	No

Long Name:	Valve	*SeqNo:*	2125
Short Name:	**OpValve**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a surgical procedure was done on the Aortic, Mitral, Tricuspid or Pulmonic valves.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD Implanted or Removed   *SeqNo:*   2130

Short Name: **VADProc**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether a VAD was implanted or removed during this hospitalization.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

   Harvest Codes:

       Code: Value:

         5   Yes

         1   No

Long Name: Other Card   *SeqNo:*   2140

Short Name: **OpOCard**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether another cardiac procedure was done (other than CABG and/or Valve procedures).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

   Harvest Codes:

       Code: Value:

         1   Yes

         2   No

Long Name:	Atrial Fibrillation Procedure Performed	*SeqNo:*	2145
Short Name:	**AFibProc**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether an atrial fibrillation procedure was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Performed	*SeqNo:*	2150
Short Name:	**AortProc**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a procedure was performed on the aorta.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
3	Yes, planned
4	Yes, unplanned due to surgical complication
5	Yes, unplanned due to unsuspected disease or anatomy
2	No

Long Name:	Other Non Card	*SeqNo:*	2155
Short Name:	**OpONCard**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a non-cardiac procedure was done.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Unplanned Procedure	*SeqNo:*	2160
Short Name:	**UnplProc**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName AdultData

Definition: Indicate if an unplanned procedure was done during this operation.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	No
2	Yes, unsuspected patient disease or anatomy
3	Yes, surgical complication

Long Name:	Unplanned CABG	*SeqNo:*	2165
Short Name:	**UnplCABG**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether unplanned procedure was a CABG.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name: Unplanned Procedure		*Format:*	Text (categorical values specified by STS)
ParentShortName: UnplProc		*DataLength:*	
ParentValue:	= "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication"	*Data Source:* User	

ParentHarvestCodes: 2|3

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Unplanned Aortic Valve Procedure	*SeqNo:*	2170
Short Name:	**UnplAV**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether unplanned procedure was an aortic valve repair or replacement.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name: Unplanned Procedure		*Format:*	Text (categorical values specified by STS)
ParentShortName: UnplProc		*DataLength:*	
ParentValue:	= "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication"	*Data Source:* User	

ParentHarvestCodes: 2|3

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Unplanned Mitral Valve Procedure	*SeqNo:*	2175
Short Name:	**UnplMV**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether unplanned procedure was a mitral valve repair or replacement.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Unplanned Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName: UnplProc	*DataLength:*	
ParentValue: = "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication"	*Data Source:* User	

ParentHarvestCodes: 2|3

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Unplanned Aorta Procedure	*SeqNo:*	2180
Short Name:	**UnplAo**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether unplanned procedure was an aorta procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Unplanned Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName: UnplProc	*DataLength:*	
ParentValue: = "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication"	*Data Source:* User	

ParentHarvestCodes: 2|3

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Unplanned VAD	*SeqNo:* 2185
Short Name: **UnplVAD**	*Core:* No
Section Name: Operative	*Harvest:* No

DBTableName AdultData

Definition: Indicate whether unplanned procedure was a VAD insertion.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: Unplanned Procedure	*Format:* Text (categorical values specified by STS)
ParentShortName: UnplProc	*DataLength:*
ParentValue: = "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication"	*Data Source:* User

ParentHarvestCodes: 2|3

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: Unplanned Other Procedure	*SeqNo:* 2190
Short Name: **UnplOth**	*Core:* No
Section Name: Operative	*Harvest:* No

DBTableName AdultData

Definition: Indicate if other unplanned procedure was performed.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: Unplanned Procedure	*Format:* Text (categorical values specified by STS)
ParentShortName: UnplProc	*DataLength:*
ParentValue: = "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication"	*Data Source:* User

ParentHarvestCodes: 2|3

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	CPT-1 Code # 1	*SeqNo:*	2195
Short Name:	**CPT1Code1**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the first CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text - Length exactly 5
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Long Name:	CPT-1 Code # 2	*SeqNo:*	2200
Short Name:	**CPT1Code2**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate, if applicable, the second CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	CPT-1 Code # 1	*Format:*	Text - Length exactly 5
ParentShortName:	CPT1Code1	*DataLength:*	
ParentValue:	Is Not Missing	*Data Source:*	User

ParentHarvestCodes: Is Not Missing

Long Name: CPT-1 Code # 3   *SeqNo:*   2205

Short Name: **CPT1Code3**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate, if applicable, the third CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPT-1 Code # 2   *Format:*   Text - Length exactly 5

ParentShortName: CPT1Code2   *DataLength:*

ParentValue: Is Not Missing   *Data Source:* User

ParentHarvestCodes: Is Not Missing

Long Name: CPT-1 Code # 4   *SeqNo:*   2210

Short Name: **CPT1Code4**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate, if applicable, the fourth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPT-1 Code # 3   *Format:*   Text - Length exactly 5

ParentShortName: CPT1Code3   *DataLength:*

ParentValue: Is Not Missing   *Data Source:* User

ParentHarvestCodes: Is Not Missing

Long Name:	CPT-1 Code # 5	*SeqNo:*	2215
Short Name:	**CPT1Code5**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate, if applicable, the fifth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CPT-1 Code # 4	*Format:*	Text - Length exactly 5
ParentShortName: CPT1Code4	*DataLength:*	
ParentValue: Is Not Missing	*Data Source:* User	

ParentHarvestCodes: Is Not Missing

Long Name:	CPT-1 Code # 6	*SeqNo:*	2220
Short Name:	**CPT1Code6**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate, if applicable, the sixth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CPT-1 Code # 5	*Format:*	Text - Length exactly 5
ParentShortName: CPT1Code5	*DataLength:*	
ParentValue: Is Not Missing	*Data Source:* User	

ParentHarvestCodes: Is Not Missing

Long Name:	CPT-1 Code # 7	*SeqNo:* 2225
Short Name:	**CPT1Code7**	*Core:* Yes
Section Name:	Operative	*Harvest:* Yes

DBTableName   AdultData

Definition: Indicate, if applicable, the seventh CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:	CPT-1 Code # 6	*Format:* Text - Length exactly 5
ParentShortName:	CPT1Code6	*DataLength:*
ParentValue:	Is Not Missing	*Data Source:* User

ParentHarvestCodes: Is Not Missing

Long Name:	CPT-1 Code # 8	*SeqNo:* 2230
Short Name:	**CPT1Code8**	*Core:* Yes
Section Name:	Operative	*Harvest:* Yes

DBTableName   AdultData

Definition: Indicate, if applicable, the eighth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:	CPT-1 Code # 7	*Format:* Text - Length exactly 5
ParentShortName:	CPT1Code7	*DataLength:*
ParentValue:	Is Not Missing	*Data Source:* User

ParentHarvestCodes: Is Not Missing

Long Name:	CPT-1 Code # 9	*SeqNo:*	2235
Short Name:	**CPT1Code9**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate, if applicable, the ninth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CPT-1 Code # 8	*Format:*	Text - Length exactly 5
ParentShortName: CPT1Code8	*DataLength:*	
ParentValue: Is Not Missing	*Data Source:* User	

ParentHarvestCodes: Is Not Missing

Long Name:	CPT-1 Code # 10	*SeqNo:*	2240
Short Name:	**CPT1Code10**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate, if applicable, the tenth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CPT-1 Code # 9	*Format:*	Text - Length exactly 5
ParentShortName: CPT1Code9	*DataLength:*	
ParentValue: Is Not Missing	*Data Source:* User	

ParentHarvestCodes: Is Not Missing

Long Name: OR Entry Date And Time   *SeqNo:*   2245

Short Name: **OREntryDT**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the date and time, to the nearest minute (using 24-hour clock), that the patient entered the operating room. If the procedure was performed in a location other than the OR, record the time when the sterile field, or its equivalent, was set up.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Date and time in the format mm/dd/yyyy hh:mm with the time in 24-hour clock

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: OR Exit Date And Time   *SeqNo:*   2250

Short Name: **ORExitDT**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the date and time, to the nearest minute (using 24-hour clock), that the patient exits the operating room. If the procedure was performed in a location other than the OR, record the time when the sterile field, or its equivalent, was taken down.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Date and time in the format mm/dd/yyyy hh:mm with the time in 24-hour clock

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name:	Initial Intubation Date And Time	*SeqNo:*	2255
Short Name:	**IntubateDT**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm) (24 hour clock) ventilatory support started. The following guidelines apply:

1. Capture the intubation closest to the surgical start time. If the patient was intubated upon admission and remained intubated until the surgical start time, capture this intubation's date and time.
2. If the patient was admitted intubated (intubated at another institution) and remained continually intubated until the surgical start time, capture the patient's admission date and time.
3. If the patient was admitted with a tracheostomy in place without ventilatory support, capture the date and time closest to the surgical start time that ventilatory support was initiated.
4. If the patient was admitted with a tracheostomy in place receiving chronic ventilatory support, capture the admission date and time.
5. If the intubation date and time is otherwise unknown, enter the date and time the patient entered the operating room.
6. Do not alter the previously established date and time that ventilatory support was initiated for scenarios including, but not limited to, interruptions in ventilatory support due to accidental extubation/de-cannulation, elective tube change etc.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Date and time in the format mm/dd/yyyy hh:mm with the time in 24-hour clock
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Initial Extubation Date And Time	*SeqNo:*	2260
Short Name:	**ExtubateDT**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm) (24 hour clock) ventilatory support initially ceased after surgery. The following guidelines apply:

1. Capture the extubation closest to the surgical stop time.
2. If the patient has a tracheostomy and is separated from the mechanical ventilator postoperatively within the hospital admission, capture the date and time of separation from the mechanical ventilator closest to the surgical stop time.
3. If the patient expires while intubated or cannulated and on the ventilator, capture the date and time of expiration.
4. If patient is discharged on chronic ventilatory support, capture the date and time of discharge.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Date and time in the format mm/dd/yyyy hh:mm with the time in 24-hour clock
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Long Name:	Skin Incision Start Date And Time	*SeqNo:*	2265
Short Name:	**SIStartDT**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the date and time, to the nearest minute (using 24-hour clock), that the first skin incision, or its equivalent, was made.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Date and time in the format mm/dd/yyyy hh:mm with the time in 24-hour clock
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Long Name:	Skin Incision Stop Date And Time	*SeqNo:*	2270
Short Name:	**SIStopDT**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the date and time, to the nearest minute (using 24-hour clock), that the skin incision was closed, or its equivalent. If the patient leaves the operating room with an open incision, collect the time that the dressings were applied to the incision.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Date and time in the format mm/dd/yyyy hh:mm with the time in 24-hour clock
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Anesthesia End Date and Time	*SeqNo:*	2275
Short Name:	**AnesEndDT**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the anesthesia end time documented in the medical record. The definition of anesthesia end time is when the anesthesiologist is no longer in personal attendance, that is, when the patient is safely placed under post-anesthesia supervision.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Date and time in the format mm/dd/yyyy hh:mm with the time in 24-hour clock
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name: Appropriate Antibiotic Selection   *SeqNo:*   2280

Short Name: **AbxSelect**   *Core:*   Yes

Section Name: Operative   *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if there was documentation of an order for a first generation or second generation cephalosporin prophylactic antibiotic, documentation that it was given preoperatively or in the event of a documented allergy an alternate antibiotic choice is ordered and administered.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Yes	
2	No	
3	Exclusion	The reason for not ordering appropriate prophylactic antibiotic is documented in the medical record.

Long Name: Appropriate Antibiotic Administration Timing   *SeqNo:*   2285

Short Name: **AbxTiming**   *Core:*   Yes

Section Name: Operative   *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether prophylactic antibiotics were administered within one hour of surgical incision or start of procedure if no incision required (two hours if receiving Vancomycin or fluoroquinolone).

The surgical incision time is the time of the first incision, regardless of location.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Yes	Given
2	No	Not given, no documented reason
3	Exclusion	Documented contraindication or rationale for not administering antibiotic in medical record

Long Name:	Appropriate Antibiotic Discontinuation	*SeqNo:*	2290
Short Name:	**AbxDisc**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the prophylactic antibiotics were ordered to be discontinued OR were discontinued within 48 hours after surgery end time.

Determining the timeframe (within 48 hours) begins at the "surgical end time".

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Exclusion

Long Name:	Additional Intraoperative Prophylactic Antibiotic Dose	*SeqNo:*	2295
Short Name:	**AddIntraopPAnti**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether an additional prophylactic antibiotic dose was given in the operating room.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Lowest Temperature   *SeqNo:*   2300

Short Name: **LwstTemp**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Record the patient's lowest core temperature in the operating room in degrees centigrade.

LowValue: 5.0   *UsualRangeLow:*

HighValue: 40.0   *UsualRangeHigh:*

Parent Long Name: *Format:*   Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Lowest Temperature Source   *SeqNo:*   2305

Short Name: **LwstTempSrc**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the source where the lowest core temperature was measured.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Esophageal
2	CPB venous return
3	Bladder
4	Nasopharyngeal
5	Tympanic
6	Rectal
7	Other
8	Unknown

Long Name:	Lowest Intra-op Hemoglobin	*SeqNo:*	2310
Short Name:	**LwstIntraHemo**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Enter the lowest measured hemoglobin recorded in the operating room. Do not enter calculated values.

LowValue:	1.00	*UsualRangeLow:*	11.00
HighValue:	50.00	*UsualRangeHigh:*	18.00

Parent Long Name:	*Format:*	Real
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User

ParentHarvestCodes:

Long Name:	Lowest Hematocrit	*SeqNo:*	2315
Short Name:	**LwstHct**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Enter the lowest measured hematocrit recorded in the operating room. Do not enter calculated values.

LowValue:	1.0	*UsualRangeLow:*	39.0
HighValue:	99.99	*UsualRangeHigh:*	53.0

Parent Long Name:	*Format:*	Real
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User

ParentHarvestCodes:

Long Name:	Highest Intra-op Glucose	*SeqNo:*	2320
Short Name:	**HighIntraGlu**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Enter the highest glucose recorded in the operating room.

LowValue:	40	*UsualRangeLow:*	80
HighValue:	2000	*UsualRangeHigh:*	180

Parent Long Name: *Format:*   Integer

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name:	CPB Utilization	*SeqNo:*	2325
Short Name:	**CPBUtil**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the level of CPB or coronary perfusion used during the procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	None	No CPB or coronary perfusion used during the procedure.
2	Combination	With or without CPB and/or with or without coronary perfusion at any time during the procedure (capture conversions from off-pump to on-pump only): At start of procedure: No CPB/No Coronary Perfusion -> conversion to -> CPB At start of procedure: No CPB/No Coronary Perfusion -> conversion to -> Coronary perfusion At start of procedure: No CPB/No Coronary Perfusion -> conversion to -> Coronary perfusion -> conversion to -> CPB
3	Full	CPB or coronary perfusion was used for the entire procedure

Long Name: CPB Utilization - Combination Plan

SeqNo: 2330

Short Name: **CPBCmb**

Core: Yes

Section Name: Operative

Harvest: Yes

DBTableName   AdultData

Definition: Indicate whether the combination procedure from off-pump to on-pump was a planned or an unplanned conversion.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPB Utilization

Format: Text (categorical values specified by STS)

ParentShortName: CPBUtil

DataLength:

ParentValue: = "Combination"

Data Source: User

ParentHarvestCodes: 2

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Planned	The surgeon intended to treat with any of the combination options described in "CPB utilization".
2	Unplanned	The surgeon did not intend to treat with any of the combination options described in "CPB utilization".

Long Name: CPB Utilization - Unplanned Combination Reason

SeqNo: 2335

Short Name: **CPBCmbR**

Core: Yes

Section Name: Operative

Harvest: Yes

DBTableName   AdultData

Definition: Indicate the reason that the procedure required the initiation of CPB and/or coronary perfusion.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPB Utilization - Combination Plan

Format: Text (categorical values specified by STS)

ParentShortName: CPBCmb

DataLength:

ParentValue: = "Unplanned"

Data Source: User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Exposure/visualization
2	Bleeding
3	Inadequate size and/or diffuse disease of distal vessel
4	Hemodynamic instability (hypotension/arrhythmias)

5   Conduit quality and/or trauma

9   Other

Long Name:	Cannulation - Arterial Cannulation Site - Aortic	*SeqNo:*	2340
Short Name:	**CanArtStAort**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included the aorta.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CPB Utilization		*Format:*	Text (categorical values specified by STS)
ParentShortName: CPBUtil		*DataLength:*	
ParentValue: = "Combination" or "Full"		*Data Source:* User	

ParentHarvestCodes: 2|3

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Cannulation - Arterial Cannulation Site - Femoral	*SeqNo:*	2345
Short Name:	**CanArtStFem**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included a femoral artery.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CPB Utilization		*Format:*	Text (categorical values specified by STS)
ParentShortName: CPBUtil		*DataLength:*	
ParentValue: = "Combination" or "Full"		*Data Source:* User	

ParentHarvestCodes: 2|3

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Cannulation - Arterial Cannulation Site - Axillary	*SeqNo:*	2350
Short Name:	**CanArtStAx**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included an axillary artery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CPB Utilization	*Format:*	Text (categorical values specified by STS)
ParentShortName: CPBUtil	*DataLength:*	
ParentValue: = "Combination" or "Full"	*Data Source:* User	

ParentHarvestCodes: 2|3

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Cannulation - Arterial Cannulation Site - Innominate	*SeqNo:*	2355
Short Name:	**CanArtStInn**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included an innominate artery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CPB Utilization	*Format:*	Text (categorical values specified by STS)
ParentShortName: CPBUtil	*DataLength:*	
ParentValue: = "Combination" or "Full"	*Data Source:* User	

ParentHarvestCodes: 2|3

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: Cannulation - Arterial Cannulation Site - Other   *SeqNo:*   2360

Short Name: **CanArtStOth**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the arterial cannulation site included any other artery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPB Utilization   *Format:*   Text (categorical values specified by STS)

ParentShortName: CPBUtil   *DataLength:*

ParentValue: = "Combination" or "Full"   *Data Source:* User

ParentHarvestCodes: 2|3

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

         1   Yes

         2   No

Long Name: Cannulation - Venous Cannulation Site - Femoral   *SeqNo:*   2365

Short Name: **CanVenStFem**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the venous (inflow) cannulation site included a femoral vein.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPB Utilization   *Format:*   Text (categorical values specified by STS)

ParentShortName: CPBUtil   *DataLength:*

ParentValue: = "Combination" or "Full"   *Data Source:* User

ParentHarvestCodes: 2|3

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

         1   Yes

         2   No

Long Name: Cannulation - Venous Cannulation Site - Jugular   *SeqNo:*   2370

Short Name: **CanVenStJug**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included a jugular vein.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPB Utilization   *Format:*   Text (categorical values specified by STS)

ParentShortName: CPBUtil   *DataLength:*

ParentValue: = "Combination" or "Full"   *Data Source:* User

ParentHarvestCodes: 2|3

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

         1   Yes

         2   No

Long Name: Cannulation - Venous Cannulation Site - Right Atrial   *SeqNo:*   2375

Short Name: **CanVenStRtA**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included the right atrium.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPB Utilization   *Format:*   Text (categorical values specified by STS)

ParentShortName: CPBUtil   *DataLength:*

ParentValue: = "Combination" or "Full"   *Data Source:* User

ParentHarvestCodes: 2|3

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

         1   Yes

         2   No

Long Name: Cannulation - Venous Cannulation Site - Left Atrial   *SeqNo:*   2380

Short Name: **CanVenStLfA**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included the left atrium.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPB Utilization   *Format:*   Text (categorical values specified by STS)

ParentShortName: CPBUtil   *DataLength:*

ParentValue: = "Combination" or "Full"   *Data Source:* User

ParentHarvestCodes: 2|3

   Harvest Codes:

        <u>Code:</u> <u>Value:</u>
          1   Yes
          2   No

Long Name: Cannulation - Venous Cannulation Site - Pulmonary Vein   *SeqNo:*   2385

Short Name: **CanVenStPulm**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included a pulmonary vein.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPB Utilization   *Format:*   Text (categorical values specified by STS)

ParentShortName: CPBUtil   *DataLength:*

ParentValue: = "Combination" or "Full"   *Data Source:* User

ParentHarvestCodes: 2|3

   Harvest Codes:

        <u>Code:</u> <u>Value:</u>
          1   Yes
          2   No

Long Name: Cannulation - Venous Cannulation Site - Caval/Bicaval   *SeqNo:*   2390

Short Name: **CanVenStBi**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included the superior and/or inferior vena cava.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPB Utilization   *Format:*   Text (categorical values specified by STS)

ParentShortName: CPBUtil   *DataLength:*

ParentValue: = "Combination" or "Full"   *Data Source:* User

ParentHarvestCodes: 2|3

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: Cannulation - Venous Cannulation Site - Other   *SeqNo:*   2395

Short Name: **CanVenStOth**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included any other site.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CPB Utilization   *Format:*   Text (categorical values specified by STS)

ParentShortName: CPBUtil   *DataLength:*

ParentValue: = "Combination" or "Full"   *Data Source:* User

ParentHarvestCodes: 2|3

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Cardiopulmonary Bypass Time	*SeqNo:*	2400
Short Name:	**PerfusTm**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the total number of minutes that systemic return is diverted into the cardiopulmonary bypass (CPB) circuit and returned to the systemic system. This time period (Cardiopulmonary Bypass Time) includes all periods of cerebral perfusion and sucker bypass. This time period (Cardiopulmonary Bypass Time) excludes any circulatory arrest and modified ultrafiltration periods. If more than one period of CPB is required during the surgical procedure, the sum of all the CPB periods will equal the
total number of CPB minutes.

LowValue:	1	*UsualRangeLow:*	1	
HighValue:	999	*UsualRangeHigh:*	300	
Parent Long Name:	CPB Utilization		*Format:*	Integer
ParentShortName:	CPBUtil		*DataLength:*	
ParentValue:	= "Combination" or "Full"		*Data Source:*	User
ParentHarvestCodes:	2|3			

Long Name:	Circulatory Arrest	*SeqNo:*	2405
Short Name:	**CircArr**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether or not circulatory arrest was utilized during the procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Circulatory Arrest Time Without Cerebral Perfusion	*SeqNo:*	2410
Short Name:	**DHCATm**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the total number of minutes of deep hypothermic circulatory arrest without cerebral perfusion. If more than one period of circulatory arrest is required during this surgical procedure, the sum of these periods is equal to the total duration of circulatory arrest.

LowValue:	0	*UsualRangeLow:*	
HighValue:	300	*UsualRangeHigh:*	
Parent Long Name:	Circulatory Arrest	*Format:*	Integer
ParentShortName:	CircArr	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Circulatory Arrest With Cerebral Perfusion	*SeqNo:*	2415
Short Name:	**CPerfUtil**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether circulatory arrest with cerebral perfusion was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Circulatory Arrest	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CircArr	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Cerebral Perfusion Time	*SeqNo:*	2420
Short Name:	**CPerfTime**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the total number of minutes cerebral perfusion was performed. This would include antegrade and/or retrograde cerebral perfusion strategies.

LowValue:	1	*UsualRangeLow:*	
HighValue:	999	*UsualRangeHigh:*	
Parent Long Name:	Circulatory Arrest With Cerebral Perfusion	*Format:*	Integer
ParentShortName:	CPerfUtil	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Cerebral Perfusion Type	*SeqNo:*	2425
Short Name:	**CPerfTyp**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate type of cerebral perfusion utilized.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Circulatory Arrest With Cerebral Perfusion	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CPerfUtil	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Antegrade
2	Retrograde
3	Both antegrade and retrograde

Long Name:	Total Circulatory Arrest Time	*SeqNo:*	2426
Short Name:	**TotCircArrTm**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Calculated variable measuring circulatory arrest without cerebral perfusion time plus any cerebral perfusion time.

LowValue:	0	*UsualRangeLow:*	
HighValue:	1299	*UsualRangeHigh:*	

Parent Long Name:	Circulatory Arrest	*Format:*	Integer
ParentShortName:	CircArr	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	Calculated

ParentHarvestCodes: 1

Long Name:	Aortic Occlusion	*SeqNo:*	2430
Short Name:	**AortOccl**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the technique of aortic occlusion used.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
5	None - beating heart
6	None - fibrillating heart
2	Aortic Crossclamp
3	Balloon Occlusion

Long Name:	Cross Clamp Time (min)	*SeqNo:*	2435
Short Name:	**XClampTm**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the total number of minutes that the coronary circulation is mechanically isolated from systemic circulation, either by an aortic cross clamp or systemic circulatory arrest.

LowValue:	0	*UsualRangeLow:*	0
HighValue:	600	*UsualRangeHigh:*	180

Parent Long Name:	Aortic Occlusion	*Format:*	Integer
ParentShortName:	AortOccl	*DataLength:*	
ParentValue:	= "Aortic Crossclamp" or "Balloon Occlusion"	*Data Source:*	User

ParentHarvestCodes: 2|3

Long Name:	Cardioplegia Delivery	*SeqNo:*	2440
Short Name:	**CplegiaDeliv**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the delivery method of cardioplegia if used.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	None
2	Antegrade
3	Retrograde
4	Both

Long Name:	Cardioplegia Type	*SeqNo:*	2445
Short Name:	**CplegiaType**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the type of cardioplegia used.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Cardioplegia Delivery	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CplegiaDeliv	*DataLength:*	
ParentValue:	= "Antegrade", "Retrograde" or "Both"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Blood
2	Crystalloid
3	Both
4	Other

Long Name:	Cerebral Oximetry Used	*SeqNo:*	2450
Short Name:	**CerOxUsed**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether cerebral oximetry was used.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Pre-Induction Baseline Regional Oxygen Saturation - Left		SeqNo:	2455
Short Name:	**PreRSO2Lft**		Core:	No
Section Name:	Operative		Harvest:	No

DBTableName AdultData

Definition: Indicate the percent baseline left cerebral regional oxygen saturation (rSO2) values at the beginning of the operation, when the patient is awake and functional. Patient can be sedated or on supplemental oxygen at the time measurement is taken. In the absence of a user-specified baseline, the cerebral oximeter will automatically select a baseline value from the first few minutes of the case.

LowValue:	1	UsualRangeLow:	
HighValue:	99	UsualRangeHigh:	

Parent Long Name:	Cerebral Oximetry Used	Format:	Integer
ParentShortName:	CerOxUsed	DataLength:	
ParentValue:	= "Yes"	Data Source:	User

ParentHarvestCodes: 1

Long Name:	Pre-Induction Baseline Regional Oxygen Saturation - Right		SeqNo:	2460
Short Name:	**PreRSO2Rt**		Core:	No
Section Name:	Operative		Harvest:	No

DBTableName AdultData

Definition: Indicate the percent baseline right cerebral regional oxygen saturation (rSO2) values at the beginning of the operation, when the patient is awake and functional. Patient can be sedated or on supplemental oxygen at the time measurement is taken. In the absence of a user-specified baseline, the cerebral oximeter will automatically select a baseline value from the first few minutes of the case.

LowValue:	1	UsualRangeLow:	
HighValue:	99	UsualRangeHigh:	

Parent Long Name:	Cerebral Oximetry Used	Format:	Integer
ParentShortName:	CerOxUsed	DataLength:	
ParentValue:	= "Yes"	Data Source:	User

ParentHarvestCodes: 1

Long Name:	Cumulative Saturation Below Threshold - Left	*SeqNo:*	2465
Short Name:	**CumulSatLft**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of 75% of the baseline rSO2 value (relative decline of 25% below baseline) for the left rSO2. Calculated by the cerebral oximeter by multiplying the difference between the threshold and current rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated throughout the operation. Units are minute-%. This is also called area under the curve (AUC).

LowValue:	0	*UsualRangeLow:*	
HighValue:	9999	*UsualRangeHigh:*	
Parent Long Name:	Cerebral Oximetry Used	*Format:*	Integer
ParentShortName:	CerOxUsed	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Cumulative Saturation Below Threshold - Right	*SeqNo:*	2470
Short Name:	**CumulSatRt**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of 75% of the baseline rSO2 value (relative decline of 25% below baseline) for the right rSO2. Calculated by the cerebral oximeter by multiplying the difference between the threshold and current rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated throughout the operation. Units are minute-%. This is also called area under the curve (AUC).

LowValue:	0	*UsualRangeLow:*	
HighValue:	9999	*UsualRangeHigh:*	
Parent Long Name:	Cerebral Oximetry Used	*Format:*	Integer
ParentShortName:	CerOxUsed	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Cerebral Oximeter Provided The First Indication	*SeqNo:*	2475
Short Name:	**COFirstInd**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the cerebral oximeter provided the first indication of a technical problem or physiological change in the patient that could potentially lead to an adverse patient outcome.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Cerebral Oximetry Used	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CerOxUsed	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Skin Closure Regional Oxygen Saturation - Left	*SeqNo:*	2480
Short Name:	**SCRSO2Lft**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the left cerebral regional oxygen saturation of blood (rSO2) value at the time of skin closure at the end of the operation. Units are %.

LowValue:	1	*UsualRangeLow:*	
HighValue:	99	*UsualRangeHigh:*	

Parent Long Name:	Cerebral Oximetry Used	*Format:*	Integer
ParentShortName:	CerOxUsed	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Skin Closure Regional Oxygen Saturation - Right	*SeqNo:*	2485
Short Name:	**SCRSO2Rt**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the right cerebral regional oxygen saturation of blood (rSO2) value at the time of skin closure at the end of the operation. Units are %.

LowValue:	1	*UsualRangeLow:*	
HighValue:	99	*UsualRangeHigh:*	
Parent Long Name:	Cerebral Oximetry Used	*Format:*	Integer
ParentShortName:	CerOxUsed	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Diffuse Aortic Calcification (Porcelain Aorta)	*SeqNo:*	2490
Short Name:	**ConCalc**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether diffuse or concentric calcification of the aorta was discovered preoperatively or Intraoperatively using imaging or palpation.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Echo Assessment of Ascending Aorta/Arch	*SeqNo:* 2495
Short Name: **AsmtAscAA**	*Core:* Yes
Section Name: Operative	*Harvest:* Yes

DBTableName   AdultData

Definition: Indicate whether the Ascending Aorta/Arch was evaluated for atheroma or plaque during surgery using TEE or epiaortic ultrasound. (Not intended for assessment of aneurysmal disease or dissection.)

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Not reported

Long Name: Assessment of Aorta Disease	*SeqNo:* 2500
Short Name: **AsmtAoDx**	*Core:* Yes
Section Name: Operative	*Harvest:* Yes

DBTableName   AdultData

Definition: Indicate highest grade of atheroma or plaque in the ascending aorta indicated on epiaortic ultrasound or TEE.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Echo Assessment of Ascending Aorta/Arch	*Format:*	Text (categorical values specified by STS)
ParentShortName: AsmtAscAA	*DataLength:*	
ParentValue: = "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Normal aorta / No or minimal plaque
2	Extensive intimal thickening
3	Protruding Atheroma < 5 mm
4	Protruding Atheroma >= 5

mm

    5   Mobile plaques

    6   Not documented

Long Name: Aortic Condition Altered Plan		*SeqNo:*	2505
Short Name: **AsmtAPln**		*Core:*	Yes
Section Name: Operative		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether aortic assessment changed cannulation strategy or surgical plan.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

    Code: Value:

      1   Yes

      2   No

Long Name: Intraop Blood Products Refused		*SeqNo:*	2510
Short Name: **IBldProdRef**		*Core:*	Yes
Section Name: Operative		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient or family refused blood products.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

    Code: Value:

      1   Yes

      2   No

Long Name:	Intraop Blood Products	*SeqNo:*	2515
Short Name:	**IBldProd**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether blood products were transfused any time intraoperatively during the initial surgery. Intraoperatively is defined as any blood started inside of the OR.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Intraop Blood Products Refused	*Format:*	Text (categorical values specified by STS)
ParentShortName:	IBldProdRef	*DataLength:*	
ParentValue:	= "No"	*Data Source:*	User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Intraop Blood Products - RBC Units	*SeqNo:*	2520
Short Name:	**IBdRBCU**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the number of units of packed red blood cells that were transfused intraoperatively. Do not include autologous, cell-saver, pump-residual or chest tube recirculated blood.

LowValue:	0	*UsualRangeLow:*	0
HighValue:	99	*UsualRangeHigh:*	10
Parent Long Name:	Intraop Blood Products	*Format:*	Integer
ParentShortName:	IBldProd	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - FFP Units   *SeqNo:*   2525

Short Name: **IBdFFPU**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the number of units of fresh frozen plasma that were transfused intraoperatively.

LowValue: 0   *UsualRangeLow:*   0

HighValue: 99   *UsualRangeHigh:*   10

Parent Long Name: Intraop Blood Products   *Format:*   Integer

ParentShortName: IBldProd   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Platelet Units   *SeqNo:*   2530

Short Name: **IBdPlatU**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the number of units of platelets that were transfused intraoperatively.

Count the dose pack as one unit. A dose pack may consist of 4, 6, 8, 10, or any number of donor platelets obtained. The number of units coded is not volume dependent.

LowValue: 0   *UsualRangeLow:*

HighValue: 99   *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products   *Format:*   Integer

ParentShortName: IBldProd   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	Intraop Blood Products - Cryo Units	*SeqNo:*	2535
Short Name:	**IBdCryoU**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the number of units of cryoprecipitate that were transfused intraoperatively. One bag of cryo = one unit.
The number of units is not volume dependent.

LowValue:	0	*UsualRangeLow:*	
HighValue:	99	*UsualRangeHigh:*	
Parent Long Name:	Intraop Blood Products	*Format:*	Integer
ParentShortName:	IBldProd	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Intraop Blood Products - Factor VIIa	*SeqNo:*	2540
Short Name:	**IBdFactorVII**	*Core:*	No
Section Name:	Operative	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the amount of Factor VIIa that was given intraoperatively. Units are measured in micrograms per kilogram.

LowValue:	0	*UsualRangeLow:*	
HighValue:	1000	*UsualRangeHigh:*	
Parent Long Name:	Intraop Blood Products	*Format:*	Integer
ParentShortName:	IBldProd	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name: Intraop Clotting Factors   *SeqNo:*   2545

Short Name: **IntraClotFact**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether clotting factors were administered intraoperatively.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

    Harvest Codes:

        Code: Value:

Code	Value
1	Yes, Factor VIIa
2	Yes, FEIBA
3	Yes, Composite
4	No

Long Name: Intraop Antifibrinolytic Medications - Epsilon Amino-Caproic Acid   *SeqNo:*   2550

Short Name: **IMedEACA**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the patient received Epsilon Amino-Caproic Acid in the operating room.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

    Harvest Codes:

        Code: Value:

Code	Value
1	Yes
2	No

Long Name:	Intraop Antifibrinolytic Medications - Tranexamic Acid		*SeqNo:*	2555
Short Name:	**IMedTran**		*Core:*	Yes
Section Name:	Operative		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received Tranexamic Acid in the operating room.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Intraop TEE post procedure		*SeqNo:*	2560
Short Name:	**InOpTEE**		*Core:*	Yes
Section Name:	Operative		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether intraoperative TEE was performed following procedure.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Post Repair TEE Aortic Insufficiency   *SeqNo:*   2565

Short Name: **PRepAR**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the highest level of aortic insufficiency/ regurgitation found on post CPB intraop TEE. Mild-to-Moderate should be coded as moderate; moderate to severe should be coded as severe. Amount of AR should be the LAST ASSESSMENT before leaving the operating room. For example: if patient has aortic repair, separates from CPB and finds moderate AR, surgeon goes back on and re-fixes, comes off and finds no AR, it should be recorded as none.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop TEE post procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: InOpTEE   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

            Code: Value:
              1   None
              2   Trace/trivial
              3   Mild
              4   Moderate
              5   Severe
              6   Not reported

Long Name:	Post Repair TEE Mitral Insufficiency	*SeqNo:* 2570
Short Name:	**PRepMR**	*Core:* Yes
Section Name:	Operative	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest level of mitral insufficiency/ regurgitation found on post CPB intraop TEE. Mild-to-Moderate should be coded as moderate; moderate to severe should be coded as severe. Amount of MR should be the LAST ASSESSMENT before leaving the operating room. For example: if patient has mitral repair, separates from CPB and finds moderate MR, surgeon goes back on and re-fixes, comes off and finds no MR, it should be recorded as none.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop TEE post procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: InOpTEE   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	None
2	Trace/trivial
3	Mild
4	Moderate
5	Severe
6	Not reported

Long Name:	Post Repair TEE Tricuspid Insufficiency	*SeqNo:* 2575
Short Name:	**PRepTR**	*Core:* Yes
Section Name:	Operative	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest level of tricuspid insufficiency/ regurgitation found on post CPB intraop TEE. Mild-to-Moderate should be coded as moderate; moderate to severe should be coded as severe. Amount of TR should be the LAST ASSESSMENT before leaving the operating room.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop TEE post procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: InOpTEE   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

   1   None

   2   Trace/trivial

   3   Mild

   4   Moderate

   5   Severe

   6   Not reported

Long Name: Post Repair Ejection Fraction   *SeqNo:*   2580

Short Name: **PRepEF**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the postoperative ejection fraction.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop TEE post procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: InOpTEE   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

   Harvest Codes:

              <u>Code:</u> <u>Value:</u>

              1   Unchanged

              2   Increased

              3   Decreased

              4   Not reported

Long Name:	Combined Cardiac Surgery and PCI Performed	*SeqNo:*	2585
Short Name:	**CombCardPCI**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a cardiac surgical procedure was performed in addition to a PCI during this hospitalization.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Combined Cardiac and PCI Procedures Performed	*SeqNo:*	2590
Short Name:	**CombProcs**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate which procedures were performed during this hospitalization.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Combined Cardiac Surgery and PCI Performed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CombCardPCI	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	PCI + CAB
2	PCI + Valve
3	PCI + Aortic
4	PCI + Other

Long Name: Combined Cardiac Surgery and PCI Procedure Status   *SeqNo:*   2595

Short Name: **CombProcsStatus**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the procedures were performed concurrently or staged.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Combined Cardiac Surgery   *Format:*   Text (categorical values specified by STS)
                     and PCI Performed

ParentShortName: CombCardPCI   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

      Harvest Codes:

          <u>Code:</u> <u>Value:</u>

            1   Concurrent - same setting

            2   Staged - PCI followed by surgery

            3   Staged - surgery followed by PCI

Long Name: Combined Cardiac Surgery and PCI Procedures   *SeqNo:*   2600

Short Name: **CombProcsPCI**   *Core:*   Yes

Section Name: Operative   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the PCI performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Combined Cardiac Surgery   *Format:*   Text (categorical values specified by STS)
                     and PCI Performed

ParentShortName: CombCardPCI   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

      Harvest Codes:

          <u>Code:</u> <u>Value:</u>

            1   Angioplasty

            2   Stent

            3   Angioplasty and stent

            4   Attempted PCI

Long Name:	Combined Cardiac Surgery and PCI Procedures - Stent Type	*SeqNo:*	2605
Short Name:	**CombProcsStentTy**	*Core:*	Yes
Section Name:	Operative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the type of stent deployed during PCI.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Combined Cardiac Surgery and PCI Procedures	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CombProcsPCI	*DataLength:*	
ParentValue:	= "Stent" or "Angioplasty and stent"	*Data Source:*	User

ParentHarvestCodes: 2|3

Harvest Codes:

Code: Value:

1   Bare metal

2   Drug-eluting

3   Bioresorbable

4   Multiple

5   Not documented

Long Name:	Hybrid Procedure CAB PCI	*SeqNo:*	2610
Short Name:	**CABHybrPCI**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether a hybrid coronary surgical and interventional cardiology procedure was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OpCAB	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Hybrid Status	*SeqNo:*	2615
Short Name:	**HybrStat**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate Status of Hybrid procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Hybrid Procedure CAB PCI	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CABHybrPCI	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Planned - concurrent	Planned, performed same setting
2	Planned - staged	Planned, performed same hospital admission
3	Unplanned	Unplanned, performed after incomplete revascularization or graft closure during the same hospital admission

Long Name:	Hybrid Procedure	*SeqNo:*	2620
Short Name:	**HybrProc**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate PCI Procedure performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Hybrid Procedure CAB PCI	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CABHybrPCI	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Angioplasty
2	Stent

Long Name:	Dist Anast - Art #	*SeqNo:*	2625
Short Name:	**DistArt**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses with arterial conduits, whether IMA, GEPA, radial artery, etc.

LowValue:	0	*UsualRangeLow:*	
HighValue:	9	*UsualRangeHigh:*	

Parent Long Name:	CAB	*Format:*	Integer
ParentShortName:	OpCAB	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Long Name:	Dist Anast - Vein #	*SeqNo:*	2630
Short Name:	**DistVein**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses with venous conduits.

LowValue:	0	*UsualRangeLow:*	
HighValue:	9	*UsualRangeHigh:*	

Parent Long Name:	CAB	*Format:*	Integer
ParentShortName:	OpCAB	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Long Name:	Dist Anast - Vein Harvest Technique	*SeqNo:*	2635
Short Name:	**DistVeinHTech**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the technique used to harvest the vein graft(s).

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Dist Anast - Vein #	*Format:*	Text (categorical values specified by STS)
ParentShortName:	DistVein	*DataLength:*	
ParentValue:	> 0	*Data Source:*	User
ParentHarvestCodes:	> 0		

Harvest Codes:

Code:	Value:
1	Endoscopic
2	Direct Vision (open)
3	Both
4	Cryopreserved

Long Name:	Saphenous Vein Harvest Time	*SeqNo:*	2640
Short Name:	**SaphHrvstT**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the total time in minutes for saphenous vein harvest.

LowValue:	1	*UsualRangeLow:*	
HighValue:	120	*UsualRangeHigh:*	
Parent Long Name:	Dist Anast - Vein Harvest Technique	*Format:*	Integer
ParentShortName:	DistVeinHTech	*DataLength:*	
ParentValue:	= "Endoscopic", "Direct Vision (open)", or "Both"	*Data Source:*	User
ParentHarvestCodes:	1|2|3		

Long Name:	Saphenous Vein Preparation Time	*SeqNo:*	2645
Short Name:	**SaphPrepT**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the total amount of vein preparation time (e.g., side branch ligation, etc.) in minutes.

LowValue:	1	*UsualRangeLow:*	
HighValue:	60	*UsualRangeHigh:*	
Parent Long Name:	Dist Anast - Vein Harvest Technique	*Format:*	Integer
ParentShortName:	DistVeinHTech	*DataLength:*	
ParentValue:	= "Endoscopic", "Direct Vision (open)", or "Both"	*Data Source:*	User

ParentHarvestCodes: 1|2|3

Long Name:	Saphenous Vein Harvest And Preparation Time	*SeqNo:*	2650
Short Name:	**SaphHarPrepTm**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the total time for saphenous vein harvest and preparation.

LowValue:	0.00	*UsualRangeLow:*	
HighValue:	240.00	*UsualRangeHigh:*	
Parent Long Name:	Dist Anast - Vein Harvest Technique	*Format:*	Real
ParentShortName:	DistVeinHTech	*DataLength:*	
ParentValue:	= "Endoscopic", "Direct Vision (open)" or "Both"	*Data Source:*	User

ParentHarvestCodes: 1|2|3

Long Name:	IMA Artery Used	*SeqNo:*	2655
Short Name:	**IMAArtUs**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate which, if any, Internal Mammary Artery (ies) (IMA) were used for grafts.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB	*Format:*	Text (categorical values specified by STS)	
ParentShortName: OpCAB	*DataLength:*		
ParentValue: = "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:* User		

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Left IMA
2	Right IMA
3	Both IMAs
4	No IMA

Long Name:	Reason for No IMA	*SeqNo:*	2660
Short Name:	**NoIMARsn**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate PRIMARY reason Internal Mammary artery was not used as documented in medical record.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: IMA Artery Used	*Format:*	Text (categorical values specified by STS)	
ParentShortName: IMAArtUs	*DataLength:*		
ParentValue: = "No IMA"	*Data Source:* User		

ParentHarvestCodes: 4

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
2	Subclavian stenosis	
3	Previous cardiac or thoracic surgery	
4	Previous mediastinal radiation	

5	Emergent or salvage procedure	
6	No LAD disease	Includes LAD with no bypassable disease.
7	Other	

Long Name: IMA Dist Anast #   *SeqNo:*   2665

Short Name: **NumIMADA**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses done using IMA grafts.

LowValue: 0   *UsualRangeLow:*

HighValue: 6   *UsualRangeHigh:*

Parent Long Name: IMA Artery Used   *Format:*   Integer

ParentShortName: IMAArtUs   *DataLength:*

ParentValue: = "Left IMA", "Right IMA" or   *Data Source:* User
                       "Both IMAs"

ParentHarvestCodes: 1|2|3

Long Name: IMA Harvest Technique   *SeqNo:*   2670

Short Name: **IMATechn**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the technique of IMA harvest.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: IMA Artery Used   *Format:*   Text (categorical values specified by STS)

ParentShortName: IMAArtUs   *DataLength:*

ParentValue: = "Left IMA", "Right IMA" or   *Data Source:* User
                       "Both IMAs"

ParentHarvestCodes: 1|2|3

Harvest Codes:

Code:	Value:
2	Direct Vision (open)
3	Thoracoscopy
4	Combination
5	Robotic Assisted

Long Name: Number of Radial Arteries Used   *SeqNo:*   2675

Short Name: **NumRadArtUs**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the number of radial artery(ies) that were used for grafts.

LowValue: 0   *UsualRangeLow:*

HighValue: 2   *UsualRangeHigh:*

Parent Long Name: CAB   *Format:*   Integer

ParentShortName: OpCAB   *DataLength:*

ParentValue: = "Yes, planned", "Yes,   *Data Source:* User
                        unplanned due to surgical
                        complication" or "Yes,
                        unplanned due to unsuspected
                        disease or anatomy"

ParentHarvestCodes: 3|4|5

Long Name: Radial Dist Anast #   *SeqNo:*   2680

Short Name: **NumRadDA**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses done using radial artery grafts.

LowValue: 0   *UsualRangeLow:*

HighValue: 6   *UsualRangeHigh:*

Parent Long Name: Number of Radial Arteries   *Format:*   Integer
                     Used

ParentShortName: NumRadArtUs   *DataLength:*

ParentValue: > 0   *Data Source:* User

ParentHarvestCodes: > 0

Long Name: Radial Dist Anast Harvest Technique   *SeqNo:*   2685

Short Name: **RadHTech**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the technique used to harvest the radial artery(s).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Radial Dist Anast #   *Format:*   Text (categorical values specified by STS)

ParentShortName: NumRadDA   *DataLength:*

ParentValue: > 0   *Data Source:* User

ParentHarvestCodes: > 0

      Harvest Codes:

            <u>Code:</u> <u>Value:</u>

              1   Endoscopic

              2   Direct Vision (open)

              3   Both

Long Name: Radial Artery Harvest Time   *SeqNo:*   2690

Short Name: **RadHrvstT**   *Core:*   No

Section Name: Coronary Bypass   *Harvest:*   No

DBTableName   AdultData

Definition: Indicate the total time in minutes for radial artery harvesting.

LowValue: 1   *UsualRangeLow:*

HighValue: 120   *UsualRangeHigh:*

Parent Long Name: Radial Dist Anast #   *Format:*   Integer

ParentShortName: NumRadDA   *DataLength:*

ParentValue: > 0   *Data Source:* User

ParentHarvestCodes: > 0

Long Name:	Radial Artery Preparation Time	*SeqNo:*	2695
Short Name:	**RadPrepT**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the total amount of artery preparation time (e.g., side branch ligation, etc.) in minutes.

LowValue: 1   *UsualRangeLow:*

HighValue: 60   *UsualRangeHigh:*

Parent Long Name: Radial Dist Anast #   *Format:*   Integer

ParentShortName: NumRadDA   *DataLength:*

ParentValue: > 0   *Data Source:* User

ParentHarvestCodes: > 0

Long Name:	Radial Artery Harvest and Preparation Time	*SeqNo:*	2700
Short Name:	**RadHarvPrepTm**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the total time for radial artery harvest and preparation.

LowValue: 0.00   *UsualRangeLow:*

HighValue: 240.00   *UsualRangeHigh:*

Parent Long Name: Radial Dist Anast #   *Format:*   Real

ParentShortName: NumRadDA   *DataLength:*

ParentValue: > 0   *Data Source:* User

ParentHarvestCodes: > 0

Long Name:	Other Arterial Distal Anastomoses #	*SeqNo:*	2705
Short Name:	**NumOArtD**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the number of arterial distal anastomoses that were used, other than radial or IMA.

LowValue:	0	*UsualRangeLow:*	
HighValue:	6	*UsualRangeHigh:*	

Parent Long Name:	CAB	*Format:*	Integer
ParentShortName:	OpCAB	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Long Name:	Proximal Technique	*SeqNo:*	2710
Short Name:	**ProxTech**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the technique employed for proximal graft anastomosis.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	CAB	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OpCAB	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Single Cross Clamp
2	Partial Occlusion Clamp
3	Anastomotic Assist Device

Long Name: CAB Native Coronary Disease Location 01	*SeqNo:* 2715
Short Name: **CABDisLoc01**	*Core:* No
Section Name: Coronary Bypass	*Harvest:* No

DBTableName   AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB	*Format:* Text (categorical values specified by STS)
ParentShortName: OpCAB	*DataLength:*
ParentValue: = "Yes"	*Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2
7	Circumflex
8	OM 1
9	OM 2
10	OM 3
11	RCA
12	PDA
13	PLB
14	AM branches
15	Ramus

Long Name:	CAB Highest Percent Stenosis In Native Vessel 01	*SeqNo:*	2720
Short Name:	**CABPctSten01**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1	*UsualRangeLow:*	
HighValue: 100	*UsualRangeHigh:*	
Parent Long Name: CAB	*Format:*	Integer
ParentShortName: OpCAB	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Long Name:	CAB Previous Conduit 01	*SeqNo:*	2725
Short Name:	**CABPrevCon01**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CAB	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpCAB	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes - Diseased
2	Yes - No disease
3	No previous conduit

Long Name:	CAB Distal Site 01	*SeqNo:*	2730
Short Name:	**CABDistSite01**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	

Parent Long Name:	CAB	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OpCAB	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
15	Left Main	Left Main
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diagonal 1	First Diagonal
9	Diagonal 2	Second Diagonal
16	Diagonal 3	Third Diagonal
17	Circumflex	Circumflex
11	Obtuse Marginal 1	First Obtuse Marginal
12	Obtuse Marginal 2	Second Obtuse Marginal
13	Obtuse Marginal 3	Third Obtuse Marginal
10	Ramus	Ramus Intermedius
1	RCA	Right Coronary Artery
2	Acute Marginal (AM)	Acute Marginal
3	Posterior Descending (PDA)	Posterior Descending Artery
4	Posterolateral (PLB)	Posterolateral Branch
14	Other	Any other site

Long Name:	CAB Distal Technique 01	*SeqNo:*	2735

Short Name: **CABDistTech01**   *Core:* No

Section Name: Coronary Bypass   *Harvest:* No

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpCAB   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

           1   Running

           2   Interrupted

           3   Clips

           4   Anastomotic Device

Long Name: CAB Proximal Site 01   *SeqNo:*   2740

Short Name: **CABProximalSite01**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpCAB   *DataLength:*

ParentValue: = "Yes, planned", "Yes,   *Data Source:* User
unplanned due to surgical
complication" or "Yes,
unplanned due to unsuspected
disease or anatomy"

ParentHarvestCodes: 3|4|5

    Harvest Codes:

        Code: Value:

           1   In Situ Mammary

           2   Ascending aorta

           3   Descending aorta

           4   Subclavian artery

5   Innominate artery

6   T-graft off SVG

7   T-graft off Radial

8   T-graft off LIMA

9   T-graft off RIMA

10   Natural Y vein graft

11   Other

Long Name:	CAB Proximal Technique 01	*SeqNo:*	2745
Short Name:	**CABProxTech01**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB		*Format:*	Text (categorical values specified by STS)
ParentShortName: OpCAB		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

5   In Situ Mammary

1   Running

2   Interrupted

3   Anastomotic Device

4   Anastomotic Assist Device

Long Name: CAB Conduit 01   *SeqNo:*   2750

Short Name: **CABConduit01**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpCAB   *DataLength:*

ParentValue: = "Yes, planned", "Yes,   *Data Source:* User
                     unplanned due to surgical
                     complication" or "Yes,
                     unplanned due to unsuspected
                     disease or anatomy"

ParentHarvestCodes: 3|4|5

    Harvest Codes:

        Code: Value:

         1   Vein graft

         2   In Situ LIMA

         3   In Situ RIMA

         4   Free IMA

         5   Radial artery

         6   Other arteries, homograft

         7   Synthetic graft

Long Name:	CAB Distal Position 01	*SeqNo:*	2755
Short Name:	**CABDistPos01**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CAB		*Format:* Text (categorical values specified by STS)
ParentShortName: OpCAB		*DataLength:*
ParentValue: = "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"		*Data Source:* User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code: Value:

1   End to side

2   Sequential (side to side)

Long Name:	CAB Endarterectomy 01	*SeqNo:*	2760
Short Name:	**CABEndArt01**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CAB		*Format:* Text (categorical values specified by STS)
ParentShortName: OpCAB		*DataLength:*
ParentValue: = "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"		*Data Source:* User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: CAB Hybrid PCI 01	*SeqNo:* 2765
Short Name: **CABHyPCI01**	*Core:* No
Section Name: Coronary Bypass	*Harvest:* No

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: CAB	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpCAB	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Angioplasty
3	Stent

Long Name: CAB 02	*SeqNo:* 2770
Short Name: **CAB02**	*Core:* Yes
Section Name: Coronary Bypass	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a second Coronary Artery Bypass graft was done.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: CAB	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpCAB	*DataLength:*	
ParentValue: = "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:* User	

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	CAB Native Coronary Disease Location 02	*SeqNo:*	2775
Short Name:	**CABDisLoc02**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name:	CAB 02	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB02	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

Code	Value
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2
7	Circumflex
8	OM 1
9	OM 2
10	OM 3
11	RCA
12	PDA
13	PLB
14	AM branches
15	Ramus

Long Name:	CAB Highest Percent Stenosis In Native Vessel 02	*SeqNo:*	2780
Short Name:	**CABPctSten02**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue:	1	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	CAB 02	*Format:*	Integer
ParentShortName:	CAB02	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	CAB Previous Conduit 02	*SeqNo:*	2785
Short Name:	**CABPrevCon02**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 02	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB02	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes - Diseased
2	Yes - No disease
3	No previous conduit

Long Name: CAB Distal Site 02   *SeqNo:*   2790

Short Name: **CABDistSite02**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 02   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB02   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
15	Left Main	Left Main
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diagonal 1	First Diagonal
9	Diagonal 2	Second Diagonal
16	Diagonal 3	Third Diagonal
17	Circumflex	Circumflex
11	Obtuse Marginal 1	First Obtuse Marginal
12	Obtuse Marginal 2	Second Obtuse Marginal
13	Obtuse Marginal 3	Third Obtuse Marginal
10	Ramus	Ramus Intermedius
1	RCA	Right Coronary Artery
2	Acute Marginal (AM)	Acute Marginal
3	Posterior Descending (PDA)	Posterior Descending Artery
4	Posterolateral (PLB)	Posterolateral Branch
14	Other	Any other site

Long Name:	CAB Distal Technique 02	*SeqNo:*	2795
Short Name:	**CABDistTech02**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 02	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB02	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
  1   Running
  2   Interrupted
  3   Clips
  4   Anastomotic Device

Long Name:	CAB Proximal Site 02	*SeqNo:*	2800
Short Name:	**CABProximalSite02**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 02	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB02	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
  1   In Situ Mammary
  2   Ascending aorta
  3   Descending aorta
  4   Subclavian artery
  5   Innominate artery
  6   T-graft off SVG
  7   T-graft off Radial

8   T-graft off LIMA

9   T-graft off RIMA

10   Natural Y vein graft

11   Other

Long Name: CAB Proximal Technique 02	*SeqNo:*	2805
Short Name: **CABProxTech02**	*Core:*	No
Section Name: Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: CAB 02	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB02	*DataLength:*	
ParentValue: = "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

5   In Situ Mammary

1   Running

2   Interrupted

3   Anastomotic Device

4   Anastomotic Assist Device

Long Name: CAB Conduit 02	*SeqNo:*	2810
Short Name: **CABConduit02**	*Core:*	Yes
Section Name: Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: CAB 02	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB02	*DataLength:*	
ParentValue: = "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Vein graft

    2   In Situ LIMA

    3   In Situ RIMA

    4   Free IMA

    5   Radial artery

    6   Other arteries, homograft

    7   Synthetic graft

Long Name: CAB Distal Position 02   *SeqNo:*   2815

Short Name: **CABDistPos02**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 02   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB02   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   End to side

          2   Sequential (side to side)

Long Name: CAB Endarterectomy 02   *SeqNo:*   2820

Short Name: **CABEndArt02**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 02   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB02   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   Yes

          2   No

Long Name: CAB Hybrid PCI 02   SeqNo: 2825

Short Name: **CABHyPCI02**   Core: No

Section Name: Coronary Bypass   Harvest: No

DBTableName   AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in
              conjunction with this graft.

LowValue: UsualRangeLow:

HighValue: UsualRangeHigh:

Parent Long Name: CAB 02   Format: Text (categorical values specified by STS)

ParentShortName: CAB02   DataLength:

ParentValue: = "Yes"   Data Source: User

ParentHarvestCodes: 1

        Harvest Codes:

                Code: Value:
                  1   No
                  2   Angioplasty
                  3   Stent

Long Name: CAB 03   SeqNo: 2830

Short Name: **CAB03**   Core: Yes

Section Name: Coronary Bypass   Harvest: Yes

DBTableName   AdultData

Definition: Indicate whether a third Coronary Artery Bypass graft was done.

LowValue: UsualRangeLow:

HighValue: UsualRangeHigh:

Parent Long Name: CAB 02   Format: Text (categorical values specified by STS)

ParentShortName: CAB02   DataLength:

ParentValue: = "Yes"   Data Source: User

ParentHarvestCodes: 1

        Harvest Codes:

                Code: Value:
                  1   Yes
                  2   No

Long Name:	CAB Native Coronary Disease Location 03	*SeqNo:*	2835
Short Name:	**CABDisLoc03**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the native coronary disease location.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CAB 03	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB03	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2
7	Circumflex
8	OM 1
9	OM 2
10	OM 3
11	RCA
12	PDA
13	PLB
14	AM branches
15	Ramus

Long Name:	CAB Highest Percent Stenosis In Native Vessel 03	*SeqNo:* 2840
Short Name:	**CABPctSten03**	*Core:* No
Section Name:	Coronary Bypass	*Harvest:* No

DBTableName   AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1   *UsualRangeLow:*

HighValue: 100   *UsualRangeHigh:*

Parent Long Name: CAB 03   *Format:*   Integer

ParentShortName: CAB03   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	CAB Previous Conduit 03	*SeqNo:* 2845
Short Name:	**CABPrevCon03**	*Core:* No
Section Name:	Coronary Bypass	*Harvest:* No

DBTableName   AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 03   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB03   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

          1   Yes - Diseased

          2   Yes - No disease

          3   No previous conduit

Long Name: CAB Distal Site 03   *SeqNo:*   2850

Short Name: **CABDistSite03**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 03   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB03   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
15	Left Main	Left Main
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diagonal 1	First Diagonal
9	Diagonal 2	Second Diagonal
16	Diagonal 3	Third Diagonal
17	Circumflex	Circumflex
11	Obtuse Marginal 1	First Obtuse Marginal
12	Obtuse Marginal 2	Second Obtuse Marginal
13	Obtuse Marginal 3	Third Obtuse Marginal
10	Ramus	Ramus Intermedius
1	RCA	Right Coronary Artery
2	Acute Marginal (AM)	Acute Marginal
3	Posterior Descending (PDA)	Posterior Descending Artery
4	Posterolateral (PLB)	Posterolateral Branch
14	Other	Any other site

Long Name:	CAB Distal Technique 03	*SeqNo:*	2855
Short Name:	**CABDistTech03**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB 03		*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB03		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Running

2   Interrupted

3   Clips

4   Anastomotic Device

Long Name:	CAB Proximal Site 03	*SeqNo:*	2860
Short Name:	**CABProximalSite03**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB 03		*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB03		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   In Situ Mammary

2   Ascending aorta

3   Descending aorta

4   Subclavian artery

5   Innominate artery

6   T-graft off SVG

7   T-graft off Radial

8   T-graft off LIMA

9   T-graft off RIMA

10   Natural Y vein graft

11   Other

Long Name:	CAB Proximal Technique 03	*SeqNo:*	2865
Short Name:	**CABProxTech03**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB 03		*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB03		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

5   In Situ Mammary

1   Running

2   Interrupted

3   Anastomotic Device

4   Anastomotic Assist Device

Long Name:	CAB Conduit 03	*SeqNo:*	2870
Short Name:	**CABConduit03**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB 03		*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB03		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Vein graft

---

2   In Situ LIMA

3   In Situ RIMA

4   Free IMA

5   Radial artery

6   Other arteries, homograft

7   Synthetic graft

Long Name:	CAB Distal Position 03	*SeqNo:*	2875
Short Name:	**CABDistPos03**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name:	CAB 03	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB03	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   End to side

2   Sequential (side to side)

Long Name:	CAB Endarterectomy 03	*SeqNo:*	2880
Short Name:	**CABEndArt03**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name:	CAB 03	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB03	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	CAB Hybrid PCI 03	*SeqNo:*	2885
Short Name:	**CABHyPCI03**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 03	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB03	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Angioplasty
3	Stent

Long Name:	CAB 04	*SeqNo:*	2890
Short Name:	**CAB04**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a fourth Coronary Artery Bypass graft was done.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 03	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB03	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	CAB Native Coronary Disease Location 04		SeqNo:	2895
Short Name:	**CABDisLoc04**		Core:	No
Section Name:	Coronary Bypass		Harvest:	No

DBTableName   AdultData

Definition: Indicate the native coronary disease location.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB 04		*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB04		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2
7	Circumflex
8	OM 1
9	OM 2
10	OM 3
11	RCA
12	PDA
13	PLB
14	AM branches
15	Ramus

Long Name:	CAB Highest Percent Stenosis In Native Vessel 04	*SeqNo:*	2900
Short Name:	**CABPctSten04**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue:	1	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	CAB 04	*Format:*	Integer
ParentShortName:	CAB04	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	CAB Previous Conduit 04	*SeqNo:*	2905
Short Name:	**CABPrevCon04**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 04	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB04	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Harvest Codes:

Code:	Value:
1	Yes - Diseased
2	Yes - No disease
3	No previous conduit

Long Name: CAB Distal Site 04   *SeqNo:*   2910

Short Name: **CABDistSite04**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 04   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB04   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
15	Left Main	Left Main
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diagonal 1	First Diagonal
9	Diagonal 2	Second Diagonal
16	Diagonal 3	Third Diagonal
17	Circumflex	Circumflex
11	Obtuse Marginal 1	First Obtuse Marginal
12	Obtuse Marginal 2	Second Obtuse Marginal
13	Obtuse Marginal 3	Third Obtuse Marginal
10	Ramus	Ramus Intermedius
1	RCA	Right Coronary Artery
2	Acute Marginal (AM)	Acute Marginal
3	Posterior Descending (PDA)	Posterior Descending Artery
4	Posterolateral (PLB)	Posterolateral Branch
14	Other	Any other site

Long Name:	CAB Distal Technique 04	*SeqNo:*	2915
Short Name:	**CABDistTech04**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB 04	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB04	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Running

2   Interrupted

3   Clips

4   Anastomotic Device

Long Name:	CAB Proximal Site 04	*SeqNo:*	2920
Short Name:	**CABProximalSite04**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB 04	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB04	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   In Situ Mammary

2   Ascending aorta

3   Descending aorta

4   Subclavian artery

5   Innominate artery

6   T-graft off SVG

7   T-graft off Radial

8   T-graft off LIMA

9   T-graft off RIMA

10   Natural Y vein graft

11   Other

Long Name:	CAB Proximal Technique 04	*SeqNo:* 2925
Short Name:	**CABProxTech04**	*Core:* No
Section Name:	Coronary Bypass	*Harvest:* No

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:	CAB 04	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB04	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

5   In Situ Mammary

1   Running

2   Interrupted

3   Anastomotic Device

4   Anastomotic Assist Device

Long Name:	CAB Conduit 04	*SeqNo:* 2930
Short Name:	**CABConduit04**	*Core:* Yes
Section Name:	Coronary Bypass	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:	CAB 04	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB04	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Vein graft

        2   In Situ LIMA

        3   In Situ RIMA

        4   Free IMA

        5   Radial artery

        6   Other arteries, homograft

        7   Synthetic graft

Long Name: CAB Distal Position 04   *SeqNo:*   2935

Short Name: **CABDistPos04**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 04   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB04   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

        Harvest Codes:

                Code: Value:
                1   End to side
                2   Sequential (side to side)

Long Name: CAB Endarterectomy 04   *SeqNo:*   2940

Short Name: **CABEndArt04**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 04   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB04   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

        Harvest Codes:

                Code: Value:
                1   Yes
                2   No

Long Name:	CAB Hybrid PCI 04	*SeqNo:*	2945
Short Name:	**CABHyPCI04**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 04	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB04	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Angioplasty
3	Stent

Long Name:	CAB 05	*SeqNo:*	2950
Short Name:	**CAB05**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a fifth Coronary Artery Bypass graft was done.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 04	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB04	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	CAB Native Coronary Disease Location 05	*SeqNo:*	2955
Short Name:	**CABDisLoc05**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name:	CAB 05	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB05	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Left Main

2   Proximal LAD

3   Mid LAD

4   Distal LAD

5   Diagonal 1

6   Diagonal 2

7   Circumflex

8   OM 1

9   OM 2

10   OM 3

11   RCA

12   PDA

13   PLB

14   AM branches

15   Ramus

Long Name:	CAB Highest Percent Stenosis In Native Vessel 05	*SeqNo:* 2960
Short Name:	**CABPctSten05**	*Core:* No
Section Name:	Coronary Bypass	*Harvest:* No

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1   *UsualRangeLow:*

HighValue: 100   *UsualRangeHigh:*

Parent Long Name: CAB 05   *Format:* Integer

ParentShortName: CAB05   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	CAB Previous Conduit 05	*SeqNo:* 2965
Short Name:	**CABPrevCon05**	*Core:* No
Section Name:	Coronary Bypass	*Harvest:* No

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 05   *Format:* Text (categorical values specified by STS)

ParentShortName: CAB05   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

   Harvest Codes:

   Code: Value:

   1 Yes - Diseased

   2 Yes - No disease

   3 No previous conduit

Long Name:	CAB Distal Site 05	*SeqNo:*	2970
Short Name:	**CABDistSite05**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate distal insertion site of bypass.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 05	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB05	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
15	Left Main	Left Main
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diagonal 1	First Diagonal
9	Diagonal 2	Second Diagonal
16	Diagonal 3	Third Diagonal
17	Circumflex	Circumflex
11	Obtuse Marginal 1	First Obtuse Marginal
12	Obtuse Marginal 2	Second Obtuse Marginal
13	Obtuse Marginal 3	Third Obtuse Marginal
10	Ramus	Ramus Intermedius
1	RCA	Right Coronary Artery
2	Acute Marginal (AM)	Acute Marginal
3	Posterior Descending (PDA)	Posterior Descending Artery
4	Posterolateral (PLB)	Posterolateral Branch
14	Other	Any other site

Long Name:	CAB Distal Technique 05	SeqNo:	2975
Short Name:	**CABDistTech05**	Core:	No
Section Name:	Coronary Bypass	Harvest:	No

DBTableName   AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue:		UsualRangeLow:	
HighValue:		UsualRangeHigh:	
Parent Long Name:	CAB 05	Format:	Text (categorical values specified by STS)
ParentShortName:	CAB05	DataLength:	
ParentValue:	= "Yes"	Data Source:	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name:	CAB Proximal Site 05	SeqNo:	2980
Short Name:	**CABProximalSite05**	Core:	Yes
Section Name:	Coronary Bypass	Harvest:	Yes

DBTableName   AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue:		UsualRangeLow:	
HighValue:		UsualRangeHigh:	
Parent Long Name:	CAB 05	Format:	Text (categorical values specified by STS)
ParentShortName:	CAB05	DataLength:	
ParentValue:	= "Yes"	Data Source:	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	In Situ Mammary
2	Ascending aorta
3	Descending aorta
4	Subclavian artery
5	Innominate artery
6	T-graft off SVG
7	T-graft off Radial

	8	T-graft off LIMA
	9	T-graft off RIMA
	10	Natural Y vein graft
	11	Other

Long Name:	CAB Proximal Technique 05	*SeqNo:*	2985
Short Name:	**CABProxTech05**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 05	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB05	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

	5	In Situ Mammary
	1	Running
	2	Interrupted
	3	Anastomotic Device
	4	Anastomotic Assist Device

Long Name:	CAB Conduit 05	*SeqNo:*	2990
Short Name:	**CABConduit05**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 05	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB05	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

	1	Vein graft

2   In Situ LIMA

3   In Situ RIMA

4   Free IMA

5   Radial artery

6   Other arteries, homograft

7   Synthetic graft

Long Name: CAB Distal Position 05   *SeqNo:*   2995

Short Name: **CABDistPos05**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 05   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB05   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

        1   End to side

        2   Sequential (side to side)

Long Name: CAB Endarterectomy 05   *SeqNo:*   3000

Short Name: **CABEndArt05**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 05   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB05   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

        1   Yes

        2   No

Long Name:	CAB Hybrid PCI 05	*SeqNo:*	3005
Short Name:	**CABHyPCI05**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 05	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB05	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Angioplasty
3	Stent

Long Name:	CAB 06	*SeqNo:*	3010
Short Name:	**CAB06**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a sixth Coronary Artery Bypass graft was done.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 05	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB05	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: CAB Native Coronary Disease Location 06   *SeqNo:*   3015

Short Name: **CABDisLoc06**   *Core:*   No

Section Name: Coronary Bypass   *Harvest:*   No

DBTableName   AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 06   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB06   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

         1   Left Main

         2   Proximal LAD

         3   Mid LAD

         4   Distal LAD

         5   Diagonal 1

         6   Diagonal 2

         7   Circumflex

         8   OM 1

         9   OM 2

        10   OM 3

        11   RCA

        12   PDA

        13   PLB

        14   AM branches

        15   Ramus

Long Name:	CAB Highest Percent Stenosis In Native Vessel 06	*SeqNo:*	3020
Short Name:	**CABPctSten06**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1   *UsualRangeLow:*

HighValue: 100   *UsualRangeHigh:*

Parent Long Name: CAB 06   *Format:*   Integer

ParentShortName: CAB06   *DataLength:*

ParentValue: = "Yes"   *Data Source:*   User

ParentHarvestCodes: 1

Long Name:	CAB Previous Conduit 06	*SeqNo:*	3025
Short Name:	**CABPrevCon06**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 06   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB06   *DataLength:*

ParentValue: = "Yes"   *Data Source:*   User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes - Diseased
2	Yes - No disease
3	No previous conduit

Long Name: CAB Distal Site 06

SeqNo: 3030

Short Name: **CABDistSite06**

Core: Yes

Section Name: Coronary Bypass

Harvest: Yes

DBTableName   AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 06

Format: Text (categorical values specified by STS)

ParentShortName: CAB06

DataLength:

ParentValue: = "Yes"

Data Source: User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
15	Left Main	Left Main
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diagonal 1	First Diagonal
9	Diagonal 2	Second Diagonal
16	Diagonal 3	Third Diagonal
17	Circumflex	Circumflex
11	Obtuse Marginal 1	First Obtuse Marginal
12	Obtuse Marginal 2	Second Obtuse Marginal
13	Obtuse Marginal 3	Third Obtuse Marginal
10	Ramus	Ramus Intermedius
1	RCA	Right Coronary Artery
2	Acute Marginal (AM)	Acute Marginal
3	Posterior Descending (PDA)	Posterior Descending Artery
4	Posterolateral (PLB)	Posterolateral Branch
14	Other	Any other site

Long Name:	CAB Distal Technique 06		SeqNo:	3035
Short Name:	**CABDistTech06**		Core:	No
Section Name:	Coronary Bypass		Harvest:	No

DBTableName   AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue:		UsualRangeLow:		
HighValue:		UsualRangeHigh:		
Parent Long Name:	CAB 06	Format:	Text (categorical values specified by STS)	
ParentShortName:	CAB06	DataLength:		
ParentValue:	= "Yes"	Data Source:	User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name:	CAB Proximal Site 06		SeqNo:	3040
Short Name:	**CABProximalSite06**		Core:	Yes
Section Name:	Coronary Bypass		Harvest:	Yes

DBTableName   AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue:		UsualRangeLow:		
HighValue:		UsualRangeHigh:		
Parent Long Name:	CAB 06	Format:	Text (categorical values specified by STS)	
ParentShortName:	CAB06	DataLength:		
ParentValue:	= "Yes"	Data Source:	User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	In Situ Mammary
2	Ascending aorta
3	Descending aorta
4	Subclavian artery
5	Innominate artery
6	T-graft off SVG
7	T-graft off Radial

8   T-graft off LIMA

9   T-graft off RIMA

10   Natural Y vein graft

11   Other

Long Name:	CAB Proximal Technique 06	*SeqNo:*	3045
Short Name:	**CABProxTech06**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB 06		*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB06		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

5   In Situ Mammary

1   Running

2   Interrupted

3   Anastomotic Device

4   Anastomotic Assist Device

Long Name:	CAB Conduit 06	*SeqNo:*	3050
Short Name:	**CABConduit06**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the conduit type used.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB 06		*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB06		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Vein graft

---

2   In Situ LIMA

3   In Situ RIMA

4   Free IMA

5   Radial artery

6   Other arteries, homograft

7   Synthetic graft

Long Name:	CAB Distal Position 06	*SeqNo:*	3055
Short Name:	**CABDistPos06**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CAB 06	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB06	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   End to side

2   Sequential (side to side)

Long Name:	CAB Endarterectomy 06	*SeqNo:*	3060
Short Name:	**CABEndArt06**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CAB 06	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB06	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	CAB Hybrid PCI 06	*SeqNo:*	3065
Short Name:	**CABHyPCI06**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 06	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB06	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Angioplasty
3	Stent

Long Name:	CAB 07	*SeqNo:*	3070
Short Name:	**CAB07**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a seventh Coronary Artery Bypass graft was done.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 06	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB06	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	CAB Native Coronary Disease Location 07	*SeqNo:*	3075
Short Name:	**CABDisLoc07**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 07	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB07	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2
7	Circumflex
8	OM 1
9	OM 2
10	OM 3
11	RCA
12	PDA
13	PLB
14	AM branches
15	Ramus

Long Name:	CAB Highest Percent Stenosis In Native Vessel 07
Short Name:	**CABPctSten07**
Section Name:	Coronary Bypass

SeqNo:	3080
Core:	No
Harvest:	No

DBTableName   AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue:	1	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	

Parent Long Name:	CAB 07	*Format:*	Integer
ParentShortName:	CAB07	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	CAB Previous Conduit 07
Short Name:	**CABPrevCon07**
Section Name:	Coronary Bypass

SeqNo:	3085
Core:	No
Harvest:	No

DBTableName   AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	CAB 07	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB07	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes - Diseased
2	Yes - No disease
3	No previous conduit

Long Name: CAB Distal Site 07

SeqNo: 3090

Short Name: **CABDistSite07**

Core: Yes

Section Name: Coronary Bypass

Harvest: Yes

DBTableName   AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 07

Format: Text (categorical values specified by STS)

ParentShortName: CAB07

DataLength:

ParentValue: = "Yes"

Data Source: User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
15	Left Main	Left Main
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diagonal 1	First Diagonal
9	Diagonal 2	Second Diagonal
16	Diagonal 3	Third Diagonal
17	Circumflex	Circumflex
11	Obtuse Marginal 1	First Obtuse Marginal
12	Obtuse Marginal 2	Second Obtuse Marginal
13	Obtuse Marginal 3	Third Obtuse Marginal
10	Ramus	Ramus Intermedius
1	RCA	Right Coronary Artery
2	Acute Marginal (AM)	Acute Marginal
3	Posterior Descending (PDA)	Posterior Descending Artery
4	Posterolateral (PLB)	Posterolateral Branch
14	Other	Any other site

Long Name: CAB Distal Technique 07	*SeqNo:*	3095
Short Name: **CABDistTech07**	*Core:*	No
Section Name: Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: CAB 07	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB07	*DataLength:*	
ParentValue: = "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Running

2   Interrupted

3   Clips

4   Anastomotic Device

Long Name: CAB Proximal Site 07	*SeqNo:*	3100
Short Name: **CABProximalSite07**	*Core:*	Yes
Section Name: Coronary Bypass	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: CAB 07	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB07	*DataLength:*	
ParentValue: = "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   In Situ Mammary

2   Ascending aorta

3   Descending aorta

4   Subclavian artery

5   Innominate artery

6   T-graft off SVG

7   T-graft off Radial

8   T-graft off LIMA

9   T-graft off RIMA

10   Natural Y vein graft

11   Other

Long Name:	CAB Proximal Technique 07	*SeqNo:*	3105
Short Name:	**CABProxTech07**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name:	CAB 07	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB07	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

5   In Situ Mammary

1   Running

2   Interrupted

3   Anastomotic Device

4   Anastomotic Assist Device

Long Name:	CAB Conduit 07	*SeqNo:*	3110
Short Name:	**CABConduit07**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name:	CAB 07	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB07	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Vein graft

---

2   In Situ LIMA

3   In Situ RIMA

4   Free IMA

5   Radial artery

6   Other arteries, homograft

7   Synthetic graft

Long Name: CAB Distal Position 07   *SeqNo:*   3115

Short Name: **CABDistPos07**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*
Parent Long Name: CAB 07   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB07   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   End to side
2   Sequential (side to side)

Long Name: CAB Endarterectomy 07   *SeqNo:*   3120

Short Name: **CABEndArt07**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*
Parent Long Name: CAB 07   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB07   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   Yes
2   No

Long Name:	CAB Hybrid PCI 07	*SeqNo:*	3125
Short Name:	**CABHyPCI07**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 07	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB07	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Angioplasty
3	Stent

Long Name:	CAB 08	*SeqNo:*	3130
Short Name:	**CAB08**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether an eighth Coronary Artery Bypass graft was done.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 07	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB07	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	CAB Native Coronary Disease Location 08	*SeqNo:*	3135
Short Name:	**CABDisLoc08**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 08	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB08	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2
7	Circumflex
8	OM 1
9	OM 2
10	OM 3
11	RCA
12	PDA
13	PLB
14	AM branches
15	Ramus

Long Name:	CAB Highest Percent Stenosis In Native Vessel 08	*SeqNo:*	3140
Short Name:	**CABPctSten08**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue:	1	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	CAB 08	*Format:*	Integer
ParentShortName:	CAB08	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	CAB Previous Conduit 08	*SeqNo:*	3145
Short Name:	**CABPrevCon08**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 08	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB08	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes - Diseased
2	Yes - No disease
3	No previous conduit

Long Name: CAB Distal Site 08   *SeqNo:*   3150

Short Name: **CABDistSite08**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 08   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB08   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
15	Left Main	Left Main
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diagonal 1	First Diagonal
9	Diagonal 2	Second Diagonal
16	Diagonal 3	Third Diagonal
17	Circumflex	Circumflex
11	Obtuse Marginal 1	First Obtuse Marginal
12	Obtuse Marginal 2	Second Obtuse Marginal
13	Obtuse Marginal 3	Third Obtuse Marginal
10	Ramus	Ramus Intermedius
1	RCA	Right Coronary Artery
2	Acute Marginal (AM)	Acute Marginal
3	Posterior Descending (PDA)	Posterior Descending Artery
4	Posterolateral (PLB)	Posterolateral Branch
14	Other	Any other site

Long Name: CAB Distal Technique 08   *SeqNo:*   3155

Short Name: **CABDistTech08**   *Core:*   No

Section Name: Coronary Bypass   *Harvest:*   No

DBTableName   AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 08   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB08   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Running

         2   Interrupted

         3   Clips

         4   Anastomotic Device

Long Name: CAB Proximal Site 08   *SeqNo:*   3160

Short Name: **CABProximalSite08**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 08   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB08   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   In Situ Mammary

         2   Ascending aorta

         3   Descending aorta

         4   Subclavian artery

         5   Innominate artery

         6   T-graft off SVG

         7   T-graft off Radial

    8   T-graft off LIMA

    9   T-graft off RIMA

    10   Natural Y vein graft

    11   Other

Long Name:	CAB Proximal Technique 08		*SeqNo:*	3165
Short Name:	**CABProxTech08**		*Core:*	No
Section Name:	Coronary Bypass		*Harvest:*	No

DBTableName   AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 08	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB08	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

    5   In Situ Mammary

    1   Running

    2   Interrupted

    3   Anastomotic Device

    4   Anastomotic Assist Device

Long Name:	CAB Conduit 08		*SeqNo:*	3170
Short Name:	**CABConduit08**		*Core:*	Yes
Section Name:	Coronary Bypass		*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the conduit type used.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 08	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB08	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

    1   Vein graft

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2   In Situ LIMA

3   In Situ RIMA

4   Free IMA

5   Radial artery

6   Other arteries, homograft

7   Synthetic graft

Long Name: CAB Distal Position 08   *SeqNo:*   3175

Short Name: **CABDistPos08**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 08   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB08   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   End to side

2   Sequential (side to side)

Long Name: CAB Endarterectomy 08   *SeqNo:*   3180

Short Name: **CABEndArt08**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 08   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB08   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	CAB Hybrid PCI 08		*SeqNo:*	3185
Short Name:	**CABHyPCI08**		*Core:*	No
Section Name:	Coronary Bypass		*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 08	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB08	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Angioplasty
3	Stent

Long Name:	CAB 09		*SeqNo:*	3190
Short Name:	**CAB09**		*Core:*	Yes
Section Name:	Coronary Bypass		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a ninth Coronary Artery Bypass graft was done.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 08	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB08	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	CAB Native Coronary Disease Location 09	*SeqNo:*	3195
Short Name:	**CABDisLoc09**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 09	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB09	*DataLength:*	
ParentValue: = "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2
7	Circumflex
8	OM 1
9	OM 2
10	OM 3
11	RCA
12	PDA
13	PLB
14	AM branches
15	Ramus

Long Name:	CAB Highest Percent Stenosis In Native Vessel 09	*SeqNo:*	3200
Short Name:	**CABPctSten09**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1	*UsualRangeLow:*		
HighValue: 100	*UsualRangeHigh:*		
Parent Long Name: CAB 09	*Format:*	Integer	
ParentShortName: CAB09	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Long Name:	CAB Previous Conduit 09	*SeqNo:*	3205
Short Name:	**CABPrevCon09**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: CAB 09	*Format:*	Text (categorical values specified by STS)	
ParentShortName: CAB09	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes - Diseased
2	Yes - No disease
3	No previous conduit

Long Name:	CAB Distal Site 09	*SeqNo:*	3210
Short Name:	**CABDistSite09**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate distal insertion site of bypass.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CAB 09	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB09	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
15	Left Main	Left Main
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diagonal 1	First Diagonal
9	Diagonal 2	Second Diagonal
16	Diagonal 3	Third Diagonal
17	Circumflex	Circumflex
11	Obtuse Marginal 1	First Obtuse Marginal
12	Obtuse Marginal 2	Second Obtuse Marginal
13	Obtuse Marginal 3	Third Obtuse Marginal
10	Ramus	Ramus Intermedius
1	RCA	Right Coronary Artery
2	Acute Marginal (AM)	Acute Marginal
3	Posterior Descending (PDA)	Posterior Descending Artery
4	Posterolateral (PLB)	Posterolateral Branch
14	Other	Any other site

Long Name: CAB Distal Technique 09	*SeqNo:* 3215
Short Name: **CABDistTech09**	*Core:* No
Section Name: Coronary Bypass	*Harvest:* No

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 09	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB09	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Running

2   Interrupted

3   Clips

4   Anastomotic Device

Long Name: CAB Proximal Site 09	*SeqNo:* 3220
Short Name: **CABProximalSite09**	*Core:* Yes
Section Name: Coronary Bypass	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 09	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB09	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   In Situ Mammary

2   Ascending aorta

3   Descending aorta

4   Subclavian artery

5   Innominate artery

6   T-graft off SVG

7   T-graft off Radial

8   T-graft off LIMA

9   T-graft off RIMA

10   Natural Y vein graft

11   Other

Long Name:	CAB Proximal Technique 09	*SeqNo:*	3225
Short Name:	**CABProxTech09**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 09	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB09	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
5	In Situ Mammary
1	Running
2	Interrupted
3	Anastomotic Device
4	Anastomotic Assist Device

Long Name:	CAB Conduit 09	*SeqNo:*	3230
Short Name:	**CABConduit09**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 09	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB09	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Vein graft

    2   In Situ LIMA

    3   In Situ RIMA

    4   Free IMA

    5   Radial artery

    6   Other arteries, homograft

    7   Synthetic graft

Long Name: CAB Distal Position 09   *SeqNo:*   3235

Short Name: **CABDistPos09**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 09   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB09   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

         1   End to side

         2   Sequential (side to side)

Long Name: CAB Endarterectomy 09   *SeqNo:*   3240

Short Name: **CABEndArt09**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 09   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB09   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

         1   Yes

         2   No

Long Name:	CAB Hybrid PCI 09	*SeqNo:*	3245
Short Name:	**CABHyPCI09**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	CAB 09	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB09	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Angioplasty
3	Stent

Long Name:	CAB 10	*SeqNo:*	3250
Short Name:	**CAB10**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a tenth Coronary Artery Bypass graft was done.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	CAB 09	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB09	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	CAB Native Coronary Disease Location 10	*SeqNo:*	3255
Short Name:	**CABDisLoc10**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the native coronary disease location.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:	CAB 10	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB10	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2
7	Circumflex
8	OM 1
9	OM 2
10	OM 3
11	RCA
12	PDA
13	PLB
14	AM branches
15	Ramus

Long Name:	CAB Highest Percent Stenosis In Native Vessel 10	*SeqNo:*	3260
Short Name:	**CABPctSten10**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue:	1	*UsualRangeLow:*	
HighValue:	100	*UsualRangeHigh:*	
Parent Long Name:	CAB 10	*Format:*	Integer
ParentShortName:	CAB10	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	CAB Previous Conduit 10	*SeqNo:*	3265
Short Name:	**CABPrevCon10**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	CAB 10	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CAB10	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes - Diseased
2	Yes - No disease
3	No previous conduit

Long Name: CAB Distal Site 10

SeqNo: 3270

Short Name: **CABDistSite10**

Core: Yes

Section Name: Coronary Bypass

Harvest: Yes

DBTableName   AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 10

Format: Text (categorical values specified by STS)

ParentShortName: CAB10

DataLength:

ParentValue: = "Yes"

Data Source: User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
15	Left Main	Left Main
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diagonal 1	First Diagonal
9	Diagonal 2	Second Diagonal
16	Diagonal 3	Third Diagonal
17	Circumflex	Circumflex
11	Obtuse Marginal 1	First Obtuse Marginal
12	Obtuse Marginal 2	Second Obtuse Marginal
13	Obtuse Marginal 3	Third Obtuse Marginal
10	Ramus	Ramus Intermedius
1	RCA	Right Coronary Artery
2	Acute Marginal (AM)	Acute Marginal
3	Posterior Descending (PDA)	Posterior Descending Artery
4	Posterolateral (PLB)	Posterolateral Branch
14	Other	Any other site

Long Name: CAB Distal Technique 10   *SeqNo:*   3275

Short Name: **CABDistTech10**   *Core:*   No

Section Name: Coronary Bypass   *Harvest:*   No

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 10   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB10   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

> Harvest Codes:
>
> > Code: Value:
> >
> > 1   Running
> >
> > 2   Interrupted
> >
> > 3   Clips
> >
> > 4   Anastomotic Device

Long Name: CAB Proximal Site 10   *SeqNo:*   3280

Short Name: **CABProximalSite10**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 10   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB10   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

> Harvest Codes:
>
> > Code: Value:
> >
> > 1   In Situ Mammary
> >
> > 2   Ascending aorta
> >
> > 3   Descending aorta
> >
> > 4   Subclavian artery
> >
> > 5   Innominate artery
> >
> > 6   T-graft off SVG
> >
> > 7   T-graft off Radial

8   T-graft off LIMA

9   T-graft off RIMA

10   Natural Y vein graft

11   Other

Long Name:	CAB Proximal Technique 10	*SeqNo:*	3285
Short Name:	**CABProxTech10**	*Core:*	No
Section Name:	Coronary Bypass	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CAB 10	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB10	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

5   In Situ Mammary

1   Running

2   Interrupted

3   Anastomotic Device

4   Anastomotic Assist Device

Long Name:	CAB Conduit 10	*SeqNo:*	3290
Short Name:	**CABConduit10**	*Core:*	Yes
Section Name:	Coronary Bypass	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the conduit type used.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: CAB 10	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB10	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Vein graft

---

2   In Situ LIMA

3   In Situ RIMA

4   Free IMA

5   Radial artery

6   Other arteries, homograft

7   Synthetic graft

Long Name: CAB Distal Position 10   *SeqNo:*   3295

Short Name: **CABDistPos10**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 10   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB10   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:
        1   End to side
        2   Sequential (side to side)

Long Name: CAB Endarterectomy 10   *SeqNo:*   3300

Short Name: **CABEndArt10**   *Core:*   Yes

Section Name: Coronary Bypass   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB 10   *Format:*   Text (categorical values specified by STS)

ParentShortName: CAB10   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:
        1   Yes
        2   No

Long Name: CAB Hybrid PCI 10	*SeqNo:* 3305
Short Name: **CABHyPCI10**	*Core:* No
Section Name: Coronary Bypass	*Harvest:* No

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: CAB 10	*Format:*	Text (categorical values specified by STS)
ParentShortName: CAB10	*DataLength:*	
ParentValue: = "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Angioplasty
3	Stent

Long Name: Valve Prosthesis Explant	*SeqNo:* 3310
Short Name: **ValExp**	*Core:* Yes
Section Name: Valve Surgery	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a prosthetic valve or annuloplasty was explanted during this procedure.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpValve	*DataLength:*	
ParentValue: = "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Valve Prosthesis Explant Position   *SeqNo:*   3315

Short Name: **ValExpPos**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the location of the first explanted prosthetic valve or annuloplasty device.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Prosthesis Explant   *Format:*   Text (categorical values specified by STS)

ParentShortName: ValExp   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

          1   Aortic

          2   Mitral

          3   Tricuspid

          4   Pulmonic

Long Name: Valve Explant Type   *SeqNo:*   3320

Short Name: **ValExpTyp**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the first type of valve device explanted or enter unknown.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Prosthesis Explant   *Format:*   Text (categorical values specified by STS)

ParentShortName: ValExp   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

          2   Mechanical Valve

          5   Leaflet clip

          3   Bioprosthetic Valve

          6   Transcatheter Device

          7   Homograft

          9   Other

          4   Annuloplasty Device

1   Unknown

Long Name: Valve Explant Etiology   *SeqNo:*   3325

Short Name: **ValExpEt**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the primary reason for explanting valve device.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Prosthesis Explant   *Format:*   Text (categorical values specified by STS)

ParentShortName: ValExp   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

    Code: Value:

      1   Endocarditis

      2   Failed repair

      3   Hemolysis

      4   Incompetence

      5   Pannus

      6   Para-valvular leak

      7   Prosthetic deterioration

      8   Sizing/positioning issue

      9   Stenosis

    10   Thrombosis

    11   Other

    12   Unknown

Long Name:	Valve Explant Device Known	*SeqNo:*	3330
Short Name:	**ValExpDevKnown**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the type of explanted valve device is known.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Valve Prosthesis Explant	*Format:*	Text (categorical values specified by STS)
ParentShortName: ValExp	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Valve Explant Device	*SeqNo:*	3335
Short Name:	**ValExpDev**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the model number of the first prosthesis explanted.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Valve Explant Device Known	*Format:*	Text (categorical values specified by STS)
ParentShortName: ValExpDevKnown	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Long Name:	Valve Explant Unique Device Identifier (UDI)	*SeqNo:*	3340
Short Name:	**ValExpUDI**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the device UDI if available, otherwise leave blank.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Valve Explant Device Known	*Format:*	Text
ParentShortName:	ValExpDevKnown	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Valve Explant Manufacturer	*SeqNo:*	3345
Short Name:	**ValExpMan**	*Core:*	No
Section Name:	Valve Surgery	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the name of the manufacturer of the first prosthesis explanted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Valve Prosthesis Explant	*Format:*	Text (categorical values specified by STS)
ParentShortName:	ValExp	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	None (Homograft or Pulmonary Autograft)
2	ATS
3	Baxter
4	Biocore
5	Björk-Shiley
6	CarboMedics
7	Carpentier-Edwards
8	Cosgrove-Edwards
9	Cryolife
10	Cryolife O'Brien
11	Edwards

12	Genesee
13	Hancock
14	Ionescu-Shiley
15	Labcor
16	LifeNet
17	Lillehei-Kaster
18	MCRI
19	Medtronic
20	Medtronic Colvin Galloway
21	Medtronic-Duran
22	Medtronic-Hall
23	Mitroflow
24	OmniCarbon
25	OmniScience
26	Sorin
27	Sorin-Puig
28	St. Jude Medical
29	St. Jude Tailor
30	Starr-Edwards
31	Ultracor
98	Unknown
99	Other

Long Name: Second Valve Prosthesis Explant   *SeqNo:*   3350

Short Name: **ValExp2**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether a second prosthetic valve or annuloplasty was explanted during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Prosthesis Explant   *Format:*   Text (categorical values specified by STS)

ParentShortName: ValExp   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: Second Valve Prosthesis Explant Postion   *SeqNo:*   3355

Short Name: **ValExpPos2**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the location of the second explanted prosthetic valve or annuloplasty.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Second Valve Prosthesis   *Format:*   Text (categorical values specified by STS)
                      Explant

ParentShortName: ValExp2   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

          1   Aortic

          2   Mitral

          3   Tricuspid

          4   Pulmonic

Long Name: Second Valve Explant Type   *SeqNo:*   3360

Short Name: **ValExpTyp2**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the second type of valve device explanted or enter unknown.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Second Valve Prosthesis   *Format:*   Text (categorical values specified by STS)
                      Explant

ParentShortName: ValExp2   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

          2   Mechanical Valve

          5   Leaflet clip

          3   Bioprosthetic Valve

          6   Transcatheter Device

          7   Homograft

    9   Other

    4   Annuloplasty Device

    1   Unknown

Long Name: Second Valve Explant Etiology   *SeqNo:*   3365

Short Name: **ValExpEt2**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the primary reason for explanting valve device.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Second Valve Prosthesis   *Format:*   Text (categorical values specified by STS)
              Explant

ParentShortName: ValExp2   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

        1   Endocarditis

        2   Failed repair

        3   Hemolysis

        4   Incompetence

        5   Pannus Formation

        6   Para-valvular leak

        7   Prosthetic deterioration

        8   Sizing/positioning issue

        9   Stenosis

       10   Thrombosis

       11   Other

       12   Unknown

Long Name:	Second Valve Explant Device Known	*SeqNo:*	3370
Short Name:	**ValExpDevKnown2**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the type of explanted valve device is known.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Second Valve Prosthesis Explant	*Format:*	Text (categorical values specified by STS)
ParentShortName:	ValExp2	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Second Valve Explant Device	*SeqNo:*	3375
Short Name:	**ValExpDev2**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the model number of the second prosthesis explanted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Second Valve Explant Device Known	*Format:*	Text (categorical values specified by STS)
ParentShortName:	ValExpDevKnown2	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Second Valve Explant Device Unique Device Identifier (UDI)	*SeqNo:*	3380
Short Name:	**ValExpDevUDI**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the device UDI if available, otherwise leave blank.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Second Valve Explant Device Known	*Format:*	Text
ParentShortName:	ValExpDevKnown2	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Second Valve Explant Manufacturer	*SeqNo:*	3385
Short Name:	**ValExpMan2**	*Core:*	No
Section Name:	Valve Surgery	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the name of the manufacturer of the second prosthesis explanted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Second Valve Prosthesis Explant	*Format:*	Text (categorical values specified by STS)
ParentShortName:	ValExp2	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	None (Homograft or Pulmonary Autograft)
2	ATS
3	Baxter
4	Biocore
5	Björk-Shiley
6	CarboMedics
7	Carpentier-Edwards
8	Cosgrove-Edwards
9	Cryolife
10	Cryolife O'Brien

11	Edwards
12	Genesee
13	Hancock
14	Ionescu-Shiley
15	Labcor
16	LifeNet
17	Lillehei-Kaster
18	MCRI
19	Medtronic
20	Medtronic Colvin Galloway
21	Medtronic-Duran
22	Medtronic-Hall
23	Mitroflow
24	OmniCarbon
25	OmniScience
26	Sorin
27	Sorin-Puig
28	St. Jude Medical
29	St. Jude Tailor
30	Starr-Edwards
31	Ultracor
98	Unknown
99	Other

Long Name: VS-Aortic Valve   *SeqNo:*   3390

Short Name: **VSAV**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether an aortic valve procedure was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpValve   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

3   Yes, planned

    4   Yes, unplanned due to
        surgical complication

    5   Yes, unplanned due to
        unsuspected disease or
        anatomy

    2   No

Long Name:	VS-Aortic Valve Procedure	*SeqNo:*	3395
Short Name:	**VSAVPr**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the type of procedure that was performed on the aortic valve and/or ascending aorta.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VS-Aortic Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VSAV	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Replacement
2	Repair / Reconstruction
3	Root Replacement with valved conduit (Bentall)
13	Replacement AV and insertion aortic non-valved conduit in supra-coronary position
14	Replacement AV and major root reconstruction/debridement with valved conduit
5	Resuspension AV without replacement of ascending aorta
6	Resuspension AV with replacement of ascending aorta
7	Apico-aortic conduit (Aortic valve bypass)

8	Autograft with pulmonary valve (Ross procedure)
9	Homograft root replacement
10	Valve sparing root reimplantation (David)
11	Valve sparing root remodeling (Yacoub)
15	Valve sparing root reconstruction (Florida Sleeve)

Long Name: VS-Aortic Transcatheter Valve Replacement   *SeqNo:*   3400

Short Name: **VSTCV**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the aortic valve replacement was done using a transcatheter valve device.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Aortic Valve Procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSAVPr   *DataLength:*

ParentValue: = "Replacement"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Transcatheter Valve Replacement Approach		*SeqNo:*	3405
Short Name:	**VSTCVR**		*Core:*	Yes
Section Name:	Valve Surgery		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate transcatheter valve replacement approach.

LowValue:		*UsualRangeLow:*		
HighValue:		*UsualRangeHigh:*		
Parent Long Name:	VS-Aortic Transcatheter Valve Replacement	*Format:*	Text (categorical values specified by STS)	
ParentShortName:	VSTCV	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Transapical
2	Transaxillary
3	Transfemoral
4	Transaortic
5	Subclavian
6	Other

Long Name:	VS-Aortic Valve Repair - Commissural Annuloplasty		*SeqNo:*	3410
Short Name:	**VSAVRComA**		*Core:*	Yes
Section Name:	Valve Surgery		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included a commissural annuloplasty.

LowValue:		*UsualRangeLow:*		
HighValue:		*UsualRangeHigh:*		
Parent Long Name:	VS-Aortic Valve Procedure	*Format:*	Text (categorical values specified by STS)	
ParentShortName:	VSAVPr	*DataLength:*		
ParentValue:	= "Repair / Reconstruction"	*Data Source:*	User	

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VS-Aortic Valve Repair - Leaflet Plication	*SeqNo:*	3415
Short Name:	**VSAVRLPlic**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet plication.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	VS-Aortic Valve Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VSAVPr	*DataLength:*	
ParentValue:	= "Repair / Reconstruction"	*Data Source:*	User

ParentHarvestCodes: 2

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Aortic Valve Repair - Leaflet Free Edge Reinforcement (PTFE) Suture	*SeqNo:*	3420
Short Name:	**VSAVRPTFE**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet free edge reinforcement (PTFE) suture.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	VS-Aortic Valve Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VSAVPr	*DataLength:*	
ParentValue:	= "Repair / Reconstruction"	*Data Source:*	User

ParentHarvestCodes: 2

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Aortic Valve Repair - Leaflet Commissural Resuspension Suture		*SeqNo:*	3425
Short Name:	**VSAVRComRS**		*Core:*	Yes
Section Name:	Valve Surgery		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet commissural resuspension suture.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Aortic Valve Procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSAVPr   *DataLength:*

ParentValue: = "Repair / Reconstruction"   *Data Source:* User

ParentHarvestCodes: 2

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Aortic Valve Repair - Division of Fused Leaflet Raphe		*SeqNo:*	3430
Short Name:	**VSAVRRaphe**		*Core:*	Yes
Section Name:	Valve Surgery		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included division of fused leaflet raphe.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Aortic Valve Procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSAVPr   *DataLength:*

ParentValue: = "Repair / Reconstruction"   *Data Source:* User

ParentHarvestCodes: 2

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Aortic Valve Repair - Ring Annuloplasty	*SeqNo:*	3435
Short Name:	**VSAVRRingA**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the aortic valve repair procedure included a ring annuloplasty.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: VS-Aortic Valve Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName: VSAVPr	*DataLength:*	
ParentValue: = "Repair / Reconstruction"	*Data Source:* User	

ParentHarvestCodes: 2

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Aortic Valve Repair - Leaflet Resection Suture	*SeqNo:*	3440
Short Name:	**VSAVRLResect**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet resection.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: VS-Aortic Valve Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName: VSAVPr	*DataLength:*	
ParentValue: = "Repair / Reconstruction"	*Data Source:* User	

ParentHarvestCodes: 2

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: VS-Aortic Valve Repair - Leaflet Pericardial Patch   *SeqNo:*   3445

Short Name: **VSAVRLPPatch**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet pericardial patch.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Aortic Valve Procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSAVPr   *DataLength:*

ParentValue: = "Repair / Reconstruction"   *Data Source:* User

ParentHarvestCodes: 2

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   Yes

          2   No

Long Name: VS-Aortic Valve Repair - Leaflet Debridement   *SeqNo:*   3450

Short Name: **VSAVRDeb**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet debridement.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Aortic Valve Procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSAVPr   *DataLength:*

ParentValue: = "Repair / Reconstruction"   *Data Source:* User

ParentHarvestCodes: 2

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   Yes

          2   No

Long Name:	VS-Aortic Valve Repair - Repair of Periprosthetic Leak	*SeqNo:*	3455
Short Name:	**VSAVRPeriLeak**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the aortic valve repair procedure included repair of a Periprosthetic leak.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: VS-Aortic Valve Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName: VSAVPr	*DataLength:*	
ParentValue: = "Repair / Reconstruction"	*Data Source:* User	

ParentHarvestCodes: 2

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Aortic Proc-Aortic Annular Enlargement	*SeqNo:*	3460
Short Name:	**AnlrEnl**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether an annular enlargement procedure was performed on the Aortic Valve. An aortic annular enlargement is defined as incision of the aortic annulus to enlarge the aortic orifice. Annular enlargement techniques include but are not limited to Manouguian, Konno and Nicks.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: VS-Aortic Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName: VSAV	*DataLength:*	
ParentValue: = "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:* User	

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Resection of Sub-Aortic Stenosis	*SeqNo:*	3465
Short Name:	**ResectSubA**	*Core:*	No
Section Name:	Valve Surgery	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether resection of sub-aortic tissue was performed alone or in conjunction with an aortic valve procedure.

LowValue:		*UsualRangeLow:*
HighValue:		*UsualRangeHigh:*

Parent Long Name:	VS-Aortic Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VSAV	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name:	VS-Aortic Implant	*SeqNo:*	3470
Short Name:	**AorticImplant**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether an aortic valve or valve device was implanted.

LowValue:		*UsualRangeLow:*
HighValue:		*UsualRangeHigh:*

Parent Long Name:	VS-Aortic Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VSAV	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Aortic Implant - Type   *SeqNo:*   3475

Short Name: **AorticImplantTy**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the type of aortic valve or valve device implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Aortic Implant   *Format:*   Text (categorical values specified by STS)

ParentShortName: AorticImplant   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Mechanical valve

         2   Annuloplasty device

         3   Bioprosthetic valve

         4   Transcatheter device

         5   Homograft

         6   Other

         7   Autograft (Ross)

Long Name: VS-Aortic Proc-Implant Model Number   *SeqNo:*   3480

Short Name: **VSAoIm**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's model number with "xx" substituting for the device size.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Aortic Implant   *Format:*   Text (categorical values specified by STS)

ParentShortName: AorticImplant   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name: VS-Aortic Proc-Imp-Size

SeqNo: 3485

Short Name: **VSAoImSz**

Core: Yes

Section Name: Valve Surgery

Harvest: Yes

DBTableName AdultData

Definition: Indicate the Aortic implant size.

LowValue: 5   *UsualRangeLow:*   10

HighValue: 100   *UsualRangeHigh:* 40

Parent Long Name: VS-Aortic Implant   *Format:*   Integer

ParentShortName: AorticImplant   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name: VS-Aortic Proc-Imp - Unique Device Identifier (UDI)

SeqNo: 3490

Short Name: **VSAoImUDI**

Core: Yes

Section Name: Valve Surgery

Harvest: Yes

DBTableName AdultData

Definition: Indicate the device UDI if available, otherwise leave blank.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Aortic Implant   *Format:*   Text

ParentShortName: AorticImplant   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name: VS-Mitral Valve   *SeqNo:*   3495

Short Name: **VSMV**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether a mitral valve procedure was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpValve   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

         3   Yes, planned

         4   Yes, unplanned due to surgical complication

         5   Yes, unplanned due to unsuspected disease or anatomy

         2   No

Long Name: VS-Mitral Valve Procedure   *SeqNo:*   3500

Short Name: **VSMVPr**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the type of procedure that was performed on the mitral valve.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSMV   *DataLength:*

ParentValue: = "Yes, planned", "Yes,   *Data Source:* User
                unplanned due to surgical
                complication" or "Yes,
                unplanned due to unsuspected
                disease or anatomy"

ParentHarvestCodes: 3|4|5

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

         1   Repair

         2   Replacement

Long Name: VS-Mitral Valve Repair - Annuloplasty | *SeqNo:* 3505

Short Name: **VSMitRAnnulo** | *Core:* Yes

Section Name: Valve Surgery | *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included an annuloplasty.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure | *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr | *DataLength:*

ParentValue: = "Repair" | *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VS-Mitral Valve Repair - Leaflet Resection | *SeqNo:* 3510

Short Name: **VSMitRLeafRes** | *Core:* Yes

Section Name: Valve Surgery | *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a leaflet resection.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure | *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr | *DataLength:*

ParentValue: = "Repair" | *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VS-Mitral Leaflet Resection Type	*SeqNo:*	3515
Short Name:	**VSLeafResTyp**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the type of leaflet resection.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VS-Mitral Valve Repair - Leaflet Resection	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VSMitRLeafRes	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Triangular

2   Quadrangular

3   Other

Long Name:	VS-Mitral Repair Location	*SeqNo:*	3520
Short Name:	**VSLeafRepLoc**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the repair involved the anterior, posterior, or both leaflets. Commissural closure stitches do not make a bileaflet repair.
A commissurotomy is a bileaflet repair.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VS-Mitral Valve Repair - Leaflet Resection	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VSMitRLeafRes	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Anterior

2   Posterior

3   Both Anterior and Posterior

Long Name:	VS-Mitral Valve Repair - Leaflet Plication	*SeqNo:*	3525
Short Name:	**VSMitRLeafPlic**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included leaflet plication.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VS-Mitral Valve Procedure		*Format:*	Text (categorical values specified by STS)
ParentShortName: VSMVPr		*DataLength:*	
ParentValue: = "Repair"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Mitral Valve Repair - Leaflet Debridement	*SeqNo:*	3530
Short Name:	**VSMitRLeafDeb**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included leaflet debridement.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VS-Mitral Valve Procedure		*Format:*	Text (categorical values specified by STS)
ParentShortName: VSMVPr		*DataLength:*	
ParentValue: = "Repair"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Mitral Valve Repair - Folding Plasty	*SeqNo:*	3535
Short Name:	**VSMitRFold**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the mitral valve repair procedure included folding plasty.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VS-Mitral Valve Procedure		*Format:*	Text (categorical values specified by STS)
ParentShortName: VSMVPr		*DataLength:*	
ParentValue: = "Repair"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   Yes
2   No

Long Name:	VS-Mitral Valve Repair - Sliding Plasty	*SeqNo:*	3540
Short Name:	**VSMitRSlidP**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the mitral valve repair procedure included a sliding plasty.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VS-Mitral Valve Procedure		*Format:*	Text (categorical values specified by STS)
ParentShortName: VSMVPr		*DataLength:*	
ParentValue: = "Repair"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   Yes
2   No

Long Name: VS-Mitral Valve Repair - Annular Decalcification   *SeqNo:*   3545

Short Name: **VSMitRADecalc**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included an annular decalcification.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSMVPr   *DataLength:*

ParentValue: = "Repair"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Yes

         2   No

Long Name: VS-Mitral Valve Repair - Neochords (PTFE)   *SeqNo:*   3550

Short Name: **VSMitRPTFE**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included neochords (PTFE).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSMVPr   *DataLength:*

ParentValue: = "Repair"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Yes

         2   No

Long Name: VS-Mitral Neochord Number   *SeqNo:*   3555

Short Name: **VSNeoChNum**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the number of neochords inserted - 1 neochord is created from 1 double arm suture.

LowValue: 1   *UsualRangeLow:*

HighValue: 8   *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Repair -   *Format:*   Integer
                     Neochords (PTFE)

ParentShortName: VSMitRPTFE   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name: VS-Mitral Valve Repair - Chordal / Leaflet Transfer   *SeqNo:*   3560

Short Name: **VSMitRChord**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a chordal / leaflet transfer.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSMVPr   *DataLength:*

ParentValue: = "Repair"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

            Code: Value:
             1   Yes
             2   No

Long Name:	VS-Mitral Valve Repair - Leaflet Extension / Replacement / Patch	*SeqNo:*	3565
Short Name:	**VSMitRLeafERP**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a leaflet extension / replacement / patch.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure		*Format:*	Text (categorical values specified by STS)
ParentShortName: VSMVPr		*DataLength:*	
ParentValue: = "Repair"		*Data Source:* User	

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   Yes

          2   No

Long Name:	VS-Mitral Valve Repair - Edge To Edge Repair	*SeqNo:*	3570
Short Name:	**VSMitREdge**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included an edge to edge repair.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure		*Format:*	Text (categorical values specified by STS)
ParentShortName: VSMVPr		*DataLength:*	
ParentValue: = "Repair"		*Data Source:* User	

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   Yes

          2   No

Long Name: VS-Mitral Valve Repair - Mitral Leaflet Clip

SeqNo: 3575

Short Name: **VSMitRMLeafClip**

Core: Yes

Section Name: Valve Surgery

Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve procedure included leaflet clip(s).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure

Format: Text (categorical values specified by STS)

ParentShortName: VSMVPr

DataLength:

ParentValue: = "Repair"

Data Source: User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: VS-Mitral Valve Repair - Mitral Commissurotomy

SeqNo: 3580

Short Name: **VSMitRMitComm**

Core: Yes

Section Name: Valve Surgery

Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a mitral commissurotomy.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure

Format: Text (categorical values specified by STS)

ParentShortName: VSMVPr

DataLength:

ParentValue: = "Repair"

Data Source: User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Mitral Valve Repair - Mitral Commissuroplasty	*SeqNo:*	3585
Short Name:	**VSMitRMitCplasty**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a mitral commissuroplasty.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VS-Mitral Valve Procedure		*Format:*	Text (categorical values specified by STS)
ParentShortName: VSMVPr		*DataLength:*	
ParentValue: = "Repair"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Mitral Valve Repair - Mitral Cleft Repair (Scallop Closure)	*SeqNo:*	3590
Short Name:	**VSMitRMitCleft**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a mitral cleft repair.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VS-Mitral Valve Procedure		*Format:*	Text (categorical values specified by STS)
ParentShortName: VSMVPr		*DataLength:*	
ParentValue: = "Repair"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: VS-Mitral Valve Repair - Other Mitral Repair

SeqNo: 3595

Short Name: **VSMitRMitOth**

Core: Yes

Section Name: Valve Surgery

Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair involved a technique not listed above.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure

Format: Text (categorical values specified by STS)

ParentShortName: VSMVPr

DataLength:

ParentValue: = "Repair"

Data Source: User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VS-Mitral Repair Attempted

SeqNo: 3600

Short Name: **MitralIntent**

Core: Yes

Section Name: Valve Surgery

Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a Mitral Valve Repair was attempted prior to the Mitral Valve Replacement.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure

Format: Text (categorical values specified by STS)

ParentShortName: VSMVPr

DataLength:

ParentValue: = "Replacement"

Data Source: User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VS-Mitral Chordal Preservation   *SeqNo:*   3605

Short Name: **VSChorPres**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether native chords were preserved.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSMVPr   *DataLength:*

ParentValue: = "Replacement"   *Data Source:* User

ParentHarvestCodes: 2

> Harvest Codes:
>
> > Code: Value:
> >
> > 2   Anterior
> >
> > 3   Posterior
> >
> > 4   Both
> >
> > 1   None

Long Name: VS-Mitral Transcatheter Valve Replacement   *SeqNo:*   3610

Short Name: **VSTCVMit**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the mitral valve replacement was done using a transcatheter valve device.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve Procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSMVPr   *DataLength:*

ParentValue: = "Replacement"   *Data Source:* User

ParentHarvestCodes: 2

> Harvest Codes:
>
> > Code: Value:
> >
> > 1   Yes
> >
> > 2   No

Long Name: VS-Mitral Implant   *SeqNo:*   3615

Short Name: **MitralImplant**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether a mitral valve or valve device was implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Valve   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSMV   *DataLength:*

ParentValue: = "Yes, planned", "Yes,   *Data Source:* User
                     unplanned due to surgical
                     complication" or "Yes,
                     unplanned due to unsuspected
                     disease or anatomy"

ParentHarvestCodes: 3|4|5

    Harvest Codes:

        Code: Value:

         1   Yes

         2   No

Long Name: VS-Mitral Implant - Type   *SeqNo:*   3620

Short Name: **MitralImplantTy**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the type of mitral valve or valve device implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Implant   *Format:*   Text (categorical values specified by STS)

ParentShortName: MitralImplant   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

         1   Mechanical valve

         2   Mitral leaflet clip

         3   Bioprosthetic valve

         4   Transcatheter device

         5   Annuloplasty device

         6   Other

Long Name:	VS-Mitral Proc-Implant Model Number	*SeqNo:*	3625
Short Name:	**VSMiIm**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the model number of the device implanted. The names provided include the manufacturer's model number with "xx" substituting for the device size.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VS-Mitral Implant	*Format:*	Text (categorical values specified by STS)
ParentShortName:	MitralImplant	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	VS-Mitral Proc-Imp-Size	*SeqNo:*	3630
Short Name:	**VSMiImSz**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Mitral implant size.

LowValue:	5	*UsualRangeLow:*	10
HighValue:	100	*UsualRangeHigh:*	40
Parent Long Name:	VS-Mitral Implant	*Format:*	Integer
ParentShortName:	MitralImplant	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	VS-Mitral Proc-Imp-Unique Device Identifier (UDI)	*SeqNo:*	3635
Short Name:	**VSMiImUDI**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the device UDI if available, otherwise leave blank.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VS-Mitral Implant		*Format:*	Text
ParentShortName: MitralImplant		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Long Name:	VS-Tricuspid Valve	*SeqNo:*	3640
Short Name:	**VSTV**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a tricuspid valve procedure was performed.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Valve		*Format:*	Text (categorical values specified by STS)
ParentShortName: OpValve		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
3	Yes, planned
4	Yes, unplanned due to surgical complication
5	Yes, unplanned due to unsuspected disease or anatomy
2	No

Long Name:	VS-Tricuspid Proc-Procedure	*SeqNo:*	3645
Short Name:	**OpTricus**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the type of procedure that was performed on the tricuspid valve.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		

Parent Long Name:	VS-Tricuspid Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VSTV	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
2	Annuloplasty Only
3	Replacement
4	Reconstruction with Annuloplasty
5	Reconstruction without Annuloplasty
6	Valvectomy

Long Name:	VS-Tricuspid Transcatheter Valve Replacement	*SeqNo:*	3650
Short Name:	**VSTCVTri**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the tricuspid valve replacement was done using a transcatheter valve device.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		

Parent Long Name:	VS-Tricuspid Proc-Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OpTricus	*DataLength:*	
ParentValue:	= "Replacement"	*Data Source:*	User

ParentHarvestCodes: 3

Harvest Codes:

Code:	Value:
1	Yes

2   No

Long Name:	VS-Tricuspid Annuloplasty Type
Short Name:	**OpTricusAnTy**
Section Name:	Valve Surgery

SeqNo: 3655
Core: Yes
Harvest: Yes

DBTableName AdultData

Definition: Indicate type of annuloplasty procedure.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Tricuspid Proc-Procedure   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpTricus   *DataLength:*

ParentValue: = "Annuloplasty Only" or   *Data Source:* User
"Reconstruction with
Annuloplasty"

ParentHarvestCodes: 2|4

Harvest Codes:

Code: Value:

1   Pericardium

2   Suture

3   Prosthetic ring

4   Prosthetic band

5   Other

Long Name:	VS-Tricuspid Implant
Short Name:	**TricuspidImplant**
Section Name:	Valve Surgery

SeqNo: 3660
Core: Yes
Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a tricuspid valve or device was implanted.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Tricuspid Valve   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSTV   *DataLength:*

ParentValue: = "Yes, planned", "Yes,   *Data Source:* User
unplanned due to surgical
complication" or "Yes,
unplanned due to unsuspected
disease or anatomy"

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code: Value:

  1   Yes

  2   No

Long Name: VS-Tricuspid Implant - Type   *SeqNo:*   3665

Short Name: **TricusImplantTy**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the type of tricuspid valve or valve device implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Tricuspid Implant   *Format:*   Text (categorical values specified by STS)

ParentShortName: TricuspidImplant   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

  Harvest Codes:

          Code: Value:

            1   Mechanical valve

            2   Annuloplasty device

            3   Bioprosthetic valve

            4   Transcatheter device

            5   Homograft

            6   Other

Long Name: VS-Tricuspid Proc-Implant Model Number   *SeqNo:*   3670

Short Name: **VSTrIm**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the model number of the prosthesis implanted. The names provided include the
                manufacturer's model number with "xx" substituting for the device size.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Tricuspid Implant   *Format:*   Text (categorical values specified by STS)

ParentShortName: TricuspidImplant   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	VS-Tricuspid Proc-Imp-Size	*SeqNo:*	3675
Short Name:	**VSTrImSz**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Tricuspid implant size.

LowValue:	5	*UsualRangeLow:*	10
HighValue:	100	*UsualRangeHigh:*	40

Parent Long Name:	VS-Tricuspid Implant	*Format:*	Integer
ParentShortName:	TricuspidImplant	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	VS-Tricuspid Proc-Imp-Unique Device Identifier (UDI)	*SeqNo:*	3680
Short Name:	**VSTrImUDI**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the device UDI if available, otherwise leave blank.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	VS-Tricuspid Implant	*Format:*	Text
ParentShortName:	TricuspidImplant	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name: VS-Pulmonic Valve   *SeqNo:*   3685

Short Name: **VSPV**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether a pulmonic valve procedure was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpValve   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

          3   Yes, planned

          4   Yes, unplanned due to
             surgical complication

          5   Yes, unplanned due to
             unsuspected disease or
             anatomy

          2   No

Long Name: VS-Pulmonic Proc-Procedure   *SeqNo:*   3690

Short Name: **OpPulm**   *Core:*   Yes

Section Name: Valve Surgery   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the type of procedure that was performed on the pulmonic valve.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Pulmonic Valve   *Format:*   Text (categorical values specified by STS)

ParentShortName: VSPV   *DataLength:*

ParentValue: = "Yes, planned", "Yes,   *Data Source:* User
unplanned due to surgical
complication" or "Yes,
unplanned due to unsuspected
disease or anatomy"

ParentHarvestCodes: 3|4|5

    Harvest Codes:

        Code: Value:

          2   Replacement

          3   Reconstruction

4   Valvectomy

Long Name:	VS-Pulmonic Transcatheter Valve Replacement	*SeqNo:*	3695
Short Name:	**VSTCVPu**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the pulmonic valve replacement was done using a transcatheter valve device.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name:	VS-Pulmonic Proc-Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OpPulm	*DataLength:*	
ParentValue:	= "Replacement"	*Data Source:*	User

ParentHarvestCodes: 2

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Pulmonic Implant	*SeqNo:*	3700
Short Name:	**PulmonicImplant**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether a pulmonic valve or device was implanted.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name:	VS-Pulmonic Valve	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VSPV	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VS-Pulmonic Implant - Type	*SeqNo:*	3705
Short Name:	**PulmonicImplantTy**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the type of pulmonic valve or valve device implanted.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VS-Pulmonic Implant		*Format:*	Text (categorical values specified by STS)
ParentShortName: PulmonicImplant		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Mechanical valve

2   Annuloplasty device

3   Bioprosthetic valve

4   Transcatheter device

5   Homograft

6   Other

Long Name:	VS-Pulmonic Proc-Implant Model Number	*SeqNo:*	3710
Short Name:	**VSPuIm**	*Core:*	Yes
Section Name:	Valve Surgery	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the model number of the prosthesis implanted. The names provided include the manufacturer's model number with "xx" substituting for the device size.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VS-Pulmonic Implant		*Format:*	Text (categorical values specified by STS)
ParentShortName: PulmonicImplant		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Long Name:	VS-Pulmonic Proc-Imp-Size	*SeqNo:* 3715
Short Name:	**VSPuImSz**	*Core:* Yes
Section Name:	Valve Surgery	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Pulmonic implant size.

LowValue: 5   *UsualRangeLow:*   10

HighValue: 100   *UsualRangeHigh:* 40

Parent Long Name: VS-Pulmonic Implant   *Format:*   Integer

ParentShortName: PulmonicImplant   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	VS-Pulmonic Proc-Imp-Unique Device Identifier	*SeqNo:* 3720
Short Name:	**VSPuImUDI**	*Core:* Yes
Section Name:	Valve Surgery	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate the device UDI if available, otherwise leave blank.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*
Parent Long Name: VS-Pulmonic Implant   *Format:*   Text

ParentShortName: PulmonicImplant   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	IABP	*SeqNo:*	3725
Short Name:	**IABP**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient was placed on an Intra-Aortic Balloon Pump (IABP).

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	IABP-When Inserted	*SeqNo:*	3730
Short Name:	**IABPWhen**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate when the IABP was inserted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	IABP	*Format:*	Text (categorical values specified by STS)
ParentShortName:	IABP	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Preop
2	Intraop
3	Postop

Long Name:	IABP-Indication	*SeqNo:*	3735
Short Name:	**IABPInd**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the primary reason for inserting the IABP.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: IABP		*Format:*	Text (categorical values specified by STS)
ParentShortName: IABP		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Hemodyn Instability
2	Procedural Support
3	Unstable Angina
4	Cardiopulmonary Bypass (CPB) Weaning Failure
5	Prophylactic
6	Other

Long Name:	IABP-Removed Date	*SeqNo:*	3740
Short Name:	**IABPRemDt**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the date on which the IABP was removed.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: IABP		*Format:*	Date mm/dd/yyyy
ParentShortName: IABP		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Long Name:	Catheter Based Assist Device Used	*SeqNo:*	3745
Short Name:	**CathBasAssist**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient was placed on a catheter based assist device (e.g., Impella).

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Catheter Based Assist Device	*SeqNo:*	3750
Short Name:	**CathBasAssistDev**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the catheter based assist device that was used.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	Catheter Based Assist Device Used	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CathBasAssist	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Harvest Codes:

Code:	Value:
1	Impella
2	Tandem Heart
9	Other

Long Name:	Catheter Based Assist Type	*SeqNo:*	3755
Short Name:	**CathBasAssistTy**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the type of catheter based assist device.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Catheter Based Assist Device Used	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CathBasAssist	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   RV
2   LV
3   BiV

Long Name:	Catheter Based Assist Device When Inserted	*SeqNo:*	3760
Short Name:	**CathBasAssistWhen**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate when the catheter based assist device was inserted.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Catheter Based Assist Device Used	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CathBasAssist	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   Preop
2   Intraop
3   Postop
4   Non-operative

Long Name:	Catheter Based Assist Device Indication	*SeqNo:*	3765
Short Name:	**CathBasAssistInd**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the primary reason for inserting the device.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Catheter Based Assist Device Used	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CathBasAssist	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Hemodynamic Instability
2	Cardiopulmonary Bypass (CPB) weaning failure
3	PCI Failure
5	Procedural support
4	Other

Long Name:	Catheter Based Assist Device Removed Date	*SeqNo:*	3770
Short Name:	**CathBasAssistRemDt**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the date on which the catheter based assist device was removed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Catheter Based Assist Device Used	*Format:*	Date mm/dd/yyyy
ParentShortName:	CathBasAssist	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Extracorporeal Membrane Oxygenation	*SeqNo:*	3775
Short Name:	**ECMO**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the patient was placed on ECMO.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
3	Veno-venous
4	Veno-atrial
5	Veno-venous converted to Veno-atrial
2	No

Long Name:	ECMO When Initiated	*SeqNo:*	3780
Short Name:	**ECMOWhen**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate when patient was placed on ECMO.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Extracorporeal Membrane Oxygenation	*Format:*	Text (categorical values specified by STS)
ParentShortName: ECMO	*DataLength:*	
ParentValue: = "Veno-venous", "Veno-atrial" or "Veno-venous converted to Veno-atrial"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Preop
2	Intraop
3	Postop
4	Non-operative

Long Name: ECMO Indication   *SeqNo:*   3785

Short Name: **ECMOInd**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate clinical indication for placing patient on ECMO.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Extracorporeal Membrane   *Format:*   Text (categorical values specified by STS)
                     Oxygenation

ParentShortName: ECMO   *DataLength:*

ParentValue: = "Veno-venous", "Veno-   *Data Source:* User
                     atrial" or "Veno-venous
                     converted to Veno-atrial"

ParentHarvestCodes: 3|4|5

Harvest Codes:

    Code: Value:

      1   Cardiac Failure

      2   Respiratory Failure

      3   Hypothermia

      4   Rescue/salvage

      5   Other

Long Name: VAD-Patient Admitted With VAD   *SeqNo:*   3790

Short Name: **PrevVAD**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate if at the time of this procedure, the patient has a VAD in place that was inserted during a
                previous admission or from an outside hospital.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

    Code: Value:

      1   Yes

      2   No

Long Name:	Previous VAD Facility	*SeqNo:*	3795
Short Name:	**PrevVADF**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate if the previously implanted assist device was implanted at another facility.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD-Patient Admitted With VAD	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrevVAD	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Previous VAD Insertion Date	*SeqNo:*	3800
Short Name:	**PrevVADD**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate insertion date of previous VAD.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD-Patient Admitted With VAD	*Format:*	Date mm/dd/yyyy
ParentShortName:	PrevVAD	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Previous VAD Indication	*SeqNo:*	3805
Short Name:	**PrevVADIn**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Specify indication for VAD insertion.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD-Patient Admitted With VAD	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrevVAD	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Bridge to Transplantation	Includes those patients who are supported with a VAD until a heart transplant is possible.
2	Bridge to Recovery	Includes those patients who are expected to have ventricular recovery. (i.e. Myocarditis patients, postcardiotomy syndromes, viral cardiomyopathies, AMI w/ revascularization, and post-transplant reperfusion injury).
3	Destination	Includes those patients where a heart transplant is not an option. The VAD is placed for permanent life sustaining support.
4	Post Cardiotomy Ventricular Failure	Includes those postcardiotomy patients who receive a VAD because of failure to separate from the heart-lung machine. Postcardiotomy refers to those patients with the inability to wean from cardiopulmonary bypass secondary to left, right, or biventricular failure.
5	Device Malfunction	Includes those patients who are currently VAD supported and are experiencing device failure.
6	End of (Device) Life	Mechanical device pump has reached functional life expectancy and requires replacement.
7	Salvage	Moribund patients unresponsive to medical interventions

Long Name:	Previous VAD Type	*SeqNo:*	3810
Short Name:	**PrevVADTy**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate type of VAD previously inserted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD-Patient Admitted With VAD	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrevVAD	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	RVAD	Right Ventricular Assist Device
2	LVAD	Left Ventricular Assist Device
3	BiVAD	BiVentricular Assist Device
4	TAH	Total Artificial Heart

Long Name:	Previous VAD Device Model Number	*SeqNo:*	3815
Short Name:	**PrevVADDevice**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate Previous VAD device.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD-Patient Admitted With VAD	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrevVAD	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Previous VAD Unique Device Identifier (UDI)	*SeqNo:*	3820
Short Name:	**PrevVADUDI**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the device UDI if available, otherwise leave blank.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD-Patient Admitted With VAD	*Format:*	Text
ParentShortName:	PrevVAD	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Previous VAD Explanted During This Admission	*SeqNo:*	3825
Short Name:	**PrevVADExp**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the previously inserted VAD was explanted during this hospitalization.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD-Patient Admitted With VAD	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrevVAD	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Yes, not during this procedure	In a prior trip to the operating room.
2	Yes, during this procedure	
3	No	

Long Name:	Previous VAD Explanted During This Admission - Reason	*SeqNo:*	3830
Short Name:	**PrevVADExpRsn**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the primary reason the VAD was explanted.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	Previous VAD Explanted During This Admission	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PrevVADExp	*DataLength:*	
ParentValue:	= "Yes, not during this procedure" or "Yes, during this procedure"	*Data Source:*	User

ParentHarvestCodes: 1|2

Harvest Codes:

Code:	Value:
1	Cardiac transplant
2	Recovery
3	Device transfer
4	Device-related infection
5	Device malfunction
6	End of (device) life

Long Name:	Previous VAD Explanted During This Admission - Date	*SeqNo:*	3835
Short Name:	**PrevVADExpDt**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate date of explant.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	Previous VAD Explanted During This Admission	*Format:*	Date mm/dd/yyyy
ParentShortName:	PrevVADExp	*DataLength:*	
ParentValue:	= "Yes, not during this procedure"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Ventricular Assist Device Implanted During This Hospitalization		*SeqNo:*	3840
Short Name:	**VADImp**		*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices		*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether a VAD was inserted during this hospitalization.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VAD-Implant Timing		*SeqNo:*	3845
Short Name:	**VADImpTmg**		*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices		*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate timing of VAD insertion.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Ventricular Assist Device Implanted During This Hospitalization	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADImp	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Harvest Codes:

Code:	Value:
1	Pre-operative (during same hospitalization but not same OR trip as CV surgical procedure)
2	Stand-alone VAD procedure
3	In conjunction with CV surgical procedure (same trip to the OR) - planned
4	In conjunction with CV

surgical procedure (same trip
to the OR) - unplanned

5   Post-operative (after surgical
procedure during reoperation)

Long Name: VAD-Indication for this VAD   *SeqNo:*   3850

Short Name: **VADInd**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the reason for implanting a Ventricular Assist Device (VAD) during this hospitalization.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Ventricular Assist Device   *Format:*   Text (categorical values specified by STS)
Implanted During This
Hospitalization

ParentShortName: VADImp   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Bridge to Transplantation	Includes those patients who are supported with a VAD until a heart transplant is possible.
2	Bridge to Recovery	Includes those patients who are expected to have ventricular recovery. (i.e. Myocarditis patients, postcardiotomy syndromes, viral cardiomyopathies, AMI w/ revascularization, and post-transplant reperfusion injury).
3	Destination	Includes those patients where a heart transplant is not an option. The VAD is placed for permanent life sustaining support.
4	Post Cardiotomy Ventricular Failure	Includes those postcardiotomy patients who receive a VAD because of failure to separate from the heart-lung machine. Postcardiotomy refers to those patients with the inability to wean from cardiopulmonary bypass secondary to left, right, or biventricular failure.
5	Device Malfunction	Includes those patients who are currently VAD supported and are experiencing device failure.
6	End of (Device) Life	Mechanical device pump has reached functional life expectancy and requires replacement.
7	Salvage	Moribund patients unresponsive to medical interventions

Long Name:	VAD-Implant Type	*SeqNo:*	3855
Short Name:	**VImpTy**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the first type of VAD implanted during this hospitalization.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Ventricular Assist Device Implanted During This Hospitalization	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADImp	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Right VAD (RVAD)

2   Left VAD (LVAD)

3   Biventricular VAD (BiVAD)

4   Total Artificial Heart (TAH)

Long Name:	VAD-Device	*SeqNo:*	3860
Short Name:	**VProdTy**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the VAD brand name implanted. Implant defined as physical placement of the VAD.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Ventricular Assist Device Implanted During This Hospitalization	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADImp	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	VAD-Implant Date	*SeqNo:*	3865
Short Name:	**VImpDt**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the date the VAD was implanted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Ventricular Assist Device Implanted During This Hospitalization	*Format:*	Date mm/dd/yyyy
ParentShortName:	VADImp	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	VAD-Implant Unique Device Identifier (UDI)	*SeqNo:*	3870
Short Name:	**VImpUDI**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the device UDI if available, otherwise leave blank.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Ventricular Assist Device Implanted During This Hospitalization	*Format:*	Text
ParentShortName:	VADImp	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	VAD-Explant	*SeqNo:*	3875
Short Name:	**VExp**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate if the VAD was explanted. Explant is defined as physical removal of the VAD.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Ventricular Assist Device Implanted During This Hospitalization	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADImp	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
3	Yes, not during this procedure
4	Yes, during this procedure
2	No

Long Name:	VAD-Explant Reason	*SeqNo:*	3880
Short Name:	**VExpRsn**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the reason the VAD was explanted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	VAD-Explant	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VExp	*DataLength:*	
ParentValue:	= "Yes, not during this procedure" or "Yes, during this procedure"	*Data Source:*	User

ParentHarvestCodes: 3|4

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Cardiac Transplant	The VAD was explanted for Cardiac Transplant.
2	Recovery	The VAD was removed after cardiac recovery.
3	Device Transfer	The VAD was explanted in order to implant another assist device.
4	Device-Related Infection	An infection within the pump pocket, driveline, VAD

		Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever requiring medical or surgical intervention.
5	Device Malfunction	The VAD pump itself is not functioning properly causing hemodynamic compromise, and/or requiring immediate intervention or VAD replacement.
6	End of (device) life	Mechanical device pump has reached functional life expectancy and requires replacement.

Long Name:	VAD-Explant Date	*SeqNo:*	3885
Short Name:	**VExpDt**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the date the VAD was explanted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD-Explant	*Format:*	Date mm/dd/yyyy
ParentShortName:	VExp	*DataLength:*	
ParentValue:	= "Yes, not during this procedure"	*Data Source:*	User

ParentHarvestCodes: 3

Long Name:	VAD-Cardiac Transplant Date	*SeqNo:*	3890
Short Name:	**VTxDt**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the date the patient received a cardiac transplant.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD-Explant Reason	*Format:*	Date mm/dd/yyyy
ParentShortName:	VExpRsn	*DataLength:*	
ParentValue:	= "Cardiac Transplant"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name: VAD-Implant #2   *SeqNo:*   3895

Short Name: **VImp2**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a second ventricular assist device was implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Ventricular Assist Device   *Format:*   Text (categorical values specified by STS)
                     Implanted During This
                     Hospitalization

ParentShortName: VADImp   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

   Harvest Codes:

      Code: Value:

       1   Yes

       2   No

Long Name: VAD-Implant Timing #2   *SeqNo:*   3900

Short Name: **VADImpTmg2**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:* Yes

DBTableName AdultData

Definition: Indicate timing of VAD #2 insertion.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #2   *Format:*   Text (categorical values specified by STS)

ParentShortName: VImp2   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

   Harvest Codes:

      Code: Value:

       1   Pre-operative (during same
         hospitalization but not same
         OR trip as CV surgical
         procedure)

       2   Stand-alone VAD procedure

       3   In conjunction with CV
         surgical procedure (same trip
         to the OR) - planned

       4   In conjunction with CV

surgical procedure (same trip
to the OR) - unplanned

5   Post-operative (after surgical
procedure during reoperation)

Long Name: VAD-Indication for this VAD #2   *SeqNo:*   3905

Short Name: **VADInd2**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the reason for implanting a Ventricular Assist Device (VAD) #2 during this hospitalization.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #2   *Format:*   Text (categorical values specified by STS)

ParentShortName: VImp2   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Bridge to Transplantation	Includes those patients who are supported with a VAD until a heart transplant is possible.
2	Bridge to Recovery	Includes those patients who are expected to have ventricular recovery. (i.e. Myocarditis patients, postcardiotomy syndromes, viral cardiomyopathies, AMI w/ revascularization, and post-transplant reperfusion injury).
3	Destination	Includes those patients where a heart transplant is not an option. The VAD is placed for permanent life sustaining support.
4	Post Cardiotomy Ventricular Failure	Includes those postcardiotomy patients who receive a VAD because of failure to separate from the heart-lung machine. Postcardiotomy refers to those patients with the inability to wean from cardiopulmonary bypass secondary to left, right, or biventricular failure.
5	Device Malfunction	Includes those patients who are currently VAD supported and are experiencing device failure.
6	End of (Device) Life	Mechanical device pump has reached functional life expectancy and requires replacement.
7	Salvage	Moribund patients unresponsive to medical interventions

Long Name: VAD-Implant Type #2   *SeqNo:*   3910

Short Name: **VImpTy2**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the second type of ventricular assist device implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #2   *Format:*   Text (categorical values specified by STS)

ParentShortName: VImp2   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Right VAD (RVAD)
2	Left VAD (LVAD)
3	Biventricular VAD (BiVAD)
4	Total Artificial Heart (TAH)

Long Name: VAD-Device #2   *SeqNo:*   3915

Short Name: **VProdTy2**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the specific product #2 implanted. Implant defined as physical placement of the VAD.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #2   *Format:*   Text (categorical values specified by STS)

ParentShortName: VImp2   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	VAD-Implant Date #2	*SeqNo:*	3920
Short Name:	**VImpDt2**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the date the VAD #2 was implanted.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VAD-Implant #2		*Format:*	Date mm/dd/yyyy
ParentShortName: VImp2		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Long Name:	VAD-Implant Unique Device Identifier (UDI) #2	*SeqNo:*	3925
Short Name:	**VImpUDI2**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the device UDI if available, otherwise leave blank.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VAD-Implant #2		*Format:*	Text
ParentShortName: VImp2		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Long Name: VAD-Explant #2   *SeqNo:*   3930

Short Name: **VExp2**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate if the VAD #2 was explanted. Explant is defined as physical removal of the VAD.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #2   *Format:*   Text (categorical values specified by STS)

ParentShortName: VImp2   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

> Harvest Codes:
>
> | Code: | Value: |
> |---|---|
> | 3 | Yes, not during this procedure |
> | 4 | Yes, during this procedure |
> | 2 | No |

Long Name: VAD-Explant Reason #2   *SeqNo:*   3935

Short Name: **VExpRsn2**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the reason the VAD #2 was explanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant #2   *Format:*   Text (categorical values specified by STS)

ParentShortName: VExp2   *DataLength:*

ParentValue: = "Yes, not during this   *Data Source:* User
                     procedure" or "Yes, during this
                     procedure"

ParentHarvestCodes: 3|4

> Harvest Codes and Value Definitions:
>
> | Code: | Value: | Definition: |
> |---|---|---|
> | 1 | Cardiac Transplant | The VAD was explanted for Cardiac Transplant. |
> | 2 | Recovery | The VAD was removed after cardiac recovery. |
> | 3 | Device Transfer | The VAD was explanted in order to implant another assist device. |
> | 4 | Device-Related Infection | An infection within the pump pocket, driveline, VAD Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active |

infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever requiring medical or surgical intervention.

| | 5 | Device Malfunction | The VAD pump itself is not functioning properly causing hemodynamic compromise, and/or requiring immediate intervention or VAD replacement. |
| | 6 | End of (device) life | Mechanical device pump has reached functional life expectancy and requires replacement. |

Long Name: VAD-Explant Date #2   *SeqNo:*   3940

Short Name: **VExpDt2**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the date the VAD #2 was explanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant #2   *Format:*   Date mm/dd/yyyy

ParentShortName: VExp2   *DataLength:*

ParentValue: = "Yes, not during this   *Data Source:* User
                     procedure"

ParentHarvestCodes: 3

Long Name: VAD-Cardiac Transplant Date #2   *SeqNo:*   3945

Short Name: **VTxDt2**   *Core:*   No

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   No

DBTableName   AdultData

Definition: Indicate the date the patient received a cardiac transplant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant Reason #2   *Format:*   Date mm/dd/yyyy

ParentShortName: VExpRsn2   *DataLength:*

ParentValue: = "Cardiac Transplant"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	VAD-Implant #3	*SeqNo:*	3950
Short Name:	**VImp3**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether a third ventricular assist device was implanted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD-Implant #2	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VImp2	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name:	VAD-Implant Timing #3	*SeqNo:*	3955
Short Name:	**VADImpTmg3**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate timing of VAD #3 insertion.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD-Implant #3	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VImp3	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1 Pre-operative (during same hospitalization but not same OR trip as CV surgical procedure)

2 Stand-alone VAD procedure

3 In conjunction with CV surgical procedure (same trip to the OR) - planned

4 In conjunction with CV surgical procedure (same trip to the OR) - unplanned

     5   Post-operative (after surgical
procedure during reoperation)

Long Name: VAD-Indication for this VAD #3   *SeqNo:*   3960

Short Name: **VADInd3**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the reason for implanting a Ventricular Assist Device (VAD)#3 during this hospitalization.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #3   *Format:*   Text (categorical values specified by STS)

ParentShortName: VImp3   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Bridge to Transplantation	Includes those patients who are supported with a VAD until a heart transplant is possible.
2	Bridge to Recovery	Includes those patients who are expected to have ventricular recovery. (i.e. Myocarditis patients, postcardiotomy syndromes, viral cardiomyopathies, AMI w/ revascularization, and post-transplant reperfusion injury).
3	Destination	Includes those patients where a heart transplant is not an option. The VAD is placed for permanent life sustaining support.
4	Post Cardiotomy Ventricular Failure	Includes those postcardiotomy patients who receive a VAD because of failure to separate from the heart-lung machine. Postcardiotomy refers to those patients with the inability to wean from cardiopulmonary bypass secondary to left, right, or biventricular failure.
5	Device Malfunction	Includes those patients who are currently VAD supported and are experiencing device failure.
6	End of (Device) Life	Mechanical device pump has reached functional life expectancy and requires replacement.
7	Salvage	Moribund patients unresponsive to medical interventions

Long Name: VAD-Implant Type #3   *SeqNo:*   3965

Short Name: **VImpTy3**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the third type of ventricular assist device implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #3   *Format:*   Text (categorical values specified by STS)

ParentShortName: VImp3   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Right VAD (RVAD)

2   Left VAD (LVAD)

3   Biventricular VAD (BiVAD)

4   Total Artificial Heart (TAH)

Long Name: VAD-Device #3   *SeqNo:*   3970

Short Name: **VProdTy3**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the specific product #3 implanted. Implant defined as physical placement of the VAD.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #3   *Format:*   Text (categorical values specified by STS)

ParentShortName: VImp3   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	VAD-Implant Date #3	*SeqNo:*	3975
Short Name:	**VImpDt3**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the date the VAD #3 was implanted.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VAD-Implant #3		*Format:*	Date mm/dd/yyyy
ParentShortName: VImp3		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Long Name:	VAD-Implant Unique Device Identifier (UDI) #3	*SeqNo:*	3980
Short Name:	**VImpUDI3**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the device UDI if available, otherwise leave blank.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: VAD-Implant #3		*Format:*	Text
ParentShortName: VImp3		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Long Name: VAD-Explant #3   *SeqNo:*   3985

Short Name: **VExp3**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate if the VAD #3 was explanted. Explant is defined as physical removal of the VAD.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #3   *Format:*   Text (categorical values specified by STS)

ParentShortName: VImp3   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

          3   Yes, not during this procedure

          4   Yes, during this procedure

          2   No

Long Name: VAD-Explant Reason #3   *SeqNo:*   3990

Short Name: **VExpRsn3**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the reason the VAD #3 was explanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant #3   *Format:*   Text (categorical values specified by STS)

ParentShortName: VExp3   *DataLength:*

ParentValue: = "Yes, not during this   *Data Source:* User
procedure" or "Yes, during this
procedure"

ParentHarvestCodes: 3|4

    Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Cardiac Transplant	The VAD was explanted for Cardiac Transplant.
2	Recovery	The VAD was removed after cardiac recovery.
3	Device Transfer	The VAD was explanted in order to implant another assist device.
4	Device-Related Infection	An infection within the pump pocket, driveline, VAD Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active

infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever requiring medical or surgical intervention.

5	Device Malfunction	The VAD pump itself is not functioning properly causing hemodynamic compromise, and/or requiring immediate intervention or VAD replacement.
6	End of (device) life	Mechanical device pump has reached functional life expectancy and requires replacement.

Long Name: VAD-Explant Date #3   *SeqNo:* 3995

Short Name: **VExpDt3**   *Core:* Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date the VAD #3 was explanted.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant #3   *Format:*   Date mm/dd/yyyy

ParentShortName: VExp3   *DataLength:*

ParentValue: = "Yes, not during this   *Data Source:* User
                     procedure"

ParentHarvestCodes: 3

Long Name: VAD-Cardiac Transplant Date #3   *SeqNo:* 4000

Short Name: **VTxDt3**   *Core:* No

Section Name: Mechanical Cardiac Assist Devices   *Harvest:* No

DBTableName AdultData

Definition: Indicate the date the patient received a cardiac transplant.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant Reason #3   *Format:*   Date mm/dd/yyyy

ParentShortName: VExpRsn3   *DataLength:*

ParentValue: = "Cardiac Transplant"   *Data Source:* User

ParentHarvestCodes: 1

Long Name:	VAD-Discharge Status	*SeqNo:*	4005
Short Name:	**VADDiscS**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the VAD status at discharge from the hospital.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD Implanted or Removed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADProc	*DataLength:*	
ParentValue:	= "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	With VAD
2	Without VAD
3	Expired in Hospital

Long Name:	Complications Related To Mechanical Assist Device(s)	*SeqNo:*	4010
Short Name:	**CompMAD**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether complications resulted from mechanical assist device(s).

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	No
2	Yes, IABP
3	Yes, CBAD
4	Yes, ECMO
5	Yes, VAD
6	Yes, multiple devices

Long Name: Complications Related To Mechanical Assist Device(s) #1   *SeqNo:*   4015

Short Name: **CompMAD1**   *Core:*   Yes

Section Name: Mechanical Cardiac Assist Devices   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate complication related to mechanical assist device(s).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Complications Related To   *Format:*   Text (categorical values specified by STS)
                 Mechanical Assist Device(s)

ParentShortName: CompMAD   *DataLength:*

ParentValue: = "Yes, IABP", "Yes, CBAD",   *Data Source:* User
                "Yes, ECMO", "Yes, VAD" or
                "Yes, multiple devices"

ParentHarvestCodes: 2|3|4|5|6

Harvest Codes:

Code:	Value:
2	Cannula / insertion site issue
3	Cardiac
4	GI
5	Hemorrhagic
6	Hemolytic
7	Infection
8	Metabolic
9	Neurologic
10	Pulmonary
11	Other

Long Name:	Complications Related To Mechanical Assist Device(s) #2	*SeqNo:*	4020
Short Name:	**CompMAD2**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate additional complication or choose no additional complications.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Complications Related To Mechanical Assist Device(s)	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CompMAD	*DataLength:*	
ParentValue:	= "Yes, IABP", "Yes, CBAD", "Yes, ECMO", "Yes, VAD" or "Yes, multiple devices"	*Data Source:*	User

ParentHarvestCodes: 2|3|4|5|6

Harvest Codes:

Code:	Value:
1	No additional complications
2	Cannula / insertion site issue
3	Cardiac
4	GI
5	Hemorrhagic
6	Hemolytic
7	Infection
8	Metabolic
9	Neurologic
10	Pulmonary
11	Other

Long Name:	Complications Related To Mechanical Assist Device(s) #3	*SeqNo:*	4025
Short Name:	**CompMAD3**	*Core:*	Yes
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate additional complication or choose no additional complications.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Complications Related To Mechanical Assist Device(s) #2	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CompMAD2	*DataLength:*	
ParentValue:	<>"No additional complications" And Is Not Missing	*Data Source:*	User
ParentHarvestCodes:	<>1 And Is Not Missing		

Harvest Codes:

Code:	Value:
1	No additional complications
2	Cannula / insertion site issue
3	Cardiac
4	GI
5	Hemorrhagic
6	Hemolytic
7	Infection
8	Metabolic
9	Neurologic
10	Pulmonary
11	Other

Long Name:	VAD-Primary VAD Comp-Intracranial Bleed	*SeqNo:*	4030
Short Name:	**PVCmpBld**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName AdultData

Definition: Indicate if the patient had an intracranial bleed, confirmed by CT scan or other diagnostic studies.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD Implanted or Removed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADProc	*DataLength:*	
ParentValue:	= "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VAD-Primary VAD Comp-Embolic Stroke	*SeqNo:*	4035
Short Name:	**PVCmpESt**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName AdultData

Definition: Indicate if the patient had embolic stroke caused by a blood clot, air embolus, or tissue, confirmed by CT scan or other diagnostic studies.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD Implanted or Removed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADProc	*DataLength:*	
ParentValue:	= "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	VAD-Primary VAD Comp-Driveline and/or cannula Infection	*SeqNo:*	4040
Short Name:	**PVCmpDCI**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName AdultData

Definition: Indicate if the patient had a driveline and/or cannula infection. Driveline and/or cannula infection is defined as the presence of erythema, drainage, or purulence at the VAD connection site whether entering or exiting the body in association with leukocytosis and in the presence of positive culture.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	VAD Implanted or Removed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADProc	*DataLength:*	
ParentValue:	= "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VAD-Primary VAD Comp-Pump Pocket Infection	*SeqNo:*	4045
Short Name:	**PVCmpPPI**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName AdultData

Definition: Indicate if the patient had a pump pocket infection. A pump pocket infection is defined as a persistent drainage in the physical location of the pump, located preperitoneally or intra-abdominally with positive cultures from the pocket site.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	VAD Implanted or Removed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADProc	*DataLength:*	
ParentValue:	= "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VAD-Primary VAD Comp-VAD Endocarditis	*SeqNo:*	4050
Short Name:	**PVCmpEnd**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate if the patient had VAD endocarditis. VAD endocarditis is defined as an infection of the blood contacting surface of the VAD device itself. This may include:
- internal surfaces;
- graft material;
- inflow/outflow valves of the VAD.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD Implanted or Removed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADProc	*DataLength:*	
ParentValue:	= "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VAD-Primary VAD Comp-Device Malfunction	*SeqNo:*	4055
Short Name:	**PVCmpMal**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate if the pump itself is not functioning properly causing hemodynamic compromise, and/or requiring immediate intervention or VAD replacement.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD Implanted or Removed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADProc	*DataLength:*	
ParentValue:	= "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VAD-Primary VAD Comp-Hemolysis	*SeqNo:*	4060
Short Name:	**PVCmpHem**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether patient experienced clinical signs of hemolysis (anemia, low hematocrit, hyperbilirubinemia) and a plasma free hemoglobin > 40 mg/dl within 72 hours of VAD implant.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD Implanted or Removed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADProc	*DataLength:*	
ParentValue:	= "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	VAD-Primary VAD Comp-Bowel Obstruction	*SeqNo:*	4065
Short Name:	**PVCmpBO**	*Core:*	No
Section Name:	Mechanical Cardiac Assist Devices	*Harvest:*	No

DBTableName AdultData

Definition: Indicate if the patient was diagnosed with a bowel obstruction post VAD insertion by documentation in the medical record.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	VAD Implanted or Removed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	VADProc	*DataLength:*	
ParentValue:	= "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted"	*Data Source:*	User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-AFib Epicardial Lesions	*SeqNo:*	4070
Short Name:	**OCarAFibEpLes**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether epicardial lesions were created for the purpose of AFib ablation.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Other Card		*Format:*	Text (categorical values specified by STS)
ParentShortName: OpOCard		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-ASD Repair - PFO Type	*SeqNo:*	4075
Short Name:	**OCarASDPFO**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a patent foramen ovale (PFO) was repaired.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Other Card		*Format:*	Text (categorical values specified by STS)
ParentShortName: OpOCard		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Other Card-Atrial Appendage Procedure   *SeqNo:*   4080

Short Name: **OCarAAProc**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether atrial appendage ligation/exclusion was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpOCard   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

      Harvest Codes:

Code:	Value:
1	RAA
2	LAA
3	Both
4	No

Long Name: Other Card-Arrhythmia Device Surgery   *SeqNo:*   4085

Short Name: **OCarACD**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate which arrhythmia correction device was surgically placed in conjunction with the primary
                 surgical procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpOCard   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

      Harvest Codes and Value Definitions:

Code:	Value:	Definition:
2	Permanent Pacemaker	An internal electronic generator that controls the heart rate.
3	Permanent Pacemaker with Cardiac Resynchronization Technique (CRT)	An internal permanent pacemaker that uses biventricular electrical stimulation to synchronize ventricular contraction.
4	Implantable Cardioverter Defibrillator (ICD)	An internal device that defibrillates the heart.

5	ICD with CRT	An internal AICD that uses biventricular electrical stimulation to synchronize ventricular contraction.
6	Implantable recorder	
1	None	

Long Name: Other Card-Lead Insertion   *SeqNo:*   4090

Short Name: **OCarLeadInsert**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether lead(s) insertion was performed. Do not capture temporary lead placement.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpOCard   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: Other Card-Myocardial Stem Cell Therapy   *SeqNo:*   4095

Short Name: **OCarStemCell**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether myocardial stem cell procedure was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpOCard   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-Transmyocardial Laser Revascularization	*SeqNo:*	4100
Short Name:	**OCarLasr**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient underwent the creation of multiple channels in left ventricular myocardium with a laser fiber either in conjunction with, or as the primary surgical procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Card	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpOCard	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-AFib Intracardiac Lesions	*SeqNo:*	4105
Short Name:	**OCarAFibIntraLes**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether intracardiac lesions were created for the purpose of AFib ablation.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Card	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpOCard	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-ASD Repair - Secundum Or Sinus Venosus	*SeqNo:*	4110
Short Name:	**OCarASDSec**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a secundum or sinus venosus ASD was repaired.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Other Card		*Format:*	Text (categorical values specified by STS)
ParentShortName: OpOCard		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-Arrhythmia Correction Surgery-Lead Extraction	*SeqNo:*	4120
Short Name:	**OCarACDLE**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether procedure included lead extraction for a device intended to treat cardiac arrhythmias.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Other Card		*Format:*	Text (categorical values specified by STS)
ParentShortName: OpOCard		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

3   Yes, planned

4   Yes, unplanned due to surgical complication

5   Yes, unplanned due to unsuspected disease or anatomy

2   No

Long Name: Other Card-LVA   *SeqNo:*   4125

Short Name: **OCarLVA**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Left Ventricular Aneurysm Repair either in conjunction with, or as the primary surgical procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpOCard   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

         1 Yes

         2 No

Long Name: Other Card-Pulmonary Thromboembolectomy   *SeqNo:*   4130

Short Name: **OCPulThromDis**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the patient had surgery for pulmonary thromboembolic disease.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpOCard   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

         2 Yes, Acute

         3 Yes, Chronic

         1 No

Long Name:	Other Card-Subaortic Stenosis Resection	*SeqNo:*	4135
Short Name:	**OCarSubaStenRes**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether resection of subaortic stenosis was performed.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Card	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpOCard	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-Subaortic Stenosis Resection Type	*SeqNo:*	4140
Short Name:	**OCarSubaStenResTy**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the type of subaortic stenosis.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Card-Subaortic Stenosis Resection	*Format:*	Text (categorical values specified by STS)
ParentShortName: OCarSubaStenRes	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Muscle

2   Ring

3   Membrane

4   Web

5   Not reported

Long Name:	Other Card-Surgical Ventricular Restoration	*SeqNo:*	4145
Short Name:	**OCarSVR**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Surgical Ventricular Restoration either in conjunction with, or as the primary surgical procedure. Surgical Ventricular Restorations are procedures that restore the geometry of the heart after an anterior MI. They include the Dor procedure or the SAVER procedure. This SVR procedure is distinct from an anterior left ventricular aneurysmectomy (LVA) and from a Batista procedure (left ventricular volume reduction procedure).

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Card	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpOCard	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   Yes
2   No

Long Name:	Other Card-Tumor	*SeqNo:*	4150
Short Name:	**OCTumor**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had resection of an intracardiac tumor.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Card	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpOCard	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
2   Myxoma
3   Fibroelastoma
4   Hypernephroma
5   Sarcoma
6   Other
1   No

Long Name:	Other Card-Card Tx	*SeqNo:* 4152
Short Name:	**OCarCrTx**	*Core:* Yes
Section Name:	Other Cardiac Procedures	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Heterotopic or Orthotopic heart transplantation either in conjunction with, or as the primary surgical procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpOCard   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-Cardiac Trauma	*SeqNo:* 4153
Short Name:	**OCarTrma**	*Core:* Yes
Section Name:	Other Cardiac Procedures	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a surgical procedure for an injury due to Cardiac Trauma either in conjunction with, or as the primary surgical procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpOCard   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-VSD		*SeqNo:*	4155
Short Name:	**OCarVSD**		*Core:*	Yes
Section Name:	Other Cardiac Procedures		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Ventricular Septal Defect Repair either in conjunction with, or as the primary surgical procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Other Card	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OpOCard	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
3	Yes, congenital
4	Yes, acquired
2	No

Long Name:	Other Card-Other		*SeqNo:*	4160
Short Name:	**OCarOthr**		*Core:*	Yes
Section Name:	Other Cardiac Procedures		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had another cardiac procedure performed either in conjunction with, or as the primary surgical procedure that is not included within this section.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Other Card	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OpOCard	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-Congenital	*SeqNo:*	4162
Short Name:	**OCarCong**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the patient had a congenital defect repair either in conjunction with, or as the primary surgical procedure. Do not include bicuspid Aortic valve or PFO here as these are captured elsewhere.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpOCard   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-ASD	*SeqNo:*	4165
Short Name:	**OCarASD**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the patient had an Atrial Septal Defect Repair either in conjunction with, or as the primary surgical procedure including but not limited to ASD, Secundum; ASD, Sinus venosus; and PFO.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpOCard   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-ASD-Type	*SeqNo:*	4170
Short Name:	**OCarASDTy**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the type of Atrial Septal Defect.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Card-ASD	*Format:*	Text (categorical values specified by STS)
ParentShortName: OCarASD	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Secundum	An ASD confined to the region of the fossa ovalis; its most common etiology is a deficiency of the septum primum, but deficiency of the limbus or septum secundum may also contribute.
2	Sinus Venosus	An ASD with a vena cava or pulmonary vein (or veins) that overrides the atrial septum or the superior interatrial fold (septum secundum) producing an interatrial or anomalous venoatrial communication. Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of the true atrial septum.
3	PFO	Small interatrial communication in the region of the foramen ovale characterized by no deficiency of the septum primum and a normal limbus with no deficiency of the septum secundum.

Long Name:	Other Card-Endovascular Procedure (TEVAR):	*SeqNo:*	4185
Short Name:	**EndoProc**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether an aortic endovascular stent graft was performed/deployed.

LowValue:		*UsualRangeLow:*			
HighValue:		*UsualRangeHigh:*			
Parent Long Name:	Other Card		*Format:*	Text (categorical values specified by STS)
ParentShortName:	OpOCard		*DataLength:*	
ParentValue:	= "Yes"		*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-Endovascular Debranching	*SeqNo:*	4190
Short Name:	**EndoProcDeb**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether debranching was performed.

LowValue:		*UsualRangeLow:*			
HighValue:		*UsualRangeHigh:*			
Parent Long Name:	Other Card-Endovascular Procedure (TEVAR):		*Format:*	Text (categorical values specified by STS)
ParentShortName:	EndoProc		*DataLength:*	
ParentValue:	= "Yes"		*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-AFib Lesion Location	*SeqNo:*	4191
Short Name:	**OCarAFibLesLoc**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the location of the majority of lesions created to treat atrial fibrillation.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Atrial Fibrillation Procedure Performed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	AFibProc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Primarily epicardial

2   Primarily Intracardiac

Long Name:	Other Card-Lesions Documented	*SeqNo:*	4195
Short Name:	**OCarLesDoc**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the lesions created during the atrial fibrillation surgery are documented.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Atrial Fibrillation Procedure Performed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	AFibProc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Radio Frequency	*SeqNo:*	4200

Short Name: **OCarAFibMethRad**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion(s) for the AFib ablation procedure included radio frequency.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card-Lesions Documented   *Format:*   Text (categorical values specified by STS)

ParentShortName: OCarLesDoc   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Radio Frequency - Bipolar	*SeqNo:*	4205

Short Name: **OCarAFibMethRadBi**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the radiofrequency method used to create the lesion(s) for the AFib ablation was bipolar.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Radio Frequency   *Format:*   Text (categorical values specified by STS)

ParentShortName: OCarAFibMethRad   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Cut-And-Sew	*SeqNo:*	4210
Short Name:	**OCarAFibMethCAS**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion(s) for the AFib ablation procedure included cut-and-sew.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name:	Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Cryo	*SeqNo:*	4215
Short Name:	**OCarAFibMethCryo**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion(s) for the AFib ablation procedure included cryoablation.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name:	Other Card-Atrial Fibrillation Surgical Procedure	*SeqNo:*	4220
Short Name:	**OCarAFibSur**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether atrial fibrillation correction surgery was performed as the primary procedure or in conjunction with another procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Card	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpOCard	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-Atrial Fibrillation Surgical Procedure-Location	*SeqNo:*	4225
Short Name:	**OCarAFibSurLoc**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the location of the AFib ablation procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Card-Atrial Fibrillation Surgical Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName: OCarAFibSur	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Biatrial
2	Left atrial only
3	Right atrial only

Long Name:	Other Card-Atrial Fibrillation Surgical Procedure-Left Atrial Appendage Obliterated	*SeqNo:*	4230
Short Name:	**OCarAFibSurLAA**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether left atrial appendage was obliterated. Includes oversewing, ligation, stapling, clipping, and/or plication.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name:	Other Card-Atrial Fibrillation Surgical Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarAFibSur	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   Yes
2   No

Long Name:	Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Ultrasound	*SeqNo:*	4235
Short Name:	**OCarAFibMethUltra**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included ultrasound.

LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*

Parent Long Name:	Other Card-Atrial Fibrillation Surgical Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarAFibSur	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1   Yes
2   No

Long Name:	Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Microwave	*SeqNo:*	4240
Short Name:	**OCarAFibMethMicro**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included microwave.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Other Card-Atrial Fibrillation Surgical Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarAFibSur	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Laser	*SeqNo:*	4245
Short Name:	**OCarAFibMethLas**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included laser.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Other Card-Atrial Fibrillation Surgical Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarAFibSur	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	AFib Lesion Location - Pulmonary Vein Isolation	*SeqNo:* 4250
Short Name:	**AFibLes1**	*Core:* Yes
Section Name:	Other Cardiac Procedures	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the afib lesion was pulmonary vein isolation.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Other Card-Lesions Documented		*Format:*	Text (categorical values specified by STS)
ParentShortName: OCarLesDoc		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - Box Lesion	*SeqNo:* 4255
Short Name:	**AFibLes2**	*Core:* Yes
Section Name:	Other Cardiac Procedures	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the afib lesion was a box lesion

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Other Card-Lesions Documented		*Format:*	Text (categorical values specified by STS)
ParentShortName: OCarLesDoc		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - Inferior Pulmonary Vein Connecting Lesion	*SeqNo:*	4260
Short Name:	**AFibLes3a**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the afib lesion was an Inferior Pulmonary Vein Connecting Lesion

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	AFib Lesion Location - Superior Pulmonary Vein Connecting Lesion	*SeqNo:*	4265
Short Name:	**AFibLes3b**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the afib lesion was a Superior Pulmonary Vein Connecting Lesion

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	AFib Lesion Location - Posterior Mitral Annular Line	*SeqNo:*	4270
Short Name:	**AFibLes4**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the afib lesion was a Posterior Mitral Annular Line

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - Pulmonary Vein Connecting Lesion to Anterior Mitral Annulus	*SeqNo:*	4275
Short Name:	**AFibLes5**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the afib lesion was a - Pulmonary Vein Connecting Lesion to Anterior Mitral Annulus lesion.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - Mitral Valve Cryo Lesion	*SeqNo:*	4280
Short Name:	**AFibLes6**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the afib lesion was a Mitral Valve Cryo Lesion

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - LAA Ligation/Removal	*SeqNo:*	4285
Short Name:	**AFibLes7**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the left Atrial Appendage was ligated or removed

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - Pulmonary Vein to LAA	*SeqNo:*	4290
Short Name:	**AFibLes8**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the afib lesion was a Pulmonary Vein to LAA lesion

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	AFib Lesion Location - Intercaval Line to Tricuspid Annulus ('T' lesion)	*SeqNo:*	4295
Short Name:	**AFibLes9**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the afib lesion was an Intercaval Line to Tricuspid Annulus ('T' lesion)

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	AFib Lesion Location - Tricuspid Cryo Lesion, Medial (10)	*SeqNo:*	4300
Short Name:	**AFibLes10**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the afib lesion was a Tricuspid Cryo Lesion, Medial (10)

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName: OCarLesDoc	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - Intercaval Line	*SeqNo:*	4305
Short Name:	**AFibLes11**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the afib lesion was an Intercaval Line

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName: OCarLesDoc	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - Tricuspid Annular Line to RAA	*SeqNo:*	4310
Short Name:	**AFibLes12**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the afib lesion was a Tricuspid Annular Line to RAA lesion

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - Tricuspid Cryo Lesion (13)	*SeqNo:*	4315
Short Name:	**AFibLes13**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the afib lesion was a Tricuspid Cryo Lesion (13)

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - RAA Ligation/Removal	*SeqNo:*	4320
Short Name:	**AFibLes14**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the Right Atrial Appendage was ligated or removed

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - RAA Lateral Wall (Short)	*SeqNo:*	4325
Short Name:	**AFibLes15a**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether the afib lesion was a RAA Lateral Wall (Short) lesion

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - RAA Lateral Wall to 'T' Lesion	*SeqNo:*	4330
Short Name:	**AFibLes15b**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the afib lesion was a RAA Lateral Wall to 'T' Lesion

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	AFib Lesion Location - Other	*SeqNo:*	4335
Short Name:	**AFibLes16**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the afib lesion was a lesion other than those previously described

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Other Card-Lesions Documented	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarLesDoc	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Aortic Procedure Location - Root	*SeqNo:*	4340
Short Name:	**AortProcRoot**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic procedure location involved the aortic root.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name: Aortic Procedure Performed		*Format:*	Text (categorical values specified by STS)
ParentShortName: AortProc		*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:* User	

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Location - Ascending	*SeqNo:*	4345
Short Name:	**AortProcAsc**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic procedure location involved the ascending aorta.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name: Aortic Procedure Performed		*Format:*	Text (categorical values specified by STS)
ParentShortName: AortProc		*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:* User	

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Location - Hemi-Arch	*SeqNo:*	4350
Short Name:	**AortProcHemi**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic procedure location involved the hemi arch

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Aortic Procedure Performed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	AortProc	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Location - Total Arch	*SeqNo:*	4355
Short Name:	**AortProcTotArch**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic procedure location involved the total arch

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Aortic Procedure Performed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	AortProc	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Location - Descending - Proximal	*SeqNo:*	4360
Short Name:	**AortProcDesProx**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic procedure location involved the proximal descending aorta.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Aortic Procedure Performed		*Format:*	Text (categorical values specified by STS)
ParentShortName: AortProc		*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:* User	

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Location - Descending - Mid	*SeqNo:*	4365
Short Name:	**AortProcDesMid**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic procedure location involved the mid descending aorta.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Aortic Procedure Performed		*Format:*	Text (categorical values specified by STS)
ParentShortName: AortProc		*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:* User	

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Location - Descending - Distal	*SeqNo:*	4370
Short Name:	**AortProcDesDist**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic procedure location involved the distal descending aorta.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Aortic Procedure Performed	*Format:*	Text (categorical values specified by STS)
ParentShortName: AortProc	*DataLength:*	
ParentValue: = "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:* User	

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Location - Thoracoabdominal	*SeqNo:*	4375
Short Name:	**AortProcThora**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the aortic procedure location involved the thoracoabdominal aorta.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Aortic Procedure Performed	*Format:*	Text (categorical values specified by STS)
ParentShortName: AortProc	*DataLength:*	
ParentValue: = "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:* User	

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Synthetic Graft Used	*SeqNo:*	4380
Short Name:	**SynthGft**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether a synthetic graft was used in the aortic procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Aortic Procedure Performed	*Format:*	Text (categorical values specified by STS)
ParentShortName:	AortProc	*DataLength:*	
ParentValue:	= "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"	*Data Source:*	User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Synthetic Graft Type - Intercostal Vessels Re-implanted	*SeqNo:*	4385
Short Name:	**SynthGftInter**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether intercostal vessels were reimplanted in conjunction with use of the synthetic graft.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Aortic Procedure Synthetic Graft Used	*Format:*	Text (categorical values specified by STS)
ParentShortName:	SynthGft	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Synthetic Graft Type - CSF Drainage Utilized	*SeqNo:*	4390
Short Name:	**SynthGftCSF**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether Cerebrospinal fluid drainage was utilized in conjunction with use of the synthetic graft.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Aortic Procedure Synthetic Graft Used	*Format:*	Text (categorical values specified by STS)
ParentShortName:	SynthGft	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Aortic Procedure Synthetic Graft Type - Elephant Trunk	*SeqNo:*	4395
Short Name:	**SynthGftEleph**	*Core:*	Yes
Section Name:	Other Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether an 'elephant trunk' synthetic graft was utilized.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Aortic Procedure Synthetic Graft Used	*Format:*	Text (categorical values specified by STS)
ParentShortName:	SynthGft	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Coil Embolization of Aortic False Lumen	*SeqNo:* 4400
Short Name: **AortProcCoil**	*Core:* Yes
Section Name: Other Cardiac Procedures	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a coil embolization of the false lumen was performed.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: Aortic Procedure Performed   *Format:* Text (categorical values specified by STS)

ParentShortName: AortProc   *DataLength:*

ParentValue: = "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"   *Data Source:* User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Aortic Procedure TEVAR	*SeqNo:* 4405
Short Name: **AortProcTEVAR**	*Core:* Yes
Section Name: Other Cardiac Procedures	*Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the aortic procedure was a thoracic endovascular aneurysm repair (TEVAR).

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: Aortic Procedure Performed   *Format:* Text (categorical values specified by STS)

ParentShortName: AortProc   *DataLength:*

ParentValue: = "Yes, planned", "Yes, unplanned due to surgical complication" or "Yes, unplanned due to unsuspected disease or anatomy"   *Data Source:* User

ParentHarvestCodes: 3|4|5

Harvest Codes:

Code:	Value:
1	Yes, with debranching
2	Yes, without debranching
3	No

Long Name: Aortic Procedure - Other   *SeqNo:*   4410

Short Name: **AortProcOther**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the aortic procedure was a procedure other that those previously described.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Aortic Procedure Performed   *Format:*   Text (categorical values specified by STS)

ParentShortName: AortProc   *DataLength:*

ParentValue: = "Yes, planned", "Yes,   *Data Source:* User
                   unplanned due to surgical
                   complication" or "Yes,
                   unplanned due to unsuspected
                   disease or anatomy"

ParentHarvestCodes: 3|4|5

    Harvest Codes:

          Code: Value:

           1   Yes

           2   No

Long Name: Other Card-Arrhythmia Correction Surgery-Lead Insertion or Replacement   *SeqNo:*   4415

Short Name: **OCarACDLI**   *Core:*   No

Section Name: Other Cardiac Procedures   *Harvest:*   No

DBTableName   AdultData

Definition: Indicate whether procedure included lead insertion or replacement for a device intended to treat
                 cardiac arrhythmias.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card-Arrhythmia   *Format:*   Text (categorical values specified by STS)
                   Device Surgery

ParentShortName: OCarACD   *DataLength:*

ParentValue: <> "None" And Is Not Missing   *Data Source:* User

ParentHarvestCodes: 2|3|4|5

    Harvest Codes:

          Code: Value:

           1   Yes

           2   No

Long Name:	Other Card-Atrial Fibrillation Ablation Procedure	*SeqNo:*	4420
Short Name:	**OCarAFibAProc**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate what atrial fibrilation ablation procedure was performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Atrial Fibrillation Surgical Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCarAFibSur	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Primarily epicardial procedure	E.g., pulmonary vein isolation with or without connection to left atrial appendage
2	Primarily intracardiac procedure	E.g., Maze procedures; lesions to mitral annulus; etc.

Long Name:	Other Card-Aortic Procedure Type	*SeqNo:*	4425
Short Name:	**OCAoProcType**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the type of aortic procedure performed in conjunction with another procedure or as the primary procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OpOCard	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	None
2	Aneurysm
3	Dissection (including intramural hematoma)
4	Trauma
5	Coarctation

6   Other

Long Name: Other Card-Aortic Root	*SeqNo:* 4430
Short Name: **ONCAoRt**	*Core:* No
Section Name: Other Cardiac Procedures	*Harvest:* No

DBTableName   AdultData

Definition: Indicate if the patient underwent repair of an aortic root aneurysm either in conjunction with, or as the primary surgical procedure. Aneurysm refers to pathologic dilatation of the aorta.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card-Aortic Procedure Type	*Format:*	Text (categorical values specified by STS)
ParentShortName: OCAoProcType	*DataLength:*	
ParentValue: = "Aneurysm"	*Data Source:* User	

ParentHarvestCodes: 2

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: Other Card-Aortic Root Graft	*SeqNo:* 4435
Short Name: **ONCAoGraft**	*Core:* No
Section Name: Other Cardiac Procedures	*Harvest:* No

DBTableName   AdultData

Definition: Indicate whether a Dacron graft was used to replace the ascending aorta (between the sinotubular junction and the origin of the innominate artery) – this includes a "hemiarch" replacement as well as a Wheat procedure. Also includes valve-sparing root reimplantation and remodling operations. If the ascending aorta was replaced with a Dacron graft, record as "yes" and also go to AVR section and record device model, size, etc. there.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card-Aortic Root	*Format:*	Text (categorical values specified by STS)
ParentShortName: ONCAoRt	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-Asc	*SeqNo:*	4440
Short Name:	**ONCAsc**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate if the patient underwent repair of ascending aortic aneurysm either in conjunction with, or as the primary surgical procedure. Aneurysm refers to pathologic dilatation of the aorta. The ascending aorta begins at the aortic annulus and ends at the origin of the innominate artery where the aorta continues as the transverse arch.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Aortic Procedure Type	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCAoProcType	*DataLength:*	
ParentValue:	= "Aneurysm"	*Data Source:*	User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-Arch	*SeqNo:*	4445
Short Name:	**ONCArch**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate if the patient underwent repair of aneurysm in the arch of the aorta either in conjunction with, or as the primary surgical procedure. The arch begins at the origin of the innominate artery and ends beneath the left subclavian artery. It is the portion of the aorta at the top of the heart that gives off three important blood vessels; the innominate artery, the left carotid artery and the left subclavian artery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Aortic Procedure Type	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCAoProcType	*DataLength:*	
ParentValue:	= "Aneurysm"	*Data Source:*	User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-Arch Repair Extent	*SeqNo:*	4450
Short Name:	**ONCArchRepExt**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the extent of the arch repair.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Arch	*Format:*	Text (categorical values specified by STS)
ParentShortName:	ONCArch	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Hemi-Arch

2   Total Arch

Long Name:	Other Card-Desc	*SeqNo:*	4455
Short Name:	**ONCDesc**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate if the patient underwent repair of a descending aortic aneurysm either in conjunction with, or as the primary surgical procedure. The descending aorta is the portion of the aorta between the arch and the abdomen.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Aortic Procedure Type	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCAoProcType	*DataLength:*	
ParentValue:	= "Aneurysm"	*Data Source:*	User

ParentHarvestCodes: 2

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-Thoracoabdominal Aneurysm	*SeqNo:*	4460
Short Name:	**ONCThAbd**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate if the patient underwent repair of a thoracoabdominal aneurysm either in conjunction with, or as the primary surgical procedure. Thoracoabdominal aneurysms can involve the entire thoracoabdominal aorta from the origin of the left subclavian artery to the aortic bifurcation or can involve only one or more segments of the abdominal aorta.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Aortic Procedure Type	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCAoProcType	*DataLength:*	
ParentValue:	= "Aneurysm"	*Data Source:*	User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-Thoracoabdominal Graft Replacement	*SeqNo:*	4465
Short Name:	**ONCThAbdGraft**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether a graft replacement was used.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Thoracoabdominal Aneurysm	*Format:*	Text (categorical values specified by STS)
ParentShortName:	ONCThAbd	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-Thoracoabdominal-Intercostal Vessels	*SeqNo:*	4470
Short Name:	**ONCThAbdInterVes**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether intercostal vessels were re-implanted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Thoracoabdominal Graft Replacement	*Format:*	Text (categorical values specified by STS)
ParentShortName:	ONCThAbdGraft	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-Thoracoabdominal-CSF Drainage	*SeqNo:*	4475
Short Name:	**ONCThAbdLumCSF**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether lumbar CSF drainage was utilized.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Thoracoabdominal Graft Replacement	*Format:*	Text (categorical values specified by STS)
ParentShortName:	ONCThAbdGraft	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Other Card-Thoracoabdominal-Extent Replaced	*SeqNo:*	4480
Short Name:	**ONCThAbdExtent**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate extent of descending aorta replacement.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Thoracoabdominal Graft Replacement	*Format:*	Text (categorical values specified by STS)
ParentShortName:	ONCThAbdGraft	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Proximal

2   Mid

3   Distal

4   Proximal - Mid

5   Proximal - Mid - Distal

6   Mid - Distal

Long Name:	Other Card-Aortic Dissection-Acute	*SeqNo:*	4485
Short Name:	**AoDisAc**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether aortic dissection is acute (<14 days prior to procedure).

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Aortic Procedure Type	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCAoProcType	*DataLength:*	
ParentValue:	= "Dissection (including intramural hematoma)"	*Data Source:*	User

ParentHarvestCodes: 3

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Other Card-Aortic Dissection Type	*SeqNo:*	4490
Short Name:	**AoDisTyp**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate aortic dissection type.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Aortic Procedure Type	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCAoProcType	*DataLength:*	
ParentValue:	= "Dissection (including intramural hematoma)"	*Data Source:*	User

ParentHarvestCodes: 3

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Stanford Type A	Dissection extends proximal to the left subclavian artery
2	Stanford Type B	Dissection extends distal to the left subclavian artery

Long Name:	Other Card-Aortic Trauma type	*SeqNo:*	4495
Short Name:	**AoTrTyp**	*Core:*	No
Section Name:	Other Cardiac Procedures	*Harvest:*	No

DBTableName AdultData

Definition: Indicate type of aortic trauma.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Other Card-Aortic Procedure Type	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OCAoProcType	*DataLength:*	
ParentValue:	= "Trauma"	*Data Source:*	User

ParentHarvestCodes: 4

Harvest Codes:

Code:	Value:
1	Blunt
2	Penetrating

Long Name: Other Card-Congenital Diagnosis 1   *SeqNo:*   4500

Short Name: **OCarCongDiag1**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the first of the three most significant congenital diagnoses.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card-Congenital   *Format:*   Text (categorical values specified by STS)

ParentShortName: OCarCong   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
10	PFO	A small interatrial communication (or potential communication) confined to the region of the oval fossa (fossa ovalis) characterized by no deficiency of the primary atrial septum (septum primum) and a normal limbus with no deficiency of the septum secundum (superior interatrial fold).
20	ASD, Secundum	A congenital cardiac malformation in which there is an interatrial communication confined to the region of the oval fossa (fossa ovalis), most commonly due to a deficiency of the primary atrial septum (septum primum) but deficiency of the septum secundum (superior interatrial fold) may also contribute.
30	ASD, Sinus venosus	A congenital cardiac malformation in which there is a caval vein (vena cava) and/or pulmonary vein (or veins) that overrides the atrial septum or the septum secundum (superior interatrial fold) producing an interatrial or anomalous venoatrial communication Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of the atrial septum.
40	ASD, Coronary sinus	A congenital cardiac malformation in which there is a deficiency of the walls separating the left atrium from the coronary sinus allowing interatrial communication through the coronary sinus ostium.
50	ASD, Common atrium (single atrium)	Complete absence of the interatrial septum. "Single atrium" is applied to defects with no associated malformation of the atrioventricular valves. "Common atrium" is applied to defects with associated malformation of the atrioventricular valves.
2150	ASD, Postoperative interatrial communication	A surgically created communication between the atria.

71	VSD, Type 1 (Subarterial) (Supracristal) (Conal septal defect) (Infundibular)	A VSD that lies beneath the semilunar valve(s) in the conal or outlet septum.
73	VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)	A VSD that is confluent with and involves the membranous septum and is bordered by an atrioventricular valve, not including type 3 VSDs.
75	VSD, Type 3 (Inlet) (AV canal type)	A VSD that involves the inlet of the right ventricular septum immediately inferior to the AV valve apparatus.
77	VSD, Type 4 (Muscular)	A VSD completely surrounded by muscle.
79	VSD, Type: Gerbode type (LV-RA communication)	A rare form of VSD in which the defect is at the membranous septum; the communication is between the left ventricle and right atrium.
80	VSD, Multiple	More than one VSD exists. Each individual VSD may be coded separately to specify the individual VSD types.
100	AVC (AVSD), Complete (CAVSD)	Indicate if the patient has the diagnosis of "AVC (AVSD), Complete (CAVSD)". An "AVC (AVSD), Complete (CAVSD)" is a "complete atrioventricular canal" or a "complete atrioventricular septal defect" and occurs in a heart with the phenotypic feature of a common atrioventricular junction. An "AVC (AVSD), Complete (CAVSD)" is defined as an AVC with a common AV valve and both a defect in the atrial septum just above the AV valve (ostium primum ASD [a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve]) and a defect in the ventricular septum just below the AV valve. The AV valve is one valve that bridges both the right and left sides of the heart. Balanced AVC is an AVC with two essentially appropriately sized ventricles. Unbalanced AVC is an AVC defect with two ventricles in which one ventricle is inappropriately small. Such a patient may be thought to be a candidate for biventricular repair, or, alternatively, may be managed as having a functionally univentricular heart. AVC lesions with unbalanced ventricles so severe as to preclude biventricular repair should be classified as single ventricles. Rastelli type A: The common superior (anterior) bridging leaflet is effectively split in two at the septum. The left superior (anterior) leaflet is entirely over the left ventricle and the right superior (anterior) leaflet is similarly entirely over the right ventricle. The division of the common superior (anterior) bridging leaflet into left and right components is caused by extensive attachment of the superior (anterior) bridging leaflet to the crest of the ventricular septum by chordae tendineae. Rastelli type B: Rare, involves anomalous papillary muscle attachment from the right side of the ventricular septum to the left side of the common superior (anterior) bridging leaflet. Rastelli type C: Marked bridging of

the ventricular septum by the superior (anterior) bridging leaflet, which floats freely (often termed a "free-floater") over the ventricular septum without chordal attachment to the crest of the ventricular septum.

110	AVC (AVSD), Intermediate (transitional)	An AVC with two distinct left and right AV valve orifices but also with both an ASD just above and a VSD just below the AV valves. While these AV valves in the intermediate form do form two separate orifices they remain abnormal valves. The VSD is often restrictive.
120	AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum)	An AVC with an ostium primum ASD (a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve) and varying degrees of malformation of the left AV valve leading to varying degrees of left AV valve regurgitation. No VSD is present.
140	AP window (aortopulmonary window)	Indicate if the patient has the diagnosis of "AP window (aortopulmonary window)". An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)
150	Pulmonary artery origin from ascending aorta (hemitruncus)	One pulmonary artery arises from the ascending aorta and the other pulmonary artery arises from the right ventricle. DOES NOT include origin of the right or left pulmonary artery from the innominate artery or the aortic arch via a patent ductus arteriosus or collateral

artery.

160	Truncus arteriosus	Indicate if the patient has the diagnosis of "Truncus arteriosus". A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. Often, the infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. In such instances, there may be no ventricular septal defect or a very small ventricular septal defect, in which case the left ventricle and mitral valve may be extremely hypoplastic.
170	Truncal valve insufficiency	Functional abnormality - insufficiency - of the truncal valve. May be further subdivided into grade of insufficiency (I, II, III, IV or mild, moderate, severe).
2010	Truncus arteriosus + Interrupted aortic arch	Indicate if the patient has the diagnosis of "Truncus arteriosus + Interrupted aortic arch". {A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. The infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. If in such case there is no ventricular septal defect, then the left ventricle and mitral valve may be extremely hypoplastic.} {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.}
180	Partial anomalous pulmonary venous connection (PAPVC)	Some, but not all of the pulmonary veins connect to the right atrium or to one or more of its venous tributaries. This definition excludes sinus venosus defects with normally connected but abnormally draining pulmonary veins (the pulmonary veins may drain abnormally into

the right atrium via the atrial septal defect).

190	Partial anomalous pulmonary venous connection (PAPVC), scimitar	The right pulmonary vein(s) connect anomalously to the inferior vena cava or to the right atrium at the insertion of the inferior vena cava. The descending vertical vein resembles a scimitar (Turkish sword) on frontal chest x-ray. Frequently associated with: hypoplasia of the right lung with bronchial anomalies; dextroposition and/or dextrorotation of the heart; hypoplasia of the right pulmonary artery; and anomalous subdiaphragmatic systemic arterial supply to the lower lobe of the right lung directly from the aorta or its main branches.
200	Total anomalous pulmonary venous connection (TAPVC), Type 1 (supracardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 1 (supracardiac) TAPVC, the anomalous connection is at the supracardiac level and can be obstructed or nonobstructed.
210	Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 2 (cardiac) TAPVC, the anomalous connection is to the heart, either to the right atrium directly or to the coronary sinus. Most patients with type 2 TAPVC are nonobstructed.
220	Total anomalous pulmonary venous connection (TAPVC), Type 3 (infracardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 3 (infracardiac) TAPVC, the anomalous connection is at the infracardiac level (below the diaphragm), with the pulmonary venous return entering the right atrium ultimately via the inferior vena cava. In the vast majority of patients infracardiac TAPVC is obstructed.
230	Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 4 (mixed) TAPVC, the anomalous connection is at two or more of the above levels (supracardiac, cardiac, infracardiac) and can be obstructed or nonobstructed.
250	Cor triatriatum	In the classic form of cor triatriatum a membrane divides the left atrium (LA) into a posterior accessory chamber that receives the pulmonary veins and an anterior chamber (LA) that communicates with the mitral valve. In differentiating cor triatriatum from supravalvar mitral ring, in cor triatriatum the posterior compartment contains the pulmonary veins while the anterior contains the left atrial appendage and the mitral valve orifice; in supravalvar mitral ring, the anterior

compartment contains only the mitral valve orifice. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.

260	Pulmonary venous stenosis	Any pathologic narrowing of one or more pulmonary veins. Can be further subdivided by etiology (congenital, acquired-postoperative, acquired-nonpostoperative) and extent of stenosis (diffusely hypoplastic, long segment focal/tubular stenosis, discrete stenosis).
270	Systemic venous anomaly	Anomalies of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from one or more anomalies of origin, duplication, course, or connection. Examples include abnormal or absent right SVC with LSVC, bilateral SVC, interrupted right or left IVC, azygos continuation of IVC, and anomalies of hepatic drainage. Bilateral SVC may have, among other configurations: 1) RSVC draining to the RA and the LSVC to the LA with completely unroofed coronary sinus, 2) RSVC draining to the RA and LSVC to the coronary sinus which drains (normally) into the RA, or 3) RSVC to the coronary sinus which drains (abnormally) into the LA and LSVC to LA. Anomalies of the inferior vena caval system include, among others: 1) left IVC to LA, 2) biatrial drainage, or 3) interrupted IVC (left or right) with azygos continuation to an LSVC or RSVC.
280	Systemic venous obstruction	Obstruction of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from congenital or acquired stenosis or occlusion. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.
290	TOF	Indicate if the patient has the diagnosis of "TOF". Only use this diagnosis if it is NOT known if the patient has one of the following four more specific diagnoses: (1). "TOF, Pulmonary stenosis", (2). "TOF, AVC (AVSD)", (3). "TOF, Absent pulmonary valve", (4). "Pulmonary atresia, VSD (Including TOF, PA)", or (5). "Pulmonary atresia, VSD-MAPCA (pseudotruncus)". {"TOF" is "Tetralogy of Fallot" and is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal

defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy.} (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")

2140	TOF, Pulmonary stenosis	Indicate if the patient has the diagnosis of "TOF, Pulmonary stenosis". Use this diagnosis if the patient has tetralogy of Fallot and pulmonary stenosis. Do not use this diagnosis if the patient has tetralogy of Fallot and pulmonary atresia. Do not use this diagnosis if the patient has tetralogy of Fallot and absent pulmonary valve. Do not use this diagnosis if the patient has tetralogy of Fallot and atrioventricular canal. {Tetralogy of Fallot is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4

(Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")}

| 300 | TOF, AVC (AVSD) | TOF with complete common atrioventricular canal defect is a rare variant of common atrioventricular canal defect with the associated conotruncal abnormality of TOF. The anatomy of the endocardial cushion defect is that of Rastelli type C in almost all cases. |
| 310 | TOF, Absent pulmonary valve | Indicate if the patient has the diagnosis of "TOF, Absent pulmonary valve". "TOF, Absent pulmonary valve" is "Tetralogy of Fallot with Absent pulmonary valve" and is defined as a malformation with all of the morphologic characteristics of tetralogy of Fallot (anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta), in which the ventriculo-arterial junction of the right ventricle with the main pulmonary artery features an atypical valve with rudimentary cusps that lack the anatomical semi-lunar features of normal valve cusps and which functionally do not achieve central coaptation. The physiologic consequence is usually a combination of variable degrees of both stenosis and regurgitation of the pulmonary valve. A developmental accompaniment of this anatomy and physiology is dilation of the main pulmonary artery and central right and left pulmonary arteries, which when extreme, is associated with abnormal arborization of lobar and segmental pulmonary artery branches and with compression of the trachea and mainstem bronchi. One theory holds that absence of the arterial duct or ductal ligament (which is a nearly constant finding in cases of tetralogy of Fallot |

with absent pulmonary valve) in combination with pulmonary `valve stenosis and regurgitation, comprise the physiologic conditions which predispose to central pulmonary artery dilation during fetal development. (Tetralogy of Fallot with Absent Pulmonary Valve Syndrome is a term frequently used to describe the clinical presentation when it features both circulatory alterations and respiratory distress secondary to airway compression.)

320	Pulmonary atresia	Pulmonary atresia defects which do not readily fall into pulmonary atresia-intact ventricular septum or pulmonary atresia-VSD (with or without MAPCAs) categories. These may include complex lesions in which pulmonary atresia is a secondary diagnosis, for example, complex single ventricle malformations with associated pulmonary atresia.
330	Pulmonary atresia, IVS	Pulmonary atresia (PA) and intact ventricular septum (IVS) is a duct-dependent congenital malformation that forms a spectrum of lesions including atresia of the pulmonary valve, a varying degree of right ventricle and tricuspid valve hypoplasia, and anomalies of the coronary circulation. An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis. Associated Ebstein's anomaly of the tricuspid valve can be present; the tricuspid diameter is enlarged and the prognosis is poor.
340	Pulmonary atresia, VSD (Including TOF, PA)	Pulmonary atresia (PA) and ventricular septal defect (VSD) is a heterogeneous group of congenital cardiac malformations in which there is lack of luminal continuity and absence of blood flow from either ventricle (in cases with ventriculo-arterial discordance) and the pulmonary artery, in a biventricular heart that has an opening or a hole in the interventricular septum (VSD). The malformation forms a spectrum of lesions including tetralogy of Fallot with pulmonary atresia. Tetralogy of Fallot with PA is a specific type of PA-VSD where the intracardiac malformation is more accurately defined (extreme underdevelopment of the RV infundibulum with marked anterior and leftward displacement of the infundibular septum often fused with the anterior wall of the RV resulting in complete obstruction of blood flow into the pulmonary artery and associated with a large outlet, subaortic ventricular septal defect). In the vast majority of cases of PA-VSD the intracardiac anatomy is that of TOF. The pulmonary circulation in PA-VSD is variable in terms of origin of blood flow, presence or absence of native pulmonary arteries, presence or absence of major aortopulmonary collateral arteries (MAPCA(s)), and distal distribution (pulmonary parenchymal segment arborization) abnormalities. Native pulmonary arteries may be present or absent. If MAPCAs are present this code

should not be used; instead, Pulmonary atresia, VSD-MAPCA (pseudotruncus) should be used.

350	Pulmonary atresia, VSD-MAPCA	MAPCA(s) are large and distinct arteries, highly variable in number, that usually arise from the descending thoracic aorta, but uncommonly may originate from the aortic arch or the subclavian, carotid or even the coronary arteries. MAPCA(s) may be associated with present or absent native pulmonary arteries. If present, the native pulmonary arteries may be hypoplastic, and either confluent or nonconfluent. Systemic pulmonary collateral arteries have been categorized into 3 types based on their site of origin and the way they connect to the pulmonary circulation: direct aortopulmonary collaterals, indirect aortopulmonary collaterals, and true bronchial arteries. Only the first two should be considered MAPCA(s). If MAPCA(s) are associated with PA-VSD or TOF, PA this code should be used.
360	MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD)	Rarely MAPCA(s) may occur in patents who do not have PA-VSD, but have severe pulmonary stenosis. The intracardiac anatomy in patients who have MAPCA(s) without PA should be specifically coded in each case as well.
370	Ebstein's anomaly	Indicate if the patient has the diagnosis of "Ebstein's anomaly". Ebstein's anomaly is a malformation of the tricuspid valve and right ventricle that is characterized by a spectrum of several features: (1) incomplete delamination of tricuspid valve leaflets from the myocardium of the right ventricle; (2) downward (apical) displacement of the functional annulus; (3) dilation of the "atrialized" portion of the right ventricle with variable degrees of hypertrophy and thinning of the wall; (4) redundancy, fenestrations, and tethering of the anterior leaflets; and (5) dilation of the right atrioventricular junction (the true tricuspid annulus). These anatomical and functional abnormalities cause tricuspid regurgitation (and rarely tricuspid stenosis) that results in right atrial and right ventricular dilation and atrial and ventricular arrhythmias. With increasing degrees of anatomic severity of malformation, the fibrous transformation of leaflets from their muscular precursors remains incomplete, with the septal leaflet being most severely involved, the posterior leaflet less severely involved, and the anterior leaflet usually the least severely involved. Associated cardiac anomalies include an interatrial communication, the presence of accessory conduction pathways often associated with Wolff-Parkinson-White syndrome, and dilation of the right atrium and right ventricle in patients with severe Ebstein's anomaly. (Varying degrees of right ventricular outflow tract obstruction may be present, including pulmonary atresia in some cases. Such cases of Ebstein's anomaly with pulmonary atresia should be

coded with a Primary Diagnosis of "Ebstein's anomaly", and a Secondary Diagnosis of "Pulmonary atresia".) (Some patients with atrioventricular discordance and ventriculoarterial discordance in situs solitus [congenitally corrected transposition] have an Ebstein-like deformity of the left-sided morphologically tricuspid valve. The nature of the displacement of the septal and posterior leaflets is similar to that in right-sided Ebstein's anomaly in patients with atrioventricular concordance and ventriculoarterial concordance in situs solitus. These patients with "Congenitally corrected TGA" and an Ebstein-like deformity of the left-sided morphologically tricuspid valve should be coded with a Primary Diagnosis of "Congenitally corrected TGA", and a Secondary Diagnosis of "Ebstein's anomaly".)

380	Tricuspid regurgitation, non-Ebstein's related	Non-Ebstein's tricuspid regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, absent papillary muscle/chordae) or acquired (post cardiac surgery or secondary to rheumatic fever, endocarditis, trauma, tumor, cardiomyopathy, iatrogenic or other causes).
390	Tricuspid stenosis	Tricuspid stenosis may be due to congenital factors (valvar hypoplasia, abnormal subvalvar apparatus, double-orifice valve, parachute deformity) or acquired (post cardiac surgery or secondary to carcinoid, rheumatic fever, tumor, systemic disease, iatrogenic, or other causes).
400	Tricuspid regurgitation and tricuspid stenosis	Tricuspid regurgitation present with tricuspid stenosis may be due to congenital factors or acquired.
410	Tricuspid valve, Other	Tricuspid valve pathology not otherwise specified in diagnosis definitions 370, 380, 390 and 400.
420	Pulmonary stenosis, Valvar	Pulmonary stenosis, Valvar ranges from critical neonatal pulmonic valve stenosis with hypoplasia of the right ventricle to valvar pulmonary stenosis in the infant, child, or adult, usually better tolerated but potentially associated with infundibular stenosis. Pulmonary branch hypoplasia can be associated. Only 10% of neonates with Pulmonary stenosis, Valvar with intact ventricular septum have RV-to-coronary artery fistula(s). An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis; this occurs in only 2% of neonates with Pulmonary stenosis, Valvar with IVS.
430	Pulmonary artery stenosis (hypoplasia), Main (trunk)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis (hypoplasia), Main (trunk)". "Pulmonary artery stenosis (hypoplasia), Main (trunk)" is defined as a congenital or acquired anomaly with pulmonary trunk (main pulmonary artery) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Since the narrowing is distal

to the pulmonic valve, it may also be known as supravalvar pulmonary stenosis.

440	Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)" is defined as a congenital or acquired anomaly with central pulmonary artery branch (within the hilar bifurcation involving the right or left pulmonary artery, or both) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Coarctation of the pulmonary artery is related to abnormal extension of the ductus arteriosus into a pulmonary branch, more frequently the left branch.
450	Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)" is defined as a congenital or acquired anomaly with peripheral pulmonary artery narrowing or hypoplasia (at or beyond the hilar bifurcation). The stenosis or hypoplasia may be isolated or associated with other cardiac lesions.
470	Pulmonary artery, Discontinuous	Indicate if the patient has the diagnosis of "Pulmonary artery, Discontinuous". Pulmonary artery, Discontinuous" is defined as a congenital or acquired anomaly with discontinuity between the branch pulmonary arteries or between a branch pulmonary artery and the main pulmonary artery trunk.
490	Pulmonary stenosis, Subvalvar	Subvalvar (infundibular) pulmonary stenosis is a narrowing of the outflow tract of the right ventricle below the pulmonic valve. It may be due to a localized fibrous diaphragm just below the valve, an obstructing muscle bundle or to a long narrow fibromuscular channel.
500	DCRV	The double chambered right ventricle is characterized by a low infundibular (subvalvar) stenosis rather than the rare isolated infundibular stenosis that develops more superiorly in the infundibulum, and is often associated with one or several closing VSDs. In some cases, the VSD is already closed. The stenosis creates two chambers in the RV, one inferior including the inlet and trabecular portions of the RV and one superior including the infundibulum.
510	Pulmonary valve, Other	Other anomalies of the pulmonary valve may be listed here including but not restricted to absent pulmonary valve.
530	Pulmonary insufficiency	Pulmonary valve insufficiency or regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, etc.) or acquired (for example, post cardiac surgery for repair of tetralogy

of Fallot, etc.).

540	Pulmonary insufficiency and pulmonary stenosis	Pulmonary valve insufficiency and pulmonary stenosis beyond the neonatal period, in infancy and childhood, may be secondary to leaflet tissue that has become thickened and myxomatous. Retraction of the commissure attachment frequently creates an associated supravalvar stenosis.
2130	Shunt failure	Indicate if the patient has the diagnosis of "Shunt failure". This diagnostic subgroup includes failure of any of a variety of shunts ("Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)", "Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)", "Shunt, Systemic to pulmonary, Other", and "Sano Shunt"), secondary to any of the following etiologies: shunt thrombosis, shunt occlusion, shunt stenosis, shunt obstruction, and shunt outgrowth. This diagnosis ("Shunt failure") would be the primary diagnosis in a patient with, for example, "Hypoplastic left heart syndrome (HLHS)" who underwent a "Norwood procedure" with a "Modified Blalock-Taussig Shunt" and now requires reoperation for thrombosis of the "Modified Blalock-Taussig Shunt". The underlying or fundamental diagnosis in this patient is "Hypoplastic left heart syndrome (HLHS)", but the primary diagnosis for the operation to be performed to treat the thrombosis of the "Modified Blalock-Taussig Shunt" would be "Shunt failure".
		Please note that the choice "2130 Shunt failure" does not include "520 Conduit failure".
520	Conduit failure	Indicate if the patient has the diagnosis of "Conduit failure". This diagnostic subgroup includes failure of any of a variety of conduits (ventricular [right or left]-to-PA conduits, as well as a variety of other types of conduits [ventricular {right or left}-to-aorta, RA-to-RV, etc.]), secondary to any of the following etiologies: conduit outgrowth, obstruction, stenosis, insufficiency, or insufficiency and stenosis. This diagnosis ("Conduit failure") would be the primary diagnosis in a patient with, for example, "Truncus arteriosus" repaired in infancy who years later is hospitalized because of conduit stenosis/insufficiency. The underlying or fundamental diagnosis in this patient is "Truncus arteriosus", but the primary diagnosis for the operation to be performed during the hospitalization (in this case, "Conduit reoperation") would be "Conduit failure".
		Please note that the choice "520 Conduit failure" does not include "2130 Shunt failure".
550	Aortic stenosis, Subvalvar	Subaortic obstruction can be caused by different lesions: subaortic membrane or tunnel, accessory mitral valve tissue, abnormal insertion of the mitral anterior

leaflet to the ventricular septum, deviation of the outlet septum (seen in coarctation of the aorta and interrupted aortic arch), or a restrictive bulboventricular foramen in single ventricle complexes. The Shone complex consists of subvalvar aortic stenosis in association with supravalvar mitral ring, parachute mitral valve, and coarctation of aorta. Subvalvar aortic stenosis may be categorized into two types: localized subvalvar aortic stenosis, which consists of a fibrous or fibromuscular ridge, and diffuse tunnel subvalvar aortic stenosis, in which circumferential narrowing commences at the annular level and extends downward for 1-3 cm. Idiopathic hypertrophic subaortic stenosis (IHSS) is also known as hypertrophic obstructive cardiomyopathy (HOCM), and is characterized by a primary hypertrophy of the myocardium. The obstructive forms involve different degrees of dynamic subvalvar aortic obstruction from a thickened ventricular wall and anterior motion of the mitral valve. Definitive nomenclature and therapeutic options for IHSS are listed under cardiomyopathy.

| 560 | Aortic stenosis, Valvar | Valvar aortic stenosis may be congenital or acquired. In its congenital form there are two types: critical (infantile), seen in the newborn in whom systemic perfusion depends on a patent ductus arteriosus, and noncritical, seen in infancy or later. Acquired valvar stenosis may be seen after as a result of rheumatic valvar disease, or from stenotic changes of an aortic valve prosthesis. Congenital valvar stenosis may result: (1) from complete fusion of commissures (acommissural) that results in a dome-shaped valve with a pinpoint opening (seen most commonly in infants with critical aortic valve stenosis); (2) from a unicommissural valve with one defined commissure and eccentric orifice (often with two raphes radiating from the ostium indicating underdeveloped commissures of a tricuspid aortic valve); (3) from a bicuspid aortic valve, with leaflets that can be equal in size or discrepant, and in left-right or anterior-posterior position; and finally (4) from a dysplastic tricuspid valve, which may have a gelatinous appearance with thick rarely equal in size leaflets, often obscuring the commissures. The dysplastic, tricuspid or bicuspid form of aortic valve deformity may not be initially obstructive but may become stenotic later in life due to leaflet thickening and calcification. |

| 570 | Aortic stenosis, Supravalvar | Congenital supravalvar aortic stenosis is described as three forms: an hourglass deformity, a fibrous membrane, and a diffuse narrowing of the ascending aorta. The disease can be inherited as an autosomal dominant trait or part of Williams-Beuren syndrome in association with mental retardation, elfin facies, failure to thrive, and occasionally infantile hypercalcemia. |

Supravalvar aortic stenosis may involve the coronary artery ostia, and the aortic leaflets may be tethered. The coronary arteries can become tortuous and dilated due to elevated pressures and early atherosclerosis may ensue. Supravalvar aortic stenosis may also be acquired: (1) after a neoaortic reconstruction such as arterial switch, Ross operation, or Norwood procedure; (2) at a suture line from a previous aortotomy or cannulation; and (3) from a narrowed conduit.

590   Aortic valve atresia

Aortic valve atresia will most often be coded under the Hypoplastic left heart syndrome/complex diagnostic codes since it most often occurs as part of a spectrum of cardiac malformations. However, there is a small subset of patients with aortic valve atresia who have a well-developed left ventricle and mitral valve and a large VSD (nonrestrictive or restrictive). The diagnostic code "Aortic valve atresia" enables users to report those patients with aortic valve atresia and a well-developed systemic ventricle without recourse to either a hypoplastic left heart syndrome/complex diagnosis or a single ventricle diagnosis.

600   Aortic insufficiency

Congenital aortic regurgitation/insufficiency is rare as an isolated entity. There are rare reports of congenital malformation of the aortic valve that result in aortic insufficiency shortly after birth from an absent or underdeveloped aortic valve cusp. Aortic insufficiency is more commonly seen with other associated cardiac anomalies: (1) in stenotic aortic valves (commonly stenotic congenital bicuspid aortic valves) with some degree of aortic regurgitation due to aortic leaflet abnormality; (2) in association with a VSD (especially in supracristal or conal type I VSD, more commonly seen in Asian populations); (3) secondary to aortic-left ventricular tunnel; (4) secondary to tethering or retraction of aortic valve leaflets in cases of supravalvar aortic stenosis that may involve the aortic valve; and similarly (5) secondary to encroachment on an aortic cusp by a subaortic membrane; or (6) turbulence caused by a stenotic jet can create progressive aortic regurgitation. Aortic insufficiency may also result from: (1) post-procedure such as closed or open valvotomy or aortic valve repair, VSD closure, balloon valvotomy, or diagnostic catheterization; (2) in the neo-aorta post arterial switch, pulmonary autograft (Ross) procedure, homograft placement, Norwood procedure, or Damus-Kaye-Stansel procedure; (3) as a result of endocarditis secondary to perforated or prolapsed leaflets or annular dehiscence; (4) secondary to annulo-aortic ectasia with prolapsed or noncoapting leaflets; (5) secondary to trauma, blunt or penetrating; or (6) as a result of aortitis, bacterial, viral or autoimmune. Aortic regurgitation secondary to prosthetic failure should be coded first as either conduit failure or prosthetic valve

failure, as applicable, and secondarily as aortic regurgitation secondary to prosthetic failure (perivalvar or due to structural failure). The underlying fundamental diagnosis that led to the initial conduit or valve prosthesis placement should also be described.

610	Aortic insufficiency and aortic stenosis	Aortic insufficiency is often seen in association with stenotic aortic valve, commonly the stenotic congenital bicuspid aortic valve. The degree of aortic regurgitation is due to the severity of the aortic leaflet abnormality.
620	Aortic valve, Other	This diagnostic subgroup may be used to delineate aortic valve cusp number (unicuspid, bicuspid, tricuspid, more than three cusps), commissural fusion (normal, partially fused, completely fused), and valve leaflet (normal, thickened, dysplastic, calcified, gelatinous), annulus (normal, hypoplastic, calcified), or sinus description (normal, dilated). Note that any extensive descriptors chosen within those made available by a vendor will be converted, at harvest, to Aortic valve, Other.
630	Sinus of Valsalva aneurysm	The sinus of Valsalva is defined as that portion of the aortic root between the aortic root annulus and the sinotubular ridge. A congenital sinus of Valsalva aneurysm is a dilation usually of a single sinus of Valsalva. These most commonly originate from the right sinus (65%-85%), less commonly from the noncoronary sinus (10%-30%), and rarely from the left sinus (<5%). A true sinus of Valsalva aneurysm presents above the aortic annulus. The hierarchical coding system distinguishes between congenital versus acquired, ruptured versus nonruptured, sinus of origin, and chamber/site of penetration (right atrium, right ventricle, left atrium, left ventricle, pulmonary artery, pericardium). A nonruptured congenital sinus of Valsalva aneurysm may vary from a mild dilation of a single aortic sinus to an extensive windsock deformity. Rupture of a congenital sinus of Valsalva aneurysm into an adjacent chamber occurs most commonly between the ages of 15-30 years. Rupture may occur spontaneously, after trauma, after strenuous physical exertion, or from acute bacterial endocarditis. Congenital etiology is supported by the frequent association of sinus of Valsalva aneurysms with VSDs. Other disease processes are also associated with sinus of Valsalva aneurysm and include: syphilis, endocarditis, cystic medial necrosis, atherosclerosis, and trauma. Acquired sinus of Valsalva aneurysms more frequently involve multiple sinuses of Valsalva; when present in multiple form they are more appropriately classified as aneurysms of the aortic root.
640	LV to aorta tunnel	The aortico-left ventricular tunnel (LV-to-aorta tunnel) is an abnormal paravalvular (alongside or in the vicinity of a valve) communication between the aorta and left

ventricle, commonly divided into 4 types: (1) type I, a simple tunnel with a slit-like opening at the aortic end and no aortic valve distortion; (2) type II, a large extracardiac aortic wall aneurysm of the tunnel with an oval opening at the aortic end, with or without ventricular distortion; (3) type III, intracardiac aneurysm of the septal portion of the tunnel, with or without right ventricular outflow obstruction; and (4) type IV, a combination of types II and III. Further differentiation within these types may be notation of right coronary artery arising from the wall of the tunnel. If a LV-to-aorta tunnel communicates with the right ventricle, many feel that the defect is really a ruptured sinus of Valsalva aneurysm.

| 650 | Mitral stenosis, Supravalvar mitral ring | Supravalvar mitral ring is formed by a circumferential ridge of tissue that is attached to the anterior mitral valve leaflet (also known as the aortic leaflet) slightly below its insertion on the annulus and to the atrium slightly above the attachment of the posterior mitral valve leaflet (also known as the mural leaflet). Depending on the diameter of the ring orifice, varying degrees of obstruction exist. The underlying valve is usually abnormal and frequently stenotic or hypoplastic. Supravalvar mitral ring is commonly associated with other stenotic lesions such as parachute or hammock valve (subvalvar stenosis), papillary muscle fusion (subvalvar stenosis), and double orifice mitral valve (valvar stenosis). Differentiation from cor triatriatum focuses on the compartments created by the supravalvar ring. In cor triatriatum the posterior compartment contains the pulmonary veins; the anterior contains the left atrial appendage and the mitral valve orifice. In supravalvar mitral ring, the posterior compartment contains the pulmonary veins and the left atrial appendage; the anterior compartment contains only the mitral valve orifice. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect. |
| 660 | Mitral stenosis, Valvar | Valvar mitral stenosis may arise from congenital (annular and / or leaflet) or acquired causes, both surgical (after mitral valve repair or replacement or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia, myxomatous degeneration, trauma, or cardiomyopathy). Mitral valve annular hypoplasia is distinguished from severe mitral valve hypoplasia and mitral valve atresia, which are typically components of hypoplastic left heart syndrome. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect. |

670	Mitral stenosis, Subvalvar	Congenital subvalvar mitral stenosis may be due to obstructive pathology of either the chordae tendineae and / or papillary muscles which support the valve leaflets. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
680	Mitral stenosis, Subvalvar, Parachute	In parachute mitral valve, all chordae are attached to a single papillary muscle originating from the posterior ventricular wall. When the interchordal spaces are partially obliterated valvar stenosis results. This defect also causes valvar insufficiency, most commonly due to a cleft leaflet, a poorly developed anterior leaflet, short chordae, or annular dilation. This lesion is also part of Shone's anomaly, which consists of the parachute mitral valve, supravalvar mitral ring, subaortic stenosis, and coarctation of the aorta. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
695	Mitral stenosis	Stenotic lesions of the mitral valve not otherwise specified in the diagnosis definitions 650, 660, 670, and 680.
700	Mitral regurgitation and mitral stenosis	Mitral regurgitation and mitral stenosis may arise from congenital or acquired causes or after cardiac surgery. Additional details to aid in coding specific components of the diagnosis are available in the individual mitral stenosis or mitral regurgitation field definitions. When coding multiple mitral valve lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
710	Mitral regurgitation	Mitral regurgitation may arise from congenital (at the annular, leaflet or subvalvar level) or acquired causes both surgical (after mitral valve repair or replacement, subaortic stenosis repair, atrioventricular canal repair, cardiac transplantation, or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia (with chordal rupture or papillary muscle infarct), myxomatous degeneration including Barlow's syndrome, trauma, or cardiomyopathy). Congenital lesions at the annular level include annular dilation or deformation (usually deformation is consequent to associated lesions). At the valve leaflet level, mitral regurgitation may be due to a cleft, hypoplasia or agenesis of leaflet(s), excessive leaflet tissue, or a double orifice valve. At the subvalvar level, mitral regurgitation may be secondary to chordae tendineae anomalies (agenesis, rupture, elongation, or shortening as in funnel valve), or to papillary muscle anomalies (hypoplasia or agenesis, shortening,

elongation, single-parachute, or multiple-hammock valve). When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

720	Mitral valve, Other	Mitral valve pathology not otherwise coded in diagnosis definitions 650 through 710.
730	Hypoplastic left heart syndrome (HLHS)	Hypoplastic left heart syndrome (HLHS) is a spectrum of cardiac malformations characterized by a severe underdevelopment of the left heart-aorta complex, consisting of aortic and/or mitral valve atresia, stenosis, or hypoplasia with marked hypoplasia or absence of the left ventricle, and hypoplasia of the ascending aorta and of the aortic arch with coarctation of the aorta. Hypoplastic left heart complex is a subset of patients at the favorable end of the spectrum of HLHS characterized by hypoplasia of the structures of the left heart-aorta complex, consisting of aortic and mitral valve hypoplasia without valve stenosis or atresia, hypoplasia of the left ventricle, hypoplasia of the left ventricular outflow tract, hypoplasia of the ascending aorta and of the aortic arch, with or without coarctation of the aorta.
2080	Shone's syndrome	Shone's syndrome is a syndrome of multilevel hypoplasia and obstruction of left sided cardiovascular structures including more than one of the following lesions: (1) supravalvar ring of the left atrium, (2) a parachute deformity of the mitral valve, (3) subaortic stenosis, and (4) aortic coarctation. The syndrome is based on the original report from Shone [1] that was based on analysis of 8 autopsied cases and described the tendency of these four obstructive, or potentially obstructive, conditions to coexist. Only 2 of the 8 cases exhibited all four conditions, with the other cases exhibiting only two or three of the anomalies [2]. [1] Shone JD, Sellers RD, Anderson RG, Adams P, Lillehei CW, Edwards JE. The developmental complex of "parachute mitral valve", supravalvar ring of left atrium, subaortic stenosis, and coarctation of the aorta. Am J Cardiol 1963; 11: 714–725. [2]. Tchervenkov CI, Jacobs JP, Weinberg PM, Aiello VD, Beland MJ, Colan SD, Elliott MJ, Franklin RC, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G. The nomenclature, definition and classification of hypoplastic left heart syndrome. Cardiology in the Young, 2006; 16(4): 339–368, August 2006. Please note that the term "2080 Shone's syndrome" may be the "Fundamental Diagnosis" of a patient; however, the term "2080 Shone's syndrome" may not be the "Primary Diagnosis" of an operation. The term "2080 Shone's syndrome" may be a "Secondary Diagnosis" of an operation.

740	Cardiomyopathy (including dilated, restrictive, and hypertrophic)	Cardiomyopathy is a term applied to a wide spectrum of cardiac diseases in which the predominant feature is poor myocardial function in the absence of any anatomic abnormalities. Cardiomyopathies can be divided into three relatively easily distinguishable entities: (1) dilated, characterized by ventricular dilation and systolic dysfunction; (2) hypertrophic, characterized by physiologically inappropriate hypertrophy of the left ventricle; and (3) restrictive, characterized by diastolic dysfunction, with a presentation often identical to constrictive pericarditis. Also included in this diagnostic category are patients with a cardiomyopathy or syndrome confined to the right ventricle, for example: (1) arrhythmogenic right ventricular dysplasia; (2) Uhl's syndrome (hypoplasia of right ventricular myocardium, parchment heart); or (3)
750	Cardiomyopathy, End-stage congenital heart disease	Myocardial abnormality in which there is systolic and/or diastolic dysfunction in the presence of structural congenital heart disease without any (or any further) surgically correctable lesions.
760	Pericardial effusion	Inflammatory stimulation of the pericardium that results in the accumulation of appreciable amounts of pericardial fluid (also known as effusive pericarditis). The effusion may be idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced).
770	Pericarditis	Inflammatory process of the pericardium that leads to either (1) effusive pericarditis with accumulation of appreciable amounts of pericardial fluid or (2) constrictive pericarditis that leads to pericardial thickening and compression of the cardiac chambers, ultimately with an associated significant reduction in cardiac function. Etiologies are varied and include idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced) pericarditis.
780	Pericardial disease, Other	A structural or functional abnormality of the visceral or parietal pericardium that may, or may not, have a significant impact on cardiac function. Included are absence or partial defects of the pericardium.
790	Single ventricle, DILV	A congenital cardiac malformation in which both atria connect to a single, morphologically left ventricle. The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart". The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to

partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

800	Single ventricle, DIRV	A congenital cardiac malformation in which both atria connect to a single, morphologically right ventricle

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The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be

considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

810   Single ventricle, Mitral atresia   A congenital cardiac malformation in which there is no orifice of mitral valve

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The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML,

Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

| 820 | Single ventricle, Tricuspid atresia |

A congenital cardiac malformation in which there is no orifice of tricuspid valve.

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Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 -

21, February 2006.

| 830 | Single ventricle, Unbalanced AV canal | Single ventricle anomalies with a common atrioventricular (AV) valve and only one completely well developed ventricle. If the common AV valve opens predominantly into the morphologic left ventricle, the defect is termed a left ventricular (LV)–type or LV-dominant AV septal defect. If the common AV valve opens predominantly into the morphologic right ventricle, the defect is termed a right ventricular (RV)–type or RV-dominant AV septal defect. |

The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart".

The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

| 840 | Single ventricle, Heterotaxia syndrome | "Heterotaxia syndrome" is synonymous with "heterotaxy", "visceral heterotaxy", and "heterotaxy syndrome". Heterotaxy is defined as an abnormality where the internal thoraco-abdominal organs demonstrate abnormal arrangement across the left-right axis of the body. By convention, heterotaxy does not include patients with either the expected usual or normal arrangement of the internal organs along the left-right axis, also known as 'situs solitus', nor patients with complete mirror-imaged arrangement of the internal organs along the left-right axis also known as 'situs inversus'. |

The version of the IPCCC derived from the

International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart".

The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

850	Single ventricle, Other	If the single ventricle is of primitive or indeterminate type, other is chosen in coding. It is recognized that a considerable variety of other structural cardiac malformations (e.g., biventricular hearts with straddling atrioventricular valves, pulmonary atresia with intact ventricular septum, some complex forms of double outlet right ventricle) may at times be best managed in a fashion similar to that which is used to treat univentricular hearts. They are not to be coded in this section of the nomenclature, but according to the underlying lesions.

The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature |

and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart".

The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

851	Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)	Indicate if the patient has the diagnosis of "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)". In the event of Single Ventricle occurring in association with Total anomalous pulmonary venous connection (TAPVC), code "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)", and then use additional (secondary) diagnostic codes to describe the Single Ventricle and the Total anomalous pulmonary venous connection (TAPVC) separately to provide further documentation about the Single Ventricle and Total anomalous pulmonary venous connection (TAPVC) types. {"Total anomalous pulmonary venous connection (TAPVC)" is defined as a heart where all of the pulmonary veins connect anomalously with the right

atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium.}

The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart".

The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

870	Congenitally corrected TGA	Indicate if the patient has the diagnosis of "Congenitally corrected TGA". Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1]

Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.

| 872 | Congenitally corrected TGA, IVS | Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS". "Congenitally corrected TGA, IVS" is "Congenitally corrected transposition with an intact ventricular septum", in other words, "Congenitally corrected transposition with no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.) |
| 874 | Congenitally corrected TGA, IVS-LVOTO | Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS-LVOTO". "Congenitally corrected TGA, IVS-LVOTO" is "Congenitally corrected transposition with an intact ventricular septum and left ventricular outflow tract obstruction", in other words, "Congenitally corrected transposition with left ventricular outflow tract obstruction and no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically |

inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

| 876 | Congenitally corrected TGA, VSD | Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD". "Congenitally corrected TGA, VSD" is "Congenitally corrected transposition with a VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.) |
| 878 | Congenitally corrected TGA, VSD-LVOTO | Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD-LVOTO". "Congenitally corrected TGA, VSD-LVOTO" is "Congenitally corrected transposition with a VSD and left ventricular outflow tract obstruction". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, |

Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

880	TGA, IVS	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
890	TGA, IVS-LVOTO	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum and associated left ventricular obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
900	TGA, VSD	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
910	TGA, VSD-LVOTO	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects and left ventricular outflow tract obstruction. There may

be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

930	DORV, VSD type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, VSD type, there is an associated subaortic or doubly-committed VSD and no pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
940	DORV, TOF type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TOF type, there is an associated subaortic or doubly-committed VSD and pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). DORV can occur in association with pulmonary atresia, keeping in mind in coding that in the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles (in this situation DORV is coded as a primary diagnosis). Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate Single ventricle listing.
950	DORV, TGA type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TGA type, there is an associated subpulmonary VSD. Most frequently, there is no pulmonary outflow tract obstruction (Taussig-Bing

heart). The aorta is usually to the right and slightly anterior to or side-by-side with the pulmonary artery. Associated aortic outflow tract stenosis (subaortic, aortic arch obstruction) is commonly associated with the Taussig-Bing heart and if present should be coded as a secondary diagnosis. Rarely, there is associated pulmonary outflow tract obstruction. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

960	DORV, Remote VSD (uncommitted VSD)	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, Remote VSD type, there is a remote or noncommitted VSD. The VSD is far removed from both the aortic and pulmonary valves, usually within the inlet septum. Many of these VSD's are in hearts with DORV and common atrioventricular canal/septal defect. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
2030	DORV + AVSD (AV Canal)	Indicate if the patient has the diagnosis of "DORV + AVSD (AV Canal)". In the event of DORV occurring in association with AVSD (AV Canal), code "DORV + AVSD (AV Canal)", and then use additional (secondary) diagnostic codes to describe the DORV and the AVSD (AV Canal) separately to provide further documentation about the DORV and AVSD (AV Canal) types. {"DORV" is "Double outlet right ventricle" and is defined as a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle.} In this case, the DORV exists in combination with an atrioventricular septal defect and common atrioventricular junction guarded by a common atrioventricular valve.
975	DORV, IVS	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In the rare case of double outlet right ventricle with IVS the ventricular septum is intact. In the nomenclature developed for DORV, there must be usual atrial

arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connections with DORV are to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

980	DOLV	Double outlet left ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the left ventricle. In the nomenclature developed for DOLV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DOLV is to be coded under congenitally corrected TGA. DOLV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
990	Coarctation of aorta	Indicate if the patient has the diagnosis of "Coarctation of aorta". A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.
1000	Aortic arch hypoplasia	Hypoplasia of the aortic arch is hypoplasia of the proximal or distal transverse arch or the aortic isthmus. The isthmus (arch between the left subclavian and insertion of the patent ductus arteriosus / ligamentum arteriosum) is hypoplastic if its diameter is less than 40% of the diameter of the ascending aorta. The proximal transverse arch (arch between the innominate and left carotid arteries) and distal transverse arch (arch between the left carotid and left subclavian arteries) are hypoplastic if their diameters are less than 60% and 50%, respectively, of the diameter of the ascending aorta.
92	VSD + Aortic arch hypoplasia	A ventricular septal defect, any type, associated with hypoplasia of the aortic arch. (See diagnosis definition 1000 for a definition of hypoplasia of the aortic arch.)
94	VSD + Coarctation of aorta	Indicate if the patient has the diagnosis of "VSD + Coarctation of aorta". In the event of a VSD occurring in association with Coarctation of aorta, code "VSD + Coarctation of aorta", and then use additional (secondary) diagnostic codes to describe the VSD and the Coarctation of aorta separately to provide further documentation about the individual VSD and Coarctation of aorta types. {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD

is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)} {A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.}

1010	Coronary artery anomaly, Anomalous aortic origin of coronary artery (AAOCA)	Anomalous aortic origins of the coronary arteries include a spectrum of anatomic variations of the normal coronary artery origins. Coronary artery anomalies of aortic origin to be coded under this diagnostic field include: anomalies of take-off (high take-off), origin (sinus), branching, and number. An anomalous course of the coronary artery vessels is also significant, particularly those coronary arteries that arise or course between the great vessels.
1020	Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA)	In patients with anomalous pulmonary origin of the coronary artery, the coronary artery (most commonly the left coronary artery) arises from the pulmonary artery rather than from the aorta. Rarely, the right coronary artery, the circumflex, or both coronary arteries may arise from the pulmonary artery.
1030	Coronary artery anomaly, Fistula	The most common of coronary artery anomalies, a coronary arteriovenous fistula is a communication between a coronary artery and either a chamber of the heart (coronary-cameral fistula) or any segment of the systemic or pulmonary circulation (coronary arteriovenous fistula). They may be congenital or acquired (traumatic, infectious, iatrogenic) in origin, and are mostly commonly seen singly, but occasionally multiple fistulas are present. Nomenclature schemes have been developed that further categorize the fistulas by vessel of origin and chamber of termination, and one angiographic classification scheme by Sakakibara has surgical implications. Coronary artery fistulas can be associated with other congenital heart anomalies such as tetralogy of Fallot, atrial septal defect, ventricular septal defect, and pulmonary atresia with intact ventricular septum, among others. The major cardiac defect should be listed as the primary diagnosis and the coronary artery fistula should be as an additional secondary diagnoses.
1040	Coronary artery anomaly, Aneurysm	Coronary artery aneurysms are defined as dilations of a coronary vessel 1.5 times the adjacent normal coronaries. There are two forms, saccular and fusiform (most common), and both may be single or multiple.

These aneurysms may be congenital or acquired (atherosclerotic, Kawasaki, systemic diseases other than Kawasaki, iatrogenic, infectious, or traumatic) in origin.

1050	Coronary artery anomaly, Other	Coronary artery anomalies which may fall within this category include coronary artery bridging and coronary artery stenosis, as well as secondary coronary artery variations seen in congenital heart defects such as tetralogy of Fallot, transposition of the great arteries, and truncus arteriosus (with the exception of variations that can be addressed by a more specific coronary artery anomaly code).
1070	Interrupted aortic arch	Indicate if the patient has the diagnosis of "Interrupted aortic arch". Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.
2020	Interrupted aortic arch + VSD	Indicate if the patient has the diagnosis of "Interrupted aortic arch + VSD". In the event of interrupted aortic arch occurring in association with VSD, code "Interrupted aortic arch + VSD", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the VSD separately to provide further documentation about the individual interrupted aortic arch and VSD types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)}
2000	Interrupted aortic arch + AP	Indicate if the patient has the diagnosis of "Interrupted

window (aortopulmonary window) | aortic arch + AP window (aortopulmonary window)". In the event of interrupted aortic arch occurring in association with AP window, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the AP window separately to provide further documentation about the individual interrupted aortic arch and AP window types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)}

| | 1080 | Patent ductus arteriosus | Indicate if the patient has the diagnosis of "Patent ductus arteriosus". The ductus arteriosus (arterial duct) is an essential feature of fetal circulation, connecting the main pulmonary trunk with the descending aorta, distal to the origin of the left subclavian artery. In most patients it is on the left side. If a right aortic arch is |

present, it may be on the right or the left; very rarely it is bilateral. When luminal patency of the duct persists post-natally, it is referred to as patent ductus arteriosus (patent arterial duct). The length and diameter may vary considerably from case to case. The media of the ductus consists mainly of smooth muscle that is arranged spirally, and the intima is much thicker than that of the aorta. (A patent ductus arteriosus is a vascular arterial connection between the thoracic aorta and the pulmonary artery. Most commonly a PDA has its origin from the descending thoracic aorta, just distal and opposite the origin of the left subclavian artery. The insertion of the ductus is most commonly into the very proximal left pulmonary artery at its junction with the main pulmonary artery. Origination and insertion sites can be variable, however.)

1090	Vascular ring	The term vascular ring refers to a group of congenital vascular anomalies that encircle and compress the esophagus and trachea. The compression may be from a complete anatomic ring (double aortic arch or right aortic arch with a left ligamentum) or from a compressive effect of an aberrant vessel (innominate artery compression syndrome).
1100	Pulmonary artery sling	In pulmonary artery sling, the left pulmonary artery originates from the right pulmonary artery and courses posteriorly between the trachea and esophagus in its route to the left lung hilum, causing a sling-like compression of the trachea.
1110	Aortic aneurysm (including pseudoaneurysm)	An aneurysm of the aorta is defined as a localized dilation or enlargement of the aorta at any site along its length (from aortic annulus to aortoiliac bifurcation). A true aortic aneurysm involves all layers of the aortic wall. A false aortic aneurysm (pseudoaneurysm) is defined as a dilated segment of the aorta not containing all layers of the aortic wall and may include postoperative or post-procedure false aneurysms at anastomotic sites, traumatic aortic injuries or transections, and infectious processes leading to a contained rupture.
1120	Aortic dissection	Aortic dissection is a separation of the layers of the aortic wall. Extension of the plane of the dissection may progress to free rupture into the pericardium, mediastinum, or pleural space if not contained by the outer layers of the media and adventitia. Dissections may be classified as acute or chronic (if they have been present for more than 14 days).
1130	Lung disease, Benign	Lung disease arising from any etiology (congenital or acquired) which does not result in death or lung or heart-lung transplant; examples might be non-life threatening asthma or emphysema, benign cysts.
1140	Lung disease, Malignant	Lung disease arising from any etiology (congenital or

acquired, including pulmonary parenchymal disease, pulmonary vascular disease, congenital heart disease, neoplasm, etc.) which may result in death or lung or heart-lung transplant.

1160	Tracheal stenosis	Tracheal stenosis is a reduction in the anatomic luminal diameter of the trachea by more than 50% of the remaining trachea. This stenosis may be congenital or acquired (as in post-intubation or traumatic tracheal stenosis).
1170	Airway disease	Included in this diagnostic category would be airway pathology not included under the definition of tracheal stenosis such as tracheomalacia, bronchotracheomalacia, tracheal right upper lobe, bronchomalacia, subglottic stenosis, bronchial stenosis, etc.
1430	Pleural disease, Benign	Benign diseases of the mediastinal or visceral pleura.
1440	Pleural disease, Malignant	Malignant diseases of the mediastinal or visceral pleura.
1450	Pneumothorax	A collection of air or gas in the pleural space.
1460	Pleural effusion	Abnormal accumulation of fluid in the pleural space.
1470	Chylothorax	The presence of lymphatic fluid in the pleural space secondary to a leak from the thoracic duct or its branches. Chylothorax is a specific type of pleural effusion.
1480	Empyema	A collection of purulent material in the pleural space, usually secondary to an infection.
1490	Esophageal disease, Benign	Any benign disease of the esophagus.
1500	Esophageal disease, Malignant	Any malignant disease of the esophagus.
1505	Mediastinal disease	Any disease of the mediastinum awaiting final benign/malignant pathology determination.
1510	Mediastinal disease, Benign	Any benign disease of the mediastinum.
1520	Mediastinal disease, Malignant	Any malignant disease of the mediastinum.
1540	Diaphragm paralysis	Paralysis of diaphragm, unilateral or bilateral.
1550	Diaphragm disease, Other	Any disease of the diaphragm other than paralysis.
2160	Rib tumor, Benign	Non-cancerous tumor of rib(s) (e.g., fibrous dysplasia)
2170	Rib tumor, Malignant	Cancerous tumor of rib(s)- primary (e.g., osteosarcoma, chondrosarcoma)
2180	Rib tumor, Metastatic	Cancerous tumor metastasized to rib(s)from a different primary location
2190	Sternal tumor, Benign	Non-cancerous tumor of sternum (e.g., fibrous dysplasia)
2200	Sternal tumor, Malignant	Cancerous tumor of sternum - primary (e.g., osteosarcoma, chondrosarcoma)
2210	Sternal tumor, Metastatic	Cancerous tumor metastasized to sternum from a different primary location

2220	Pectus carinatum	Pectus carinatum represents a spectrum of protrusion abnormalities of the anterior chest wall. Severe deformity may result in dyspnea and decreased endurance. Some patients develop rigidity of the chest wall with decreased lung compliance, progressive emphysema, and increased frequency of respiratory tract infections.
2230	Pectus excavatum	Pectus excavatum is a congenital chest wall deformity in which several ribs and the sternum grow abnormally, producing a concave, or caved-in, appearance in the anterior chest wall. Pectus excavatum is the most common type of congenital chest wall abnormality. It occurs in an estimated 1 in 300-400 births, with male predominance (male-to-female ratio of 3:1). The condition is typically noticed at birth, and more than 90% of cases are diagnosed within the first year of life. Worsening of the chest's appearance and the onset of respiratory symptoms are usually reported during rapid bone growth in the early teenage years.
2240	Thoracic outlet syndrome	Thoracic outlet syndrome (TOS) is caused by compression at the superior thoracic outlet wherein excess pressure is placed on a neurovascular bundle passing between the anterior scalene and middle scalene muscles. It can affect the brachial plexus (nerves that pass into the arm from the neck), the subclavian artery, and - rarely - the vein, which does not normally pass through the scalene hiatus. TOS may occur due to a positional cause - for example, by abnormal compression from the clavicle (collarbone) and shoulder girdle on arm movement. There are also several static forms, caused by abnormalities, enlargement, or spasm of the various muscles surrounding the arteries, veins, and/or brachial plexus, a fixation of a first rib, or a cervical rib. The most common causes of thoracic outlet syndrome include physical trauma from a car accident, repetitive injuries from a job such as frequent non-ergonomic use of a keyboard, sports-related activities, anatomical defects such as having an extra rib, and pregnancy.
1180	Arrhythmia	Any cardiac rhythm other than normal sinus rhythm.
2040	Arrhythmia, Atrial	Indicate if the patient has the diagnosis of ''Arrhythmia, Atrial''. ''Arrhythmia, Atrial'' ROOT Definition = Non-sinus atrial rhythm with or without atrioventricular conduction. [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 373.
2050	Arrhythmia, Junctional	Indicate if the patient has the diagnosis of ''Arrhythmia,

		Junctional''. "Arrhythmias arising from the atrioventricular junction; may be bradycardia, tachycardia, premature beats, or escape rhythm [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 379.
2060	Arrhythmia, Ventricular	Indicate if the patient has the diagnosis of ''Arrhythmia, Ventricular''. "Arrhythmia, Ventricular'' ROOT Definition = Abnormal rhythm originating from the ventricles [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 393.
1185	Arrhythmia, Heart block	Atrioventricular block may be congenital or acquired, and may be of varying degree (first, second, or third degree).
1190	Arrhythmia, Heart block, Acquired	Atrioventricular block, when acquired, may be post-surgical, or secondary to myocarditis or other etiologies; the block may be first, second or third degree.
1200	Arrhythmia, Heart block, Congenital	Atrioventricular block, when congenital, may be first, second or third degree block.
1220	Arrhythmia, Pacemaker, Indication for replacement	Indications for pacemaker replacement may include end of generator life, malfunction, or infection.
1230	Atrial Isomerism, Left	In isomerism, both appendages are of like morphology or structure; in left atrial isomerism both the right atrium and left atrium appear to be a left atrium structurally.
1240	Atrial Isomerism, Right	In isomerism, both appendages are of like morphology or structure; in right atrial isomerism both the right atrium and left atrium appear to be a right atrium structurally.
2090	Dextrocardia	Indicate if the patient has the diagnosis of ''Dextrocardia''. "Dextrocardia'' is most usually considered synonymous with a right-sided ventricular mass, whilst ''dextroversion'' is frequently defined as a configuration where the ventricular apex points to the right. In a patient with the usual atrial arrangement, or situs solitus, dextroversion, therefore, implies a turning to the right of the heart [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan

SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

2100	Levocardia	Indicate if the patient has the diagnosis of ''Levocardia''. ''Levocardia'' usually considered synonymous with a left-sided ventricular mass, whilst ''levoversion'' is frequently defined as a configuration where the ventricular apex points to the left [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2110	Mesocardia	Indicate if the patient has the diagnosis of ''Mesocardia''. "Mesocardia'' is most usually considered synonymous with the ventricular mass occupying the midline [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2120	Situs inversus	Indicate if the patient has the diagnosis of "Situs inversus" of the atrial chambers. The development of morphologically right-sided structures on one side of the body, and morphologically left-sided structures on the other side, is termed lateralization. Normal lateralization, the usual arrangement, is also known as ''situs solitus''. The mirror-imaged arrangement is also known as ''situs inversus''. The term ''visceroatrial situs'' is often used to refer to the situs of the viscera and atria when their situs is in agreement. The

arrangement of the organs themselves, and the arrangement of the atrial chambers, is not always the same. Should such disharmony be encountered, the sidedness of the organs and atrial chambers must be separately specified [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

1250	Aneurysm, Ventricular, Right (including pseudoaneurysm)	An aneurysm of the right ventricle is defined as a localized dilation or enlargement of the right ventricular wall.
1260	Aneurysm, Ventricular, Left (including pseudoaneurysm)	An aneurysm of the left ventricle is defined as a localized dilation or enlargement of the left ventricular wall.
1270	Aneurysm, Pulmonary artery	An aneurysm of the pulmonary artery is defined as a localized dilation or enlargement of the pulmonary artery trunk and its central branches (right and left pulmonary artery).
1280	Aneurysm, Other	A localized dilation or enlargement of a cardiac vessel or chamber not coded in specific fields available for aortic aneurysm, sinus of Valsalva aneurysm, coronary artery aneurysm, right ventricular aneurysm, left ventricular aneurysm, or pulmonary artery aneurysm.
1290	Hypoplastic RV	Small size of the right ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the right ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
1300	Hypoplastic LV	Small size of the left ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the left ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated

diagnosis.

2070	Postoperative bleeding	Indicate if the patient has the diagnosis of "Postoperative bleeding".
1310	Mediastinitis	Inflammation/infection of the mediastinum, the cavity between the lungs which holds the heart, great vessels, trachea, esophagus, thymus, and connective tissues. In the United States mediastinitis occurs most commonly following chest surgery.
1320	Endocarditis	An infection of the endocardial surface of the heart, which may involve one or more heart valves (native or prosthetic) or septal defects or prosthetic patch material placed at previous surgery.
1325	Rheumatic heart disease	Heart disease, usually valvar (e.g., mitral or aortic), following an infection with group A streptococci
1330	Prosthetic valve failure	Indicate if the patient has the diagnosis of "Prosthetic valve failure". This diagnosis is the primary diagnosis to be entered for patients undergoing replacement of a previously placed valve (not conduit) prosthesis, whatever type (e.g., bioprosthetic, mechanical, etc.). Failure may be due to, among others, patient somatic growth, malfunction of the prosthesis, or calcification or overgrowth of the prosthesis (e.g., pannus formation). Secondary or fundamental diagnosis would relate to the underlying valve disease entity. As an example, a patient undergoing removal or replacement of a prosthetic pulmonary valve previously placed for pulmonary insufficiency after repair of tetralogy of Fallot would have as a primary diagnosis "Prosthetic valve failure", as a secondary diagnosis "Pulmonary insufficiency", and as a fundamental diagnosis "Tetralogy of Fallot".
1340	Myocardial infarction	A myocardial infarction is the development of myocardial necrosis caused by a critical imbalance between the oxygen supply and demand of the myocardium. While a myocardial infarction may be caused by any process that causes this imbalance it most commonly results from plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Myocardial infarction is a usual accompaniment of anomalous left coronary artery from the pulmonary artery (ALCAPA).
1350	Cardiac tumor	An abnormal growth of tissue in or on the heart, demonstrating partial or complete lack of structural organization, and no functional coordination with normal cardiac tissue. Commonly, a mass is recognized which is distinct from the normal structural components of the heart. A primary cardiac tumor is one that arises directly from tissues of the heart, (e.g., myxoma, fibroelastoma, rhabdomyoma, fibroma, lipoma, pheochromocytoma, teratoma, hemangioma,

mesothesioloma, sarcoma). A secondary cardiac tumor is one that arises from tissues distant from the heart, with subsequent spread to the otherwise normal tissues of the heart, (e.g., renal cell tumor with caval extension from the kidney to the level of the heart or tumor with extension from other organs or areas of the body (hepatic, adrenal, uterine, infradiaphragmatic)). N.B., in the nomenclature system developed, cardiac thrombus and cardiac vegetation are categorized as primary cardiac tumors.

1360	Pulmonary AV fistula	An abnormal intrapulmonary connection (fistula) between an artery and vein that occurs in the blood vessels of the lungs. Pulmonary AV fistulas may be seen in association with congenital heart defects; the associated cardiac defect should be coded as well.
1370	Pulmonary embolism	A pulmonary embolus is a blockage of an artery in the lungs by fat, air, clumped tumor cells, or a blood clot.
1385	Pulmonary vascular obstructive disease	Pulmonary vascular obstructive disease (PVOD) other than those specifically defined elsewhere (Eisenmenger's pulmonary vascular obstructive disease, primary pulmonary hypertension, persistent fetal circulation). The spectrum includes PVOD arising from (1) pulmonary arterial hypertension or (2) pulmonary venous hypertension or (3) portal hypertension, or (4) collage vascular disease, or (5) drug or toxin induced, or (6) diseases of the respiratory system, or (7) chronic thromboembolic disease, among others.
1390	Pulmonary vascular obstructive disease (Eisenmenger's)	"Eisenmenger syndrome" could briefly be described as "Acquired severe pulmonary vascular disease associated with congenital heart disease (Eisenmenger)". Eisenmenger syndrome is an acquired condition. In Eisenmenger-type pulmonary vascular obstructive disease, long-term left-to-right shunting (e.g., through a ventricular or atrial septal defect, patent ductus arteriosus, aortopulmonary window) can lead to chronic pulmonary hypertension with resultant pathological changes in the pulmonary vessels. The vessels become thick-walled, stiff, noncompliant, and may be obstructed. In Eisenmenger syndrome, the long-term left-to-right shunting will reverse and become right to left. Please note that the specific heart defect should be coded as a secondary diagnosis.
1400	Primary pulmonary hypertension	Primary pulmonary hypertension is a rare disease characterized by elevated pulmonary artery hypertension with no apparent cause. Two forms are included in the nomenclature, a sporadic form and a familial form which can be linked to the BMPR-II gene.
1410	Persistent fetal circulation	Persistence of the blood flow pattern seen in fetal life, in which high pulmonary vascular resistance in the lungs results in decreased blood flow to the lungs. Normally, after birth pulmonary pressure falls with a

fall in pulmonary vascular resistance and there is increased perfusion of the lungs. Persistent fetal circulation, also known as persistent pulmonary hypertension of the newborn, can be related to lung or diaphragm malformations or lung immaturity.

1420	Meconium aspiration	Aspiration of amniotic fluid stained with meconium before, during, or after birth can lead to pulmonary sequelae including (1) pneumothorax, (2) pneumomediastinum, (3) pneumopericardium, (4) lung infection, and (5) meconium aspiration syndrome (MAS) with persistent pulmonary hypertension.
2250	Kawasaki disease	Kawasaki disease, also known as Kawasaki syndrome, is an acute febrile illness of unknown etiology that primarily affects children younger than 5 years of age. it was first described in Japan in 1967, and the first cases outside of Japan were reported in Hawaii in 1976. It is characterized by fever, rash, swelling of the hands and feet, irritation and redness of the whites of the eyes, swollen lymph glands in the neck, and irritation and inflammation of the mouth, lips, and throat. Serious complications of Kawasaki disease include coronary artery dilations and aneurysms, and Kawasaki disease is a leading cause of acquired heart disease in children in the United States. The standard treatment with intravenous immunoglobulin and aspirin substantially decreases the development of coronary artery abnormalities.
1560	Cardiac, Other	Any cardiac diagnosis not specifically delineated in other diagnostic codes.
1570	Thoracic and/or mediastinal, Other	Any thoracic and/or mediastinal disease not specifically delineated in other diagnostic codes.
1580	Peripheral vascular, Other	Any peripheral vascular disease (congenital or acquired) or injury (from trauma or iatrogenic); vessels involved may include, but are not limited to femoral artery, femoral vein, iliac artery, brachial artery, etc.
2260	Complication of cardiovascular catheterization procedure	Unspecified complication of cardiovascular catheterization procedure
2270	Complication of cardiovascular catheterization procedure, Device embolization	Migration or movement of device introduced during a cardiac catheterization procedure to an unintended location
2280	Complication of cardiovascular catheterization procedure, Device malfunction	Malfunction of a device introduced during a cardiac catheterization procedure
2290	Complication of cardiovascular catheterization procedure, Perforation	Perforation or puncture caused by a device introduced during a cardiac catheterization procedure
2300	Complication of	Unspecified complication of interventional radiology

	interventional radiology procedure	procedure
2310	Complication of interventional radiology procedure, Device embolization	Migration or movement of device introduced during an interventional radiology procedure to an unintended location
2320	Complication of interventional radiology procedure, Device malfunction	Malfunction of a device introduced during an interventional radiology procedure
2330	Complication of interventional radiology procedure, Perforation	Perforation or puncture caused by a device introduced during an interventional radiology procedure
2340	Foreign body, Intracardiac foreign body	Presence of a foreign body within the heart
2350	Foreign body, Intravascular foreign body	Presence of a foreign body within an artery or vein
2360	Open sternum with closed skin	Sternotomy edges not re-approximated prior to closure of skin incision
2370	Open sternum with open skin (includes membrane placed to close skin)	Sternotomy and skin incision left open following surgery, covered with a membrane or dressing
2380	Retained sternal wire causing irritation	Surgically placed wire causing soft tissue irritation, pain or swelling (not infected)
2390	Syncope	A transient, self-limited loss of consciousness with an inability to maintain postural tone that is followed by spontaneous recovery. The term syncope excludes seizures, coma, shock, or other states of altered consciousness.
2400	Trauma, Blunt	Injury (ies) sustained from blunt force, caused by motor vehicle accidents, falls, blows or crush injuries
2410	Trauma, Penetrating	Injury (ies) sustained as a result of sharp force, including cutting or piercing instruments or objects, bites, or firearm injuries from projectiles.
7000	Normal heart	Normal heart.
7777	Miscellaneous, Other	Any disease (congenital or acquired) not specifically delineated in other diagnostic codes.
4010	Status post - PFO, Primary closure	
4020	Status post - ASD repair, Primary closure	
4030	Status post - ASD repair, Patch	
4040	Status post - ASD repair, Device	
6110	Status post - ASD repair,	

Patch + PAPVC repair

4050	Status post - ASD, Common atrium (single atrium), Septation
4060	Status post - ASD creation/enlargement
4070	Status post - ASD partial closure
4080	Status post - Atrial septal fenestration
4085	Status post - Atrial fenestration closure
4100	Status post - VSD repair, Primary closure
4110	Status post - VSD repair, Patch
4120	Status post - VSD repair, Device
4130	Status post - VSD, Multiple, Repair
4140	Status post - VSD creation/enlargement
4150	Status post - Ventricular septal fenestration
4170	Status post - AVC (AVSD) repair, Complete (CAVSD)
4180	Status post - AVC (AVSD) repair, Intermediate (Transitional)
4190	Status post - AVC (AVSD) repair, Partial (Incomplete) (PAVSD)
6300	Status post - Valvuloplasty, Common atrioventricular valve
6250	Status post - Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve
6230	Status post - Valve replacement, Common atrioventricular valve
4210	Status post - AP window repair
4220	Status post - Pulmonary

artery origin from ascending aorta (hemitruncus) repair

4230	Status post - Truncus arteriosus repair
4240	Status post - Valvuloplasty, Truncal valve
6290	Status post - Valvuloplasty converted to valve replacement in the same operation, Truncal valve
4250	Status post - Valve replacement, Truncal valve
6220	Status post - Truncus + Interrupted aortic arch repair (IAA) repair
4260	Status post - PAPVC repair
4270	Status post - PAPVC, Scimitar, Repair
6120	Status post - PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)
4280	Status post - TAPVC repair
6200	Status post - TAPVC repair + Shunt - systemic-to-pulmonary
4290	Status post - Cor triatriatum repair
4300	Status post - Pulmonary venous stenosis repair
4310	Status post - Atrial baffle procedure (non-Mustard, non-Senning)
4330	Status post - Anomalous systemic venous connection repair
4340	Status post - Systemic venous stenosis repair
4350	Status post - TOF repair, No ventriculotomy
4360	Status post - TOF repair, Ventriculotomy, Nontransanular patch
4370	Status post - TOF repair, Ventriculotomy, Transanular

patch

4380	Status post - TOF repair, RV-PA conduit
4390	Status post - TOF - AVC (AVSD) repair
4400	Status post - TOF - Absent pulmonary valve repair
4420	Status post - Pulmonary atresia - VSD (including TOF, PA) repair
6700	Status post - Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])
6710	Status post - Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])
6720	Status post - Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])
6730	Status post - Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Complete unifocalization (all usable MAPCA[s] are incorporated)
6740	Status post - Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Incomplete unifocalization (not all usable MAPCA[s] are incorporated)
6750	Status post - Unifocalization MAPCA(s), Unilateral pulmonary unifocalization

4440	Status post - Unifocalization MAPCA(s)
4450	Status post - Occlusion of MAPCA(s)
4460	Status post - Valvuloplasty, Tricuspid
6280	Status post - Valvuloplasty converted to valve replacement in the same operation, Tricuspid
4465	Status post - Ebstein's repair
4470	Status post - Valve replacement, Tricuspid (TVR)
4480	Status post - Valve closure, Tricuspid (exclusion, univentricular approach)
4490	Status post - Valve excision, Tricuspid (without replacement)
4500	Status post - Valve surgery, Other, Tricuspid
4510	Status post - RVOT procedure
4520	Status post - 1 1/2 ventricular repair
4530	Status post - PA, reconstruction (plasty), Main (trunk)
4540	Status post - PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)
4550	Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)
4570	Status post - DCRV repair
4590	Status post - Valvuloplasty, Pulmonic
6270	Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic
4600	Status post - Valve replacement, Pulmonic (PVR)
4630	Status post - Valve excision, Pulmonary (without

replacement)

4640	Status post - Valve closure, Semilunar
4650	Status post - Valve surgery, Other, Pulmonic
4610	Status post - Conduit placement, RV to PA
4620	Status post - Conduit placement, LV to PA
5774	Status post - Conduit placement, Ventricle to aorta
5772	Status post - Conduit placement, Other
4580	Status post - Conduit reoperation
4660	Status post - Valvuloplasty, Aortic
6240	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic
6310	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure
6320	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure
4670	Status post - Valve replacement, Aortic (AVR)
4680	Status post - Valve replacement, Aortic (AVR), Mechanical
4690	Status post - Valve replacement, Aortic (AVR), Bioprosthetic
4700	Status post - Valve replacement, Aortic (AVR), Homograft
4715	Status post - Aortic root replacement, Bioprosthetic
4720	Status post - Aortic root replacement, Mechanical

4730   Status post - Aortic root replacement, Homograft

4735   Status post - Aortic root replacement, Valve sparing

4740   Status post - Ross procedure

4750   Status post - Konno procedure

4760   Status post - Ross-Konno procedure

4770   Status post - Other annular enlargement procedure

4780   Status post - Aortic stenosis, Subvalvar, Repair

6100   Status post - Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS

4790   Status post - Aortic stenosis, Supravalvar, Repair

4800   Status post - Valve surgery, Other, Aortic

4810   Status post - Sinus of Valsalva, Aneurysm repair

4820   Status post - LV to aorta tunnel repair

4830   Status post - Valvuloplasty, Mitral

6260   Status post - Valvuloplasty converted to valve replacement in the same operation, Mitral

4840   Status post - Mitral stenosis, Supravalvar mitral ring repair

4850   Status post - Valve replacement, Mitral (MVR)

4860   Status post - Valve surgery, Other, Mitral

4870   Status post - Norwood procedure

4880   Status post - HLHS biventricular repair

6755   Status post - Conduit insertion right ventricle to pulmonary artery + Intraventricular tunnel left ventricle to neoaorta + Arch reconstruction (Rastelli and Norwood type arch

reconstruction) (Yasui)

6160   Status post - Hybrid Approach "Stage 1", Application of RPA & LPA bands

6170   Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)

6180   Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands

6140   Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)

6150   Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair

6760   Status post - Hybrid Approach, Transcardiac balloon dilation

6770   Status post - Hybrid Approach, Transcardiac transcatheter device placement

1590   Status post - Transplant, Heart

1610   Status post - Transplant, Heart and lung

4910   Status post - Partial left ventriculectomy (LV volume reduction surgery) (Batista)

4920   Status post - Pericardial drainage procedure

4930   Status post - Pericardiectomy

4940   Status post - Pericardial procedure, Other

4950	Status post - Fontan, Atrio-pulmonary connection
4960	Status post - Fontan, Atrio-ventricular connection
4970	Status post - Fontan, TCPC, Lateral tunnel, Fenestrated
4980	Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated
5000	Status post - Fontan, TCPC, External conduit, Fenestrated
5010	Status post - Fontan, TCPC, External conduit, Nonfenestrated
6780	Status post - Fontan, TCPC, Intra/extracardiac conduit, Fenestrated
6790	Status post - Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated
5025	Status post - Fontan revision or conversion (Re-do Fontan)
5030	Status post - Fontan, Other
6340	Status post - Fontan + Atrioventricular valvuloplasty
5035	Status post - Ventricular septation
5050	Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double switch)
5060	Status post - Congenitally corrected TGA repair, Atrial switch and Rastelli
5070	Status post - Congenitally corrected TGA repair, VSD closure
5080	Status post - Congenitally corrected TGA repair, VSD closure and LV to PA conduit
5090	Status post - Congenitally corrected TGA repair, Other
5110	Status post - Arterial switch operation (ASO)
5120	Status post - Arterial switch operation (ASO) and VSD repair

5123   Status post - Arterial switch
        procedure + Aortic arch repair

5125   Status post - Arterial switch
        procedure and VSD repair +
        Aortic arch repair

5130   Status post - Senning

5140   Status post - Mustard

5145   Status post - Atrial baffle
        procedure, Mustard or
        Senning revision

5150   Status post - Rastelli

5160   Status post - REV

6190   Status post - Aortic root
        translocation over left
        ventricle (Including Nikaidoh
        procedure)

6210   Status post - TGA, Other
        procedures (Kawashima, LV-
        PA conduit, other)

5180   Status post - DORV,
        Intraventricular tunnel repair

5200   Status post - DOLV repair

5210   Status post - Coarctation
        repair, End to end

5220   Status post - Coarctation
        repair, End to end, Extended

5230   Status post - Coarctation
        repair, Subclavian flap

5240   Status post - Coarctation
        repair, Patch aortoplasty

5250   Status post - Coarctation
        repair, Interposition graft

5260   Status post - Coarctation
        repair, Other

5275   Status post - Coarctation
        repair + VSD repair

5280   Status post - Aortic arch repair

5285   Status post - Aortic arch
        repair + VSD repair

5290   Status post - Coronary artery
        fistula ligation

5291   Status post - Anomalous
        origin of coronary artery from
        pulmonary artery repair

5300   Status post - Coronary artery

bypass

5305	Status post - Anomalous aortic origin of coronary artery (AAOCA) repair
5310	Status post - Coronary artery procedure, Other
5320	Status post - Interrupted aortic arch repair
5330	Status post - PDA closure, Surgical
5340	Status post - PDA closure, Device
5360	Status post - Vascular ring repair
5365	Status post - Aortopexy
5370	Status post - Pulmonary artery sling repair
5380	Status post - Aortic aneurysm repair
5390	Status post - Aortic dissection repair
5400	Status post - Lung biopsy
1600	Status post - Transplant, Lung(s)
5420	Status post - Lung procedure, Other
5440	Status post - Tracheal procedure
6800	Status post - Muscle flap, Trunk (i.e., intercostal, pectus, or serratus muscle)
6810	Status post - Muscle flap, Trunk (i.e. latissimus dorsi)
6820	Status post - Removal, Sternal wire
6830	Status post - Rib excision, Complete
6840	Status post - Rib excision, Partial
6850	Status post - Sternal fracture - open treatment
6860	Status post - Sternal resection, Radical resection of sternum
6870	Status post - Sternal resection,

Radical resection of sternum with mediastinal lymphadenectomy

6880   Status post - Tumor of chest wall - Excision including ribs

6890   Status post - Tumor of chest wall - Excision including ribs, With reconstruction

6900   Status post - Tumor of soft tissue of thorax - Excision of deep subfascial or intramuscular tumor

6910   Status post - Tumor of soft tissue of thorax - Excision of subcutaneous tumor

6920   Status post - Tumor of soft tissue of thorax - Radical resection

6930   Status post - Hyoid myotomy and suspension

6940   Status post - Muscle flap, Neck

6950   Status post - Procedure on neck

6960   Status post - Tumor of soft tissue of neck - Excision of deep subfascial or intramuscular tumor

6970   Status post - Tumor of soft tissue of neck - Excision of subcutaneous tumor

6980   Status post - Tumor of soft tissue of neck - Radical resection

6990   Status post - Pectus bar removal

7005   Status post - Pectus bar repositioning

7010   Status post - Pectus repair, Minimally invasive repair (Nuss), With thoracoscopy

7020   Status post - Pectus repair, Minimally invasive repair (Nuss), Without thoracoscopy

7030   Status post - Pectus repair, Open repair

7040   Status post - Division of

scalenus anticus, With resection of a cervical rib

7050   Status post - Division of scalenus anticus, Without resection of a cervical rib

7060   Status post - Rib excision, Excision of cervical rib

7070   Status post - Rib excision, Excision of cervical rib, With sympathectomy

7080   Status post - Rib excision, Excision of first rib

7090   Status post - Rib excision, Excision of first rib, With sympathectomy

7100   Status post - Procedure on thorax

5450   Status post - Pacemaker implantation, Permanent

5460   Status post - Pacemaker procedure

6350   Status post - Explantation of pacing system

5470   Status post - ICD (AICD) implantation

5480   Status post - ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure

5490   Status post - Arrhythmia surgery - atrial, Surgical Ablation

5500   Status post - Arrhythmia surgery - ventricular, Surgical Ablation

6500   Status post - Cardiovascular catheterization procedure, Diagnostic

6520   Status post - Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained

6550   Status post - Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration

6540   Status post - Cardiovascular

catheterization procedure,
Diagnostic, Hemodynamic
alteration

6510   Status post - Cardiovascular
catheterization procedure,
Diagnostic, Hemodynamic
data obtained

6530   Status post - Cardiovascular
catheterization procedure,
Diagnostic, Transluminal test
occlusion

6410   Status post - Cardiovascular
catheterization procedure,
Therapeutic

6670   Status post - Cardiovascular
catheterization procedure,
Therapeutic, Adjunctive
therapy

6570   Status post - Cardiovascular
catheterization procedure,
Therapeutic, Balloon dilation

6590   Status post - Cardiovascular
catheterization procedure,
Therapeutic, Balloon
valvotomy

6600   Status post - Cardiovascular
catheterization procedure,
Therapeutic, Coil implantation

6610   Status post - Cardiovascular
catheterization procedure,
Therapeutic, Device
implantation

7110   Status post - Cardiovascular
catheterization procedure,
Therapeutic, Device
implantation attempted

6690   Status post - Cardiovascular
catheterization procedure,
Therapeutic,
Electrophysiological ablation

7120   Status post - Cardiovascular
catheterization procedure,
Therapeutic, Intravascular
foreign body removal

6640   Status post - Cardiovascular
catheterization procedure,
Therapeutic, Perforation
(establishing interchamber
and/or intervessel

communication)

6580	Status post - Cardiovascular catheterization procedure, Therapeutic, Septostomy
6620	Status post - Cardiovascular catheterization procedure, Therapeutic, Stent insertion
6630	Status post - Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation
6650	Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion
6660	Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve
5590	Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)
5600	Status post - Shunt, Systemic to pulmonary, Central (shunt from aorta)
7130	Status post - Shunt, Systemic to pulmonary, Central (shunt from aorta), Central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta (i.e. Mee shunt)
5610	Status post - Shunt, Systemic to pulmonary, Other
5630	Status post - Shunt, Ligation and takedown
6095	Status post - Shunt, Reoperation
5640	Status post - PA banding (PAB)
5650	Status post - PA debanding
5660	Status post - Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)
5670	Status post - Bidirectional

cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)

5680   Status post - Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)

5690   Status post - Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)

5700   Status post - HemiFontan

6330   Status post - Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty

6130   Status post - Superior Cavopulmonary anastomosis(es) + PA reconstruction

7140   Status post - Hepatic vein to azygous vein connection, Direct

7150   Status post - Hepatic vein to azygous vein connection, Interposition graft

7160   Status post - Kawashima operation (superior cavopulmonary connection in setting of interrupted IVC with azygous continuation)

5710   Status post - Palliation, Other

6360   Status post - ECMO cannulation

6370   Status post - ECMO decannulation

5910   Status post - ECMO procedure

5900   Status post - Intraaortic balloon pump (IABP) insertion

5920   Status post - Right/left heart assist device procedure

6390   Status post - VAD explantation

6380   Status post - VAD implantation

7170   Status post - VAD change out

6420   Status post - Echocardiography procedure, Sedated transesophageal echocardiogram

6430   Status post - Echocardiography procedure, Sedated transthoracic echocardiogram

6435   Status post - Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia

6440   Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)

6450   Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)

6460   Status post - Radiology procedure on cardiac patient, Diagnostic radiology

6470   Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient

6480   Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient

6490   Status post - Radiology procedure on cardiac patient, Therapeutic radiology

5720   Status post - Aneurysm, Ventricular, Right, Repair

5730   Status post - Aneurysm, Ventricular, Left, Repair

5740   Status post - Aneurysm, Pulmonary artery, Repair

5760   Status post - Cardiac tumor resection

5780   Status post - Pulmonary AV fistula repair/occlusion

5790   Status post - Ligation,

Pulmonary artery

5802   Status post - Pulmonary embolectomy, Acute pulmonary embolus

5804   Status post - Pulmonary embolectomy, Chronic pulmonary embolus

5810   Status post - Pleural drainage procedure

5820   Status post - Pleural procedure, Other

5830   Status post - Ligation, Thoracic duct

5840   Status post - Decortication

5850   Status post - Esophageal procedure

5860   Status post - Mediastinal procedure

5870   Status post - Bronchoscopy

5880   Status post - Diaphragm plication

5890   Status post - Diaphragm procedure, Other

5930   Status post - VATS (video-assisted thoracoscopic surgery)

5940   Status post - Minimally invasive procedure

5950   Status post - Bypass for noncardiac lesion

5960   Status post - Delayed sternal closure

5970   Status post - Mediastinal exploration

5980   Status post - Sternotomy wound drainage

7180   Status post - Intravascular stent removal

5990   Status post - Thoracotomy, Other

6000   Status post - Cardiotomy, Other

6010   Status post - Cardiac procedure, Other

6020   Status post - Thoracic and/or

mediastinal procedure, Other

6030	Status post - Peripheral vascular procedure, Other
6040	Status post - Miscellaneous procedure, Other
11777	Status post - Other procedure

Long Name: Other Card-Congenital Diagnosis 2   *SeqNo:*   4505

Short Name: **OCarCongDiag2**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the second of the three most significant congenital diagnoses.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card-Congenital   *Format:*   Text (categorical values specified by STS)

ParentShortName: OCarCong   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
10	PFO	A small interatrial communication (or potential communication) confined to the region of the oval fossa (fossa ovalis) characterized by no deficiency of the primary atrial septum (septum primum) and a normal limbus with no deficiency of the septum secundum (superior interatrial fold).
20	ASD, Secundum	A congenital cardiac malformation in which there is an interatrial communication confined to the region of the oval fossa (fossa ovalis), most commonly due to a deficiency of the primary atrial septum (septum primum) but deficiency of the septum secundum (superior interatrial fold) may also contribute.
30	ASD, Sinus venosus	A congenital cardiac malformation in which there is a caval vein (vena cava) and/or pulmonary vein (or veins) that overrides the atrial septum or the septum secundum (superior interatrial fold) producing an interatrial or anomalous venoatrial communication Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of the atrial septum.
40	ASD, Coronary sinus	A congenital cardiac malformation in which there is a deficiency of the walls separating the left atrium from the coronary sinus allowing interatrial communication

through the coronary sinus ostium.

50	ASD, Common atrium (single atrium)	Complete absence of the interatrial septum. "Single atrium" is applied to defects with no associated malformation of the atrioventricular valves. "Common atrium" is applied to defects with associated malformation of the atrioventricular valves.
2150	ASD, Postoperative interatrial communication	A surgically created communication between the atria.
71	VSD, Type 1 (Subarterial) (Supracristal) (Conal septal defect) (Infundibular)	A VSD that lies beneath the semilunar valve(s) in the conal or outlet septum.
73	VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)	A VSD that is confluent with and involves the membranous septum and is bordered by an atrioventricular valve, not including type 3 VSDs.
75	VSD, Type 3 (Inlet) (AV canal type)	A VSD that involves the inlet of the right ventricular septum immediately inferior to the AV valve apparatus.
77	VSD, Type 4 (Muscular)	A VSD completely surrounded by muscle.
79	VSD, Type: Gerbode type (LV-RA communication)	A rare form of VSD in which the defect is at the membranous septum; the communication is between the left ventricle and right atrium.
80	VSD, Multiple	More than one VSD exists. Each individual VSD may be coded separately to specify the individual VSD types.
100	AVC (AVSD), Complete (CAVSD)	Indicate if the patient has the diagnosis of "AVC (AVSD), Complete (CAVSD)". An "AVC (AVSD), Complete (CAVSD)" is a "complete atrioventricular canal" or a "complete atrioventricular septal defect" and occurs in a heart with the phenotypic feature of a common atrioventricular junction. An "AVC (AVSD), Complete (CAVSD)" is defined as an AVC with a common AV valve and both a defect in the atrial septum just above the AV valve (ostium primum ASD [a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve]) and a defect in the ventricular septum just below the AV valve. The AV valve is one valve that bridges both the right and left sides of the heart. Balanced AVC is an AVC with two essentially appropriately sized ventricles. Unbalanced AVC is an AVC defect with two ventricles in which one ventricle is inappropriately small. Such a patient may be thought to be a candidate for biventricular repair, or, alternatively, may be managed as having a functionally univentricular heart. AVC lesions with unbalanced ventricles so severe as to preclude biventricular repair should be classified as single ventricles. Rastelli type A: The common superior (anterior) bridging leaflet is effectively split in two at the septum. The left superior (anterior) leaflet is entirely over the left ventricle and the right superior (anterior) leaflet is similarly entirely

over the right ventricle. The division of the common superior (anterior) bridging leaflet into left and right components is caused by extensive attachment of the superior (anterior) bridging leaflet to the crest of the ventricular septum by chordae tendineae. Rastelli type B: Rare, involves anomalous papillary muscle attachment from the right side of the ventricular septum to the left side of the common superior (anterior) bridging leaflet. Rastelli type C: Marked bridging of the ventricular septum by the superior (anterior) bridging leaflet, which floats freely (often termed a "free-floater") over the ventricular septum without chordal attachment to the crest of the ventricular septum.

110	AVC (AVSD), Intermediate (transitional)	An AVC with two distinct left and right AV valve orifices but also with both an ASD just above and a VSD just below the AV valves. While these AV valves in the intermediate form do form two separate orifices they remain abnormal valves. The VSD is often restrictive.
120	AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum)	An AVC with an ostium primum ASD (a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve) and varying degrees of malformation of the left AV valve leading to varying degrees of left AV valve regurgitation. No VSD is present.
140	AP window (aortopulmonary window)	Indicate if the patient has the diagnosis of "AP window (aortopulmonary window)". An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted

aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)

150	Pulmonary artery origin from ascending aorta (hemitruncus)	One pulmonary artery arises from the ascending aorta and the other pulmonary artery arises from the right ventricle. DOES NOT include origin of the right or left pulmonary artery from the innominate artery or the aortic arch via a patent ductus arteriosus or collateral artery.
160	Truncus arteriosus	Indicate if the patient has the diagnosis of "Truncus arteriosus". A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. Often, the infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. In such instances, there may be no ventricular septal defect or a very small ventricular septal defect, in which case the left ventricle and mitral valve may be extremely hypoplastic.
170	Truncal valve insufficiency	Functional abnormality - insufficiency - of the truncal valve. May be further subdivided into grade of insufficiency (I, II, III, IV or mild, moderate, severe).
2010	Truncus arteriosus + Interrupted aortic arch	Indicate if the patient has the diagnosis of "Truncus arteriosus + Interrupted aortic arch". {A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. The infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. If in such case there is no ventricular septal defect, then the left ventricle and mitral valve may be extremely hypoplastic.} {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is

between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.}

180	Partial anomalous pulmonary venous connection (PAPVC)	Some, but not all of the pulmonary veins connect to the right atrium or to one or more of its venous tributaries. This definition excludes sinus venosus defects with normally connected but abnormally draining pulmonary veins (the pulmonary veins may drain abnormally into the right atrium via the atrial septal defect).
190	Partial anomalous pulmonary venous connection (PAPVC), scimitar	The right pulmonary vein(s) connect anomalously to the inferior vena cava or to the right atrium at the insertion of the inferior vena cava. The descending vertical vein resembles a scimitar (Turkish sword) on frontal chest x-ray. Frequently associated with: hypoplasia of the right lung with bronchial anomalies; dextroposition and/or dextrorotation of the heart; hypoplasia of the right pulmonary artery; and anomalous subdiaphragmatic systemic arterial supply to the lower lobe of the right lung directly from the aorta or its main branches.
200	Total anomalous pulmonary venous connection (TAPVC), Type 1 (supracardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 1 (supracardiac) TAPVC, the anomalous connection is at the supracardiac level and can be obstructed or nonobstructed.
210	Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 2 (cardiac) TAPVC, the anomalous connection is to the heart, either to the right atrium directly or to the coronary sinus. Most patients with type 2 TAPVC are nonobstructed.
220	Total anomalous pulmonary venous connection (TAPVC), Type 3 (infracardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 3 (infracardiac) TAPVC, the anomalous connection is at the infracardiac level (below the diaphragm), with the pulmonary venous return entering the right atrium ultimately via the inferior vena cava. In the vast majority of patients infracardiac TAPVC is obstructed.
230	Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 4 (mixed) TAPVC, the anomalous connection is at two or more of the above levels (supracardiac, cardiac, infracardiac) and can be obstructed or nonobstructed.
250	Cor triatriatum	In the classic form of cor triatriatum a membrane

divides the left atrium (LA) into a posterior accessory chamber that receives the pulmonary veins and an anterior chamber (LA) that communicates with the mitral valve. In differentiating cor triatriatum from supravalvar mitral ring, in cor triatriatum the posterior compartment contains the pulmonary veins while the anterior contains the left atrial appendage and the mitral valve orifice; in supravalvar mitral ring, the anterior compartment contains only the mitral valve orifice. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.

260	Pulmonary venous stenosis	Any pathologic narrowing of one or more pulmonary veins. Can be further subdivided by etiology (congenital, acquired-postoperative, acquired-nonpostoperative) and extent of stenosis (diffusely hypoplastic, long segment focal/tubular stenosis, discrete stenosis).
270	Systemic venous anomaly	Anomalies of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from one or more anomalies of origin, duplication, course, or connection. Examples include abnormal or absent right SVC with LSVC, bilateral SVC, interrupted right or left IVC, azygos continuation of IVC, and anomalies of hepatic drainage. Bilateral SVC may have, among other configurations: 1) RSVC draining to the RA and the LSVC to the LA with completely unroofed coronary sinus, 2) RSVC draining to the RA and LSVC to the coronary sinus which drains (normally) into the RA, or 3) RSVC to the coronary sinus which drains (abnormally) into the LA and LSVC to LA. Anomalies of the inferior vena caval system include, among others: 1) left IVC to LA, 2) biatrial drainage, or 3) interrupted IVC (left or right) with azygos continuation to an LSVC or RSVC.
280	Systemic venous obstruction	Obstruction of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from congenital or acquired stenosis or occlusion. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.
290	TOF	Indicate if the patient has the diagnosis of "TOF". Only use this diagnosis if it is NOT known if the patient has one of the following four more specific diagnoses: (1). "TOF, Pulmonary stenosis", (2). "TOF, AVC (AVSD)", (3). "TOF, Absent pulmonary valve", (4).

"Pulmonary atresia, VSD (Including TOF, PA)", or (5). "Pulmonary atresia, VSD-MAPCA (pseudotruncus)". {"TOF" is "Tetralogy of Fallot" and is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy.} (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")

2140	TOF, Pulmonary stenosis	Indicate if the patient has the diagnosis of "TOF, Pulmonary stenosis". Use this diagnosis if the patient has tetralogy of Fallot and pulmonary stenosis. Do not use this diagnosis if the patient has tetralogy of Fallot and pulmonary atresia. Do not use this diagnosis if the patient has tetralogy of Fallot and absent pulmonary valve. Do not use this diagnosis if the patient has tetralogy of Fallot and atrioventricular canal. {Tetralogy of Fallot is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the

malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")}

300	TOF, AVC (AVSD)	TOF with complete common atrioventricular canal defect is a rare variant of common atrioventricular canal defect with the associated conotruncal abnormality of TOF. The anatomy of the endocardial cushion defect is that of Rastelli type C in almost all cases.
310	TOF, Absent pulmonary valve	Indicate if the patient has the diagnosis of "TOF, Absent pulmonary valve". "TOF, Absent pulmonary valve" is "Tetralogy of Fallot with Absent pulmonary valve" and is defined as a malformation with all of the morphologic characteristics of tetralogy of Fallot (anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta), in which the ventriculo-arterial junction of the right ventricle with the main pulmonary artery features an atypical valve with rudimentary cusps that lack the anatomical semi-lunar features of normal valve cusps and which functionally do not achieve central coaptation. The physiologic consequence is usually a combination of variable degrees of both stenosis and regurgitation of the pulmonary valve. A developmental accompaniment

of this anatomy and physiology is dilation of the main pulmonary artery and central right and left pulmonary arteries, which when extreme, is associated with abnormal arborization of lobar and segmental pulmonary artery branches and with compression of the trachea and mainstem bronchi. One theory holds that absence of the arterial duct or ductal ligament (which is a nearly constant finding in cases of tetralogy of Fallot with absent pulmonary valve) in combination with pulmonary `valve stenosis and regurgitation, comprise the physiologic conditions which predispose to central pulmonary artery dilation during fetal development. (Tetralogy of Fallot with Absent Pulmonary Valve Syndrome is a term frequently used to describe the clinical presentation when it features both circulatory alterations and respiratory distress secondary to airway compression.)

320	Pulmonary atresia	Pulmonary atresia defects which do not readily fall into pulmonary atresia-intact ventricular septum or pulmonary atresia-VSD (with or without MAPCAs) categories. These may include complex lesions in which pulmonary atresia is a secondary diagnosis, for example, complex single ventricle malformations with associated pulmonary atresia.
330	Pulmonary atresia, IVS	Pulmonary atresia (PA) and intact ventricular septum (IVS) is a duct-dependent congenital malformation that forms a spectrum of lesions including atresia of the pulmonary valve, a varying degree of right ventricle and tricuspid valve hypoplasia, and anomalies of the coronary circulation. An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis. Associated Ebstein's anomaly of the tricuspid valve can be present; the tricuspid diameter is enlarged and the prognosis is poor.
340	Pulmonary atresia, VSD (Including TOF, PA)	Pulmonary atresia (PA) and ventricular septal defect (VSD) is a heterogeneous group of congenital cardiac malformations in which there is lack of luminal continuity and absence of blood flow from either ventricle (in cases with ventriculo-arterial discordance) and the pulmonary artery, in a biventricular heart that has an opening or a hole in the interventricular septum (VSD). The malformation forms a spectrum of lesions including tetralogy of Fallot with pulmonary atresia. Tetralogy of Fallot with PA is a specific type of PA-VSD where the intracardiac malformation is more accurately defined (extreme underdevelopment of the RV infundibulum with marked anterior and leftward displacement of the infundibular septum often fused with the anterior wall of the RV resulting in complete obstruction of blood flow into the pulmonary artery and associated with a large outlet, subaortic ventricular septal defect). In the vast majority of cases of PA-VSD

the intracardiac anatomy is that of TOF. The pulmonary circulation in PA-VSD is variable in terms of origin of blood flow, presence or absence of native pulmonary arteries, presence or absence of major aortopulmonary collateral arteries (MAPCA(s)), and distal distribution (pulmonary parenchymal segment arborization) abnormalities. Native pulmonary arteries may be present or absent. If MAPCAs are present this code should not be used; instead, Pulmonary atresia, VSD-MAPCA (pseudotruncus) should be used.

350	Pulmonary atresia, VSD-MAPCA	MAPCA(s) are large and distinct arteries, highly variable in number, that usually arise from the descending thoracic aorta, but uncommonly may originate from the aortic arch or the subclavian, carotid or even the coronary arteries. MAPCA(s) may be associated with present or absent native pulmonary arteries. If present, the native pulmonary arteries may be hypoplastic, and either confluent or nonconfluent. Systemic pulmonary collateral arteries have been categorized into 3 types based on their site of origin and the way they connect to the pulmonary circulation: direct aortopulmonary collaterals, indirect aortopulmonary collaterals, and true bronchial arteries. Only the first two should be considered MAPCA(s). If MAPCA(s) are associated with PA-VSD or TOF, PA this code should be used.
360	MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD)	Rarely MAPCA(s) may occur in patents who do not have PA-VSD, but have severe pulmonary stenosis. The intracardiac anatomy in patients who have MAPCA(s) without PA should be specifically coded in each case as well.
370	Ebstein's anomaly	Indicate if the patient has the diagnosis of "Ebstein's anomaly". Ebstein's anomaly is a malformation of the tricuspid valve and right ventricle that is characterized by a spectrum of several features: (1) incomplete delamination of tricuspid valve leaflets from the myocardium of the right ventricle; (2) downward (apical) displacement of the functional annulus; (3) dilation of the "atrialized" portion of the right ventricle with variable degrees of hypertrophy and thinning of the wall; (4) redundancy, fenestrations, and tethering of the anterior leaflets; and (5) dilation of the right atrioventricular junction (the true tricuspid annulus). These anatomical and functional abnormalities cause tricuspid regurgitation (and rarely tricuspid stenosis) that results in right atrial and right ventricular dilation and atrial and ventricular arrhythmias. With increasing degrees of anatomic severity of malformation, the fibrous transformation of leaflets from their muscular precursors remains incomplete, with the septal leaflet being most severely involved, the posterior leaflet less severely involved, and the anterior leaflet usually the least severely involved. Associated cardiac anomalies

include an interatrial communication, the presence of accessory conduction pathways often associated with Wolff-Parkinson-White syndrome, and dilation of the right atrium and right ventricle in patients with severe Ebstein's anomaly. (Varying degrees of right ventricular outflow tract obstruction may be present, including pulmonary atresia in some cases. Such cases of Ebstein's anomaly with pulmonary atresia should be coded with a Primary Diagnosis of "Ebstein's anomaly", and a Secondary Diagnosis of "Pulmonary atresia".) (Some patients with atrioventricular discordance and ventriculoarterial discordance in situs solitus [congenitally corrected transposition] have an Ebstein-like deformity of the left-sided morphologically tricuspid valve. The nature of the displacement of the septal and posterior leaflets is similar to that in right-sided Ebstein's anomaly in patients with atrioventricular concordance and ventriculoarterial concordance in situs solitus. These patients with "Congenitally corrected TGA" and an Ebstein-like deformity of the left-sided morphologically tricuspid valve should be coded with a Primary Diagnosis of "Congenitally corrected TGA", and a Secondary Diagnosis of "Ebstein's anomaly".)

380	Tricuspid regurgitation, non-Ebstein's related	Non-Ebstein's tricuspid regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, absent papillary muscle/chordae) or acquired (post cardiac surgery or secondary to rheumatic fever, endocarditis, trauma, tumor, cardiomyopathy, iatrogenic or other causes).
390	Tricuspid stenosis	Tricuspid stenosis may be due to congenital factors (valvar hypoplasia, abnormal subvalvar apparatus, double-orifice valve, parachute deformity) or acquired (post cardiac surgery or secondary to carcinoid, rheumatic fever, tumor, systemic disease, iatrogenic, or other causes).
400	Tricuspid regurgitation and tricuspid stenosis	Tricuspid regurgitation present with tricuspid stenosis may be due to congenital factors or acquired.
410	Tricuspid valve, Other	Tricuspid valve pathology not otherwise specified in diagnosis definitions 370, 380, 390 and 400.
420	Pulmonary stenosis, Valvar	Pulmonary stenosis, Valvar ranges from critical neonatal pulmonic valve stenosis with hypoplasia of the right ventricle to valvar pulmonary stenosis in the infant, child, or adult, usually better tolerated but potentially associated with infundibular stenosis. Pulmonary branch hypoplasia can be associated. Only 10% of neonates with Pulmonary stenosis, Valvar with intact ventricular septum have RV-to-coronary artery fistula(s). An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis; this occurs in only 2% of neonates with Pulmonary stenosis, Valvar with IVS.

430	Pulmonary artery stenosis (hypoplasia), Main (trunk)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis (hypoplasia), Main (trunk)". "Pulmonary artery stenosis (hypoplasia), Main (trunk)" is defined as a congenital or acquired anomaly with pulmonary trunk (main pulmonary artery) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Since the narrowing is distal to the pulmonic valve, it may also be known as supravalvar pulmonary stenosis.
440	Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)" is defined as a congenital or acquired anomaly with central pulmonary artery branch (within the hilar bifurcation involving the right or left pulmonary artery, or both) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Coarctation of the pulmonary artery is related to abnormal extension of the ductus arteriosus into a pulmonary branch, more frequently the left branch.
450	Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)" is defined as a congenital or acquired anomaly with peripheral pulmonary artery narrowing or hypoplasia (at or beyond the hilar bifurcation). The stenosis or hypoplasia may be isolated or associated with other cardiac lesions.
470	Pulmonary artery, Discontinuous	Indicate if the patient has the diagnosis of "Pulmonary artery, Discontinuous". Pulmonary artery, Discontinuous" is defined as a congenital or acquired anomaly with discontinuity between the branch pulmonary arteries or between a branch pulmonary artery and the main pulmonary artery trunk.
490	Pulmonary stenosis, Subvalvar	Subvalvar (infundibular) pulmonary stenosis is a narrowing of the outflow tract of the right ventricle below the pulmonic valve. It may be due to a localized fibrous diaphragm just below the valve, an obstructing muscle bundle or to a long narrow fibromuscular channel.
500	DCRV	The double chambered right ventricle is characterized by a low infundibular (subvalvar) stenosis rather than the rare isolated infundibular stenosis that develops more superiorly in the infundibulum, and is often associated with one or several closing VSDs. In some cases, the VSD is already closed. The stenosis creates two chambers in the RV, one inferior including the inlet and trabecular portions of the RV and one superior including the infundibulum.

510	Pulmonary valve, Other	Other anomalies of the pulmonary valve may be listed here including but not restricted to absent pulmonary valve.
530	Pulmonary insufficiency	Pulmonary valve insufficiency or regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, etc.) or acquired (for example, post cardiac surgery for repair of tetralogy of Fallot, etc.).
540	Pulmonary insufficiency and pulmonary stenosis	Pulmonary valve insufficiency and pulmonary stenosis beyond the neonatal period, in infancy and childhood, may be secondary to leaflet tissue that has become thickened and myxomatous. Retraction of the commissure attachment frequently creates an associated supravalvar stenosis.
2130	Shunt failure	Indicate if the patient has the diagnosis of "Shunt failure". This diagnostic subgroup includes failure of any of a variety of shunts ("Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)", "Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)", "Shunt, Systemic to pulmonary, Other", and "Sano Shunt"), secondary to any of the following etiologies: shunt thrombosis, shunt occlusion, shunt stenosis, shunt obstruction, and shunt outgrowth. This diagnosis ("Shunt failure") would be the primary diagnosis in a patient with, for example, "Hypoplastic left heart syndrome (HLHS)" who underwent a "Norwood procedure" with a "Modified Blalock-Taussig Shunt" and now requires reoperation for thrombosis of the "Modified Blalock-Taussig Shunt". The underlying or fundamental diagnosis in this patient is "Hypoplastic left heart syndrome (HLHS)", but the primary diagnosis for the operation to be performed to treat the thrombosis of the "Modified Blalock-Taussig Shunt" would be "Shunt failure". Please note that the choice "2130 Shunt failure" does not include "520 Conduit failure".
520	Conduit failure	Indicate if the patient has the diagnosis of "Conduit failure". This diagnostic subgroup includes failure of any of a variety of conduits (ventricular [right or left]-to-PA conduits, as well as a variety of other types of conduits [ventricular {right or left}-to-aorta, RA-to-RV, etc.]), secondary to any of the following etiologies: conduit outgrowth, obstruction, stenosis, insufficiency, or insufficiency and stenosis. This diagnosis ("Conduit failure") would be the primary diagnosis in a patient with, for example, "Truncus arteriosus" repaired in infancy who years later is hospitalized because of conduit stenosis/insufficiency. The underlying or fundamental diagnosis in this patient is "Truncus arteriosus", but the primary diagnosis for the operation to be performed during the hospitalization (in this case,

"Conduit reoperation") would be "Conduit failure".

Please note that the choice "520 Conduit failure" does not include "2130 Shunt failure".

550   Aortic stenosis, Subvalvar

Subaortic obstruction can be caused by different lesions: subaortic membrane or tunnel, accessory mitral valve tissue, abnormal insertion of the mitral anterior leaflet to the ventricular septum, deviation of the outlet septum (seen in coarctation of the aorta and interrupted aortic arch), or a restrictive bulboventricular foramen in single ventricle complexes. The Shone complex consists of subvalvar aortic stenosis in association with supravalvar mitral ring, parachute mitral valve, and coarctation of aorta. Subvalvar aortic stenosis may be categorized into two types: localized subvalvar aortic stenosis, which consists of a fibrous or fibromuscular ridge, and diffuse tunnel subvalvar aortic stenosis, in which circumferential narrowing commences at the annular level and extends downward for 1-3 cm. Idiopathic hypertrophic subaortic stenosis (IHSS) is also known as hypertrophic obstructive cardiomyopathy (HOCM), and is characterized by a primary hypertrophy of the myocardium. The obstructive forms involve different degrees of dynamic subvalvar aortic obstruction from a thickened ventricular wall and anterior motion of the mitral valve. Definitive nomenclature and therapeutic options for IHSS are listed under cardiomyopathy.

560   Aortic stenosis, Valvar

Valvar aortic stenosis may be congenital or acquired. In its congenital form there are two types: critical (infantile), seen in the newborn in whom systemic perfusion depends on a patent ductus arteriosus, and noncritical, seen in infancy or later. Acquired valvar stenosis may be seen after as a result of rheumatic valvar disease, or from stenotic changes of an aortic valve prosthesis. Congenital valvar stenosis may result: (1) from complete fusion of commissures (acommissural) that results in a dome-shaped valve with a pinpoint opening (seen most commonly in infants with critical aortic valve stenosis); (2) from a unicommissural valve with one defined commissure and eccentric orifice (often with two raphes radiating from the ostium indicating underdeveloped commissures of a tricuspid aortic valve); (3) from a bicuspid aortic valve, with leaflets that can be equal in size or discrepant, and in left-right or anterior-posterior position; and finally (4) from a dysplastic tricuspid valve, which may have a gelatinous appearance with thick rarely equal in size leaflets, often obscuring the commissures. The dysplastic, tricuspid or bicuspid form of aortic valve deformity may not be initially obstructive but may become stenotic later in life due to leaflet thickening and calcification.

570	Aortic stenosis, Supravalvar	Congenital supravalvar aortic stenosis is described as three forms: an hourglass deformity, a fibrous membrane, and a diffuse narrowing of the ascending aorta. The disease can be inherited as an autosomal dominant trait or part of Williams-Beuren syndrome in association with mental retardation, elfin facies, failure to thrive, and occasionally infantile hypercalcemia. Supravalvar aortic stenosis may involve the coronary artery ostia, and the aortic leaflets may be tethered. The coronary arteries can become tortuous and dilated due to elevated pressures and early atherosclerosis may ensue. Supravalvar aortic stenosis may also be acquired: (1) after a neoaortic reconstruction such as arterial switch, Ross operation, or Norwood procedure; (2) at a suture line from a previous aortotomy or cannulation; and (3) from a narrowed conduit.
590	Aortic valve atresia	Aortic valve atresia will most often be coded under the Hypoplastic left heart syndrome/complex diagnostic codes since it most often occurs as part of a spectrum of cardiac malformations. However, there is a small subset of patients with aortic valve atresia who have a well-developed left ventricle and mitral valve and a large VSD (nonrestrictive or restrictive). The diagnostic code "Aortic valve atresia" enables users to report those patients with aortic valve atresia and a well-developed systemic ventricle without recourse to either a hypoplastic left heart syndrome/complex diagnosis or a single ventricle diagnosis.
600	Aortic insufficiency	Congenital aortic regurgitation/insufficiency is rare as an isolated entity. There are rare reports of congenital malformation of the aortic valve that result in aortic insufficiency shortly after birth from an absent or underdeveloped aortic valve cusp. Aortic insufficiency is more commonly seen with other associated cardiac anomalies: (1) in stenotic aortic valves (commonly stenotic congenital bicuspid aortic valves) with some degree of aortic regurgitation due to aortic leaflet abnormality; (2) in association with a VSD (especially in supracristal or conal type I VSD, more commonly seen in Asian populations); (3) secondary to aortic-left ventricular tunnel; (4) secondary to tethering or retraction of aortic valve leaflets in cases of supravalvar aortic stenosis that may involve the aortic valve; and similarly (5) secondary to encroachment on an aortic cusp by a subaortic membrane; or (6) turbulence caused by a stenotic jet can create progressive aortic regurgitation. Aortic insufficiency may also result from: (1) post-procedure such as closed or open valvotomy or aortic valve repair, VSD closure, balloon valvotomy, or diagnostic catheterization; (2) in the neo-aorta post arterial switch, pulmonary autograft (Ross) procedure, homograft placement, Norwood procedure, or Damus-Kaye-Stansel procedure; (3) as a result of

endocarditis secondary to perforated or prolapsed leaflets or annular dehiscence; (4) secondary to annulo-aortic ectasia with prolapsed or noncoapting leaflets; (5) secondary to trauma, blunt or penetrating; or (6) as a result of aortitis, bacterial, viral or autoimmune. Aortic regurgitation secondary to prosthetic failure should be coded first as either conduit failure or prosthetic valve failure, as applicable, and secondarily as aortic regurgitation secondary to prosthetic failure (perivalvar or due to structural failure). The underlying fundamental diagnosis that led to the initial conduit or valve prosthesis placement should also be described.

610	Aortic insufficiency and aortic stenosis	Aortic insufficiency is often seen in association with stenotic aortic valve, commonly the stenotic congenital bicuspid aortic valve. The degree of aortic regurgitation is due to the severity of the aortic leaflet abnormality.
620	Aortic valve, Other	This diagnostic subgroup may be used to delineate aortic valve cusp number (unicuspid, bicuspid, tricuspid, more than three cusps), commissural fusion (normal, partially fused, completely fused), and valve leaflet (normal, thickened, dysplastic, calcified, gelatinous), annulus (normal, hypoplastic, calcified), or sinus description (normal, dilated). Note that any extensive descriptors chosen within those made available by a vendor will be converted, at harvest, to Aortic valve, Other.
630	Sinus of Valsalva aneurysm	The sinus of Valsalva is defined as that portion of the aortic root between the aortic root annulus and the sinotubular ridge. A congenital sinus of Valsalva aneurysm is a dilation usually of a single sinus of Valsalva. These most commonly originate from the right sinus (65%-85%), less commonly from the noncoronary sinus (10%-30%), and rarely from the left sinus (<5%). A true sinus of Valsalva aneurysm presents above the aortic annulus. The hierarchical coding system distinguishes between congenital versus acquired, ruptured versus nonruptured, sinus of origin, and chamber/site of penetration (right atrium, right ventricle, left atrium, left ventricle, pulmonary artery, pericardium). A nonruptured congenital sinus of Valsalva aneurysm may vary from a mild dilation of a single aortic sinus to an extensive windsock deformity. Rupture of a congenital sinus of Valsalva aneurysm into an adjacent chamber occurs most commonly between the ages of 15-30 years. Rupture may occur spontaneously, after trauma, after strenuous physical exertion, or from acute bacterial endocarditis. Congenital etiology is supported by the frequent association of sinus of Valsalva aneurysms with VSDs. Other disease processes are also associated with sinus of Valsalva aneurysm and include: syphilis, endocarditis, cystic medial necrosis, atherosclerosis, and trauma. Acquired sinus of Valsalva aneurysms more frequently

involve multiple sinuses of Valsalva; when present in multiple form they are more appropriately classified as aneurysms of the aortic root.

| 640 | LV to aorta tunnel | The aortico-left ventricular tunnel (LV-to-aorta tunnel) is an abnormal paravalvular (alongside or in the vicinity of a valve) communication between the aorta and left ventricle, commonly divided into 4 types: (1) type I, a simple tunnel with a slit-like opening at the aortic end and no aortic valve distortion; (2) type II, a large extracardiac aortic wall aneurysm of the tunnel with an oval opening at the aortic end, with or without ventricular distortion; (3) type III, intracardiac aneurysm of the septal portion of the tunnel, with or without right ventricular outflow obstruction; and (4) type IV, a combination of types II and III. Further differentiation within these types may be notation of right coronary artery arising from the wall of the tunnel. If a LV-to-aorta tunnel communicates with the right ventricle, many feel that the defect is really a ruptured sinus of Valsalva aneurysm. |

| 650 | Mitral stenosis, Supravalvar mitral ring | Supravalvar mitral ring is formed by a circumferential ridge of tissue that is attached to the anterior mitral valve leaflet (also known as the aortic leaflet) slightly below its insertion on the annulus and to the atrium slightly above the attachment of the posterior mitral valve leaflet (also known as the mural leaflet). Depending on the diameter of the ring orifice, varying degrees of obstruction exist. The underlying valve is usually abnormal and frequently stenotic or hypoplastic. Supravalvar mitral ring is commonly associated with other stenotic lesions such as parachute or hammock valve (subvalvar stenosis), papillary muscle fusion (subvalvar stenosis), and double orifice mitral valve (valvar stenosis). Differentiation from cor triatriatum focuses on the compartments created by the supravalvar ring. In cor triatriatum the posterior compartment contains the pulmonary veins; the anterior contains the left atrial appendage and the mitral valve orifice. In supravalvar mitral ring, the posterior compartment contains the pulmonary veins and the left atrial appendage; the anterior compartment contains only the mitral valve orifice. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect. |

| 660 | Mitral stenosis, Valvar | Valvar mitral stenosis may arise from congenital (annular and / or leaflet) or acquired causes, both surgical (after mitral valve repair or replacement or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia, myxomatous degeneration, trauma, or cardiomyopathy). Mitral valve annular hypoplasia is distinguished from |

severe mitral valve hypoplasia and mitral valve atresia, which are typically components of hypoplastic left heart syndrome. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

670	Mitral stenosis, Subvalvar	Congenital subvalvar mitral stenosis may be due to obstructive pathology of either the chordae tendineae and / or papillary muscles which support the valve leaflets. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
680	Mitral stenosis, Subvalvar, Parachute	In parachute mitral valve, all chordae are attached to a single papillary muscle originating from the posterior ventricular wall. When the interchordal spaces are partially obliterated valvar stenosis results. This defect also causes valvar insufficiency, most commonly due to a cleft leaflet, a poorly developed anterior leaflet, short chordae, or annular dilation. This lesion is also part of Shone's anomaly, which consists of the parachute mitral valve, supravalvar mitral ring, subaortic stenosis, and coarctation of the aorta. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
695	Mitral stenosis	Stenotic lesions of the mitral valve not otherwise specified in the diagnosis definitions 650, 660, 670, and 680.
700	Mitral regurgitation and mitral stenosis	Mitral regurgitation and mitral stenosis may arise from congenital or acquired causes or after cardiac surgery. Additional details to aid in coding specific components of the diagnosis are available in the individual mitral stenosis or mitral regurgitation field definitions. When coding multiple mitral valve lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
710	Mitral regurgitation	Mitral regurgitation may arise from congenital (at the annular, leaflet or subvalvar level) or acquired causes both surgical (after mitral valve repair or replacement, subaortic stenosis repair, atrioventricular canal repair, cardiac transplantation, or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia (with chordal rupture or papillary muscle infarct), myxomatous degeneration including Barlow's syndrome, trauma, or cardiomyopathy). Congenital lesions at the annular level include annular dilation or deformation (usually deformation is consequent to associated lesions). At the valve leaflet level, mitral regurgitation may be due to a cleft,

hypoplasia or agenesis of leaflet(s), excessive leaflet tissue, or a double orifice valve. At the subvalvar level, mitral regurgitation may be secondary to chordae tendineae anomalies (agenesis, rupture, elongation, or shortening as in funnel valve), or to papillary muscle anomalies (hypoplasia or agenesis, shortening, elongation, single-parachute, or multiple-hammock valve). When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

720	Mitral valve, Other	Mitral valve pathology not otherwise coded in diagnosis definitions 650 through 710.
730	Hypoplastic left heart syndrome (HLHS)	Hypoplastic left heart syndrome (HLHS) is a spectrum of cardiac malformations characterized by a severe underdevelopment of the left heart-aorta complex, consisting of aortic and/or mitral valve atresia, stenosis, or hypoplasia with marked hypoplasia or absence of the left ventricle, and hypoplasia of the ascending aorta and of the aortic arch with coarctation of the aorta. Hypoplastic left heart complex is a subset of patients at the favorable end of the spectrum of HLHS characterized by hypoplasia of the structures of the left heart-aorta complex, consisting of aortic and mitral valve hypoplasia without valve stenosis or atresia, hypoplasia of the left ventricle, hypoplasia of the left ventricular outflow tract, hypoplasia of the ascending aorta and of the aortic arch, with or without coarctation of the aorta.
2080	Shone's syndrome	Shone's syndrome is a syndrome of multilevel hypoplasia and obstruction of left sided cardiovascular structures including more than one of the following lesions: (1) supravalvar ring of the left atrium, (2) a parachute deformity of the mitral valve, (3) subaortic stenosis, and (4) aortic coarctation. The syndrome is based on the original report from Shone [1] that was based on analysis of 8 autopsied cases and described the tendency of these four obstructive, or potentially obstructive, conditions to coexist. Only 2 of the 8 cases exhibited all four conditions, with the other cases exhibiting only two or three of the anomalies [2]. [1] Shone JD, Sellers RD, Anderson RG, Adams P, Lillehei CW, Edwards JE. The developmental complex of "parachute mitral valve", supravalvar ring of left atrium, subaortic stenosis, and coarctation of the aorta. Am J Cardiol 1963; 11: 714–725. [2]. Tchervenkov CI, Jacobs JP, Weinberg PM, Aiello VD, Beland MJ, Colan SD, Elliott MJ, Franklin RC, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G. The nomenclature, definition and classification of hypoplastic left heart syndrome. Cardiology in the Young, 2006; 16(4): 339–368, August 2006.

Please note that the term "2080 Shone's syndrome" may be the "Fundamental Diagnosis" of a patient; however, the term "2080 Shone's syndrome" may not be the "Primary Diagnosis" of an operation. The term "2080 Shone's syndrome" may be a "Secondary Diagnosis" of an operation.

740	Cardiomyopathy (including dilated, restrictive, and hypertrophic)	Cardiomyopathy is a term applied to a wide spectrum of cardiac diseases in which the predominant feature is poor myocardial function in the absence of any anatomic abnormalities. Cardiomyopathies can be divided into three relatively easily distinguishable entities: (1) dilated, characterized by ventricular dilation and systolic dysfunction; (2) hypertrophic, characterized by physiologically inappropriate hypertrophy of the left ventricle; and (3) restrictive, characterized by diastolic dysfunction, with a presentation often identical to constrictive pericarditis. Also included in this diagnostic category are patients with a cardiomyopathy or syndrome confined to the right ventricle, for example: (1) arrhythmogenic right ventricular dysplasia; (2) Uhl's syndrome (hypoplasia of right ventricular myocardium, parchment heart); or (3)
750	Cardiomyopathy, End-stage congenital heart disease	Myocardial abnormality in which there is systolic and/or diastolic dysfunction in the presence of structural congenital heart disease without any (or any further) surgically correctable lesions.
760	Pericardial effusion	Inflammatory stimulation of the pericardium that results in the accumulation of appreciable amounts of pericardial fluid (also known as effusive pericarditis). The effusion may be idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced).
770	Pericarditis	Inflammatory process of the pericardium that leads to either (1) effusive pericarditis with accumulation of appreciable amounts of pericardial fluid or (2) constrictive pericarditis that leads to pericardial thickening and compression of the cardiac chambers, ultimately with an associated significant reduction in cardiac function. Etiologies are varied and include idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced) pericarditis.
780	Pericardial disease, Other	A structural or functional abnormality of the visceral or parietal pericardium that may, or may not, have a significant impact on cardiac function. Included are absence or partial defects of the pericardium.
790	Single ventricle, DILV	A congenital cardiac malformation in which both atria connect to a single, morphologically left ventricle.

The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the |

term "single ventricle" as synonymous for the "functionally univentricular heart".

The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

| 800 | Single ventricle, DIRV | A congenital cardiac malformation in which both atria connect to a single, morphologically right ventricle |

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feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

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810   Single ventricle, Mitral atresia   A congenital cardiac malformation in which there is no orifice of mitral valve

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septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

| 820 | Single ventricle, Tricuspid atresia | A congenital cardiac malformation in which there is no orifice of tricuspid valve. |

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Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

| 830 | Single ventricle, Unbalanced AV canal | Single ventricle anomalies with a common atrioventricular (AV) valve and only one completely well developed ventricle. If the common AV valve opens predominantly into the morphologic left ventricle, the defect is termed a left ventricular (LV)–type or LV-dominant AV septal defect. If the common AV valve opens predominantly into the morphologic right ventricle, the defect is termed a right ventricular (RV)–type or RV-dominant AV septal defect.

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| 840 | Single ventricle, Heterotaxia syndrome | "Heterotaxia syndrome" is synonymous with "heterotaxy", "visceral heterotaxy", and "heterotaxy syndrome". Heterotaxy is defined as an abnormality where the internal thoraco-abdominal organs demonstrate abnormal arrangement across the left-right axis of the body. By convention, heterotaxy does not include patients with either the expected usual or normal arrangement of the internal organs along the left- |

right axis, also known as 'situs solitus', nor patients with complete mirror-imaged arrangement of the internal organs along the left-right axis also known as 'situs inversus'.

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850	Single ventricle, Other	If the single ventricle is of primitive or indeterminate type, other is chosen in coding. It is recognized that a considerable variety of other structural cardiac malformations (e.g., biventricular hearts with straddling atrioventricular valves, pulmonary atresia with intact ventricular septum, some complex forms of double outlet right ventricle) may at times be best managed in a fashion similar to that which is used to treat

univentricular hearts. They are not to be coded in this section of the nomenclature, but according to the underlying lesions.

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| 851 | Single Ventricle + Total anomalous pulmonary venous connection (TAPVC) | Indicate if the patient has the diagnosis of "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)". In the event of Single Ventricle occurring in association with Total anomalous pulmonary venous connection (TAPVC), code "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)", and then use additional (secondary) diagnostic codes to describe the Single Ventricle and the Total anomalous pulmonary venous |

connection (TAPVC) separately to provide further documentation about the Single Ventricle and Total anomalous pulmonary venous connection (TAPVC) types. {"Total anomalous pulmonary venous connection (TAPVC)" is defined as a heart where all of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium.}

The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart".

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870	Congenitally corrected TGA	Indicate if the patient has the diagnosis of "Congenitally corrected TGA". Congenitally corrected transposition is synonymous with the terms 'corrected transposition'

and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.

| 872 | Congenitally corrected TGA, IVS | Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS". "Congenitally corrected TGA, IVS" is "Congenitally corrected transposition with an intact ventricular septum", in other words, "Congenitally corrected transposition with no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.) |
| 874 | Congenitally corrected TGA, IVS-LVOTO | Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS-LVOTO". "Congenitally corrected TGA, IVS-LVOTO" is "Congenitally corrected transposition with an intact ventricular septum and left ventricular outflow tract obstruction", in other words, "Congenitally corrected transposition with left ventricular outflow tract obstruction and no VSD". (Congenitally corrected transposition is synonymous |

with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

876	Congenitally corrected TGA, VSD	Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD". "Congenitally corrected TGA, VSD" is "Congenitally corrected transposition with a VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)
878	Congenitally corrected TGA, VSD-LVOTO	Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD-LVOTO". "Congenitally corrected TGA, VSD-LVOTO" is "Congenitally corrected transposition with a VSD and left ventricular outflow tract obstruction". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac

malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

880	TGA, IVS	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
890	TGA, IVS-LVOTO	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum and associated left ventricular obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
900	TGA, VSD	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial

switch (segmental diagnoses include A,L,L and A,D,D).

910	TGA, VSD-LVOTO	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects and left ventricular outflow tract obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
930	DORV, VSD type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, VSD type, there is an associated subaortic or doubly-committed VSD and no pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
940	DORV, TOF type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TOF type, there is an associated subaortic or doubly-committed VSD and pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). DORV can occur in association with pulmonary atresia, keeping in mind in coding that in the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles (in this situation DORV is coded as a primary diagnosis). Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate Single ventricle listing.

950	DORV, TGA type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TGA type, there is an associated subpulmonary VSD. Most frequently, there is no pulmonary outflow tract obstruction (Taussig-Bing heart). The aorta is usually to the right and slightly anterior to or side-by-side with the pulmonary artery. Associated aortic outflow tract stenosis (subaortic, aortic arch obstruction) is commonly associated with the Taussig-Bing heart and if present should be coded as a secondary diagnosis. Rarely, there is associated pulmonary outflow tract obstruction. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
960	DORV, Remote VSD (uncommitted VSD)	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, Remote VSD type, there is a remote or noncommitted VSD. The VSD is far removed from both the aortic and pulmonary valves, usually within the inlet septum. Many of these VSD's are in hearts with DORV and common atrioventricular canal/septal defect. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
2030	DORV + AVSD (AV Canal)	Indicate if the patient has the diagnosis of "DORV + AVSD (AV Canal)". In the event of DORV occurring in association with AVSD (AV Canal), code "DORV + AVSD (AV Canal)", and then use additional (secondary) diagnostic codes to describe the DORV and the AVSD (AV Canal) separately to provide further documentation about the DORV and AVSD (AV Canal) types. {"DORV" is "Double outlet right ventricle" and is defined as a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle.} In this case, the DORV exists in combination with an atrioventricular septal defect and common atrioventricular junction guarded by a common atrioventricular valve.

975	DORV, IVS	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In the rare case of double outlet right ventricle with IVS the ventricular septum is intact. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connections with DORV are to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
980	DOLV	Double outlet left ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the left ventricle. In the nomenclature developed for DOLV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DOLV is to be coded under congenitally corrected TGA. DOLV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
990	Coarctation of aorta	Indicate if the patient has the diagnosis of "Coarctation of aorta". A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.
1000	Aortic arch hypoplasia	Hypoplasia of the aortic arch is hypoplasia of the proximal or distal transverse arch or the aortic isthmus. The isthmus (arch between the left subclavian and insertion of the patent ductus arteriosus / ligamentum arteriosum) is hypoplastic if its diameter is less than 40% of the diameter of the ascending aorta. The proximal transverse arch (arch between the innominate and left carotid arteries) and distal transverse arch (arch between the left carotid and left subclavian arteries) are hypoplastic if their diameters are less than 60% and 50%, respectively, of the diameter of the ascending aorta.
92	VSD + Aortic arch hypoplasia	A ventricular septal defect, any type, associated with hypoplasia of the aortic arch. (See diagnosis definition 1000 for a definition of hypoplasia of the aortic arch.)
94	VSD + Coarctation of aorta	Indicate if the patient has the diagnosis of "VSD + Coarctation of aorta". In the event of a VSD occurring in association with Coarctation of aorta, code "VSD + Coarctation of aorta", and then use additional (secondary) diagnostic codes to describe the VSD and

the Coarctation of aorta separately to provide further documentation about the individual VSD and Coarctation of aorta types. {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)} {A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.}

1010	Coronary artery anomaly, Anomalous aortic origin of coronary artery (AAOCA)	Anomalous aortic origins of the coronary arteries include a spectrum of anatomic variations of the normal coronary artery origins. Coronary artery anomalies of aortic origin to be coded under this diagnostic field include: anomalies of take-off (high take-off), origin (sinus), branching, and number. An anomalous course of the coronary artery vessels is also significant, particularly those coronary arteries that arise or course between the great vessels.
1020	Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA)	In patients with anomalous pulmonary origin of the coronary artery, the coronary artery (most commonly the left coronary artery) arises from the pulmonary artery rather than from the aorta. Rarely, the right coronary artery, the circumflex, or both coronary arteries may arise from the pulmonary artery.
1030	Coronary artery anomaly, Fistula	The most common of coronary artery anomalies, a coronary arteriovenous fistula is a communication between a coronary artery and either a chamber of the heart (coronary-cameral fistula) or any segment of the systemic or pulmonary circulation (coronary arteriovenous fistula). They may be congenital or acquired (traumatic, infectious, iatrogenic) in origin, and are mostly commonly seen singly, but occasionally multiple fistulas are present. Nomenclature schemes have been developed that further categorize the fistulas by vessel of origin and chamber of termination, and one angiographic classification scheme by Sakakibara has surgical implications. Coronary artery fistulas can be associated with other congenital heart anomalies such as tetralogy of Fallot, atrial septal defect, ventricular septal defect, and pulmonary atresia with intact ventricular septum, among others. The major cardiac defect should be listed as the primary diagnosis and the coronary artery fistula should be as an additional secondary

diagnoses.

1040	Coronary artery anomaly, Aneurysm	Coronary artery aneurysms are defined as dilations of a coronary vessel 1.5 times the adjacent normal coronaries. There are two forms, saccular and fusiform (most common), and both may be single or multiple. These aneurysms may be congenital or acquired (atherosclerotic, Kawasaki, systemic diseases other than Kawasaki, iatrogenic, infectious, or traumatic) in origin.
1050	Coronary artery anomaly, Other	Coronary artery anomalies which may fall within this category include coronary artery bridging and coronary artery stenosis, as well as secondary coronary artery variations seen in congenital heart defects such as tetralogy of Fallot, transposition of the great arteries, and truncus arteriosus (with the exception of variations that can be addressed by a more specific coronary artery anomaly code).
1070	Interrupted aortic arch	Indicate if the patient has the diagnosis of "Interrupted aortic arch". Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.
2020	Interrupted aortic arch + VSD	Indicate if the patient has the diagnosis of "Interrupted aortic arch + VSD". In the event of interrupted aortic arch occurring in association with VSD, code "Interrupted aortic arch + VSD", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the VSD separately to provide further documentation about the individual interrupted aortic arch and VSD types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left

ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)}

| 2000 | Interrupted aortic arch + AP window (aortopulmonary window) | Indicate if the patient has the diagnosis of "Interrupted aortic arch + AP window (aortopulmonary window)". In the event of interrupted aortic arch occurring in association with AP window, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the AP window separately to provide further documentation about the individual interrupted aortic arch and AP window types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)} |
| 1080 | Patent ductus arteriosus | Indicate if the patient has the diagnosis of "Patent |

ductus arteriosus". The ductus arteriosus (arterial duct) is an essential feature of fetal circulation, connecting the main pulmonary trunk with the descending aorta, distal to the origin of the left subclavian artery. In most patients it is on the left side. If a right aortic arch is present, it may be on the right or the left; very rarely it is bilateral. When luminal patency of the duct persists post-natally, it is referred to as patent ductus arteriosus (patent arterial duct). The length and diameter may vary considerably from case to case. The media of the ductus consists mainly of smooth muscle that is arranged spirally, and the intima is much thicker than that of the aorta. (A patent ductus arteriosus is a vascular arterial connection between the thoracic aorta and the pulmonary artery. Most commonly a PDA has its origin from the descending thoracic aorta, just distal and opposite the origin of the left subclavian artery. The insertion of the ductus is most commonly into the very proximal left pulmonary artery at its junction with the main pulmonary artery. Origination and insertion sites can be variable, however.)

1090	Vascular ring	The term vascular ring refers to a group of congenital vascular anomalies that encircle and compress the esophagus and trachea. The compression may be from a complete anatomic ring (double aortic arch or right aortic arch with a left ligamentum) or from a compressive effect of an aberrant vessel (innominate artery compression syndrome).
1100	Pulmonary artery sling	In pulmonary artery sling, the left pulmonary artery originates from the right pulmonary artery and courses posteriorly between the trachea and esophagus in its route to the left lung hilum, causing a sling-like compression of the trachea.
1110	Aortic aneurysm (including pseudoaneurysm)	An aneurysm of the aorta is defined as a localized dilation or enlargement of the aorta at any site along its length (from aortic annulus to aortoiliac bifurcation). A true aortic aneurysm involves all layers of the aortic wall. A false aortic aneurysm (pseudoaneurysm) is defined as a dilated segment of the aorta not containing all layers of the aortic wall and may include postoperative or post-procedure false aneurysms at anastomotic sites, traumatic aortic injuries or transections, and infectious processes leading to a contained rupture.
1120	Aortic dissection	Aortic dissection is a separation of the layers of the aortic wall. Extension of the plane of the dissection may progress to free rupture into the pericardium, mediastinum, or pleural space if not contained by the outer layers of the media and adventitia. Dissections may be classified as acute or chronic (if they have been present for more than 14 days).
1130	Lung disease, Benign	Lung disease arising from any etiology (congenital or

		acquired) which does not result in death or lung or heart-lung transplant; examples might be non-life threatening asthma or emphysema, benign cysts.
1140	Lung disease, Malignant	Lung disease arising from any etiology (congenital or acquired, including pulmonary parenchymal disease, pulmonary vascular disease, congenital heart disease, neoplasm, etc.) which may result in death or lung or heart-lung transplant.
1160	Tracheal stenosis	Tracheal stenosis is a reduction in the anatomic luminal diameter of the trachea by more than 50% of the remaining trachea. This stenosis may be congenital or acquired (as in post-intubation or traumatic tracheal stenosis).
1170	Airway disease	Included in this diagnostic category would be airway pathology not included under the definition of tracheal stenosis such as tracheomalacia, bronchotracheomalacia, tracheal right upper lobe, bronchomalacia, subglottic stenosis, bronchial stenosis, etc.
1430	Pleural disease, Benign	Benign diseases of the mediastinal or visceral pleura.
1440	Pleural disease, Malignant	Malignant diseases of the mediastinal or visceral pleura.
1450	Pneumothorax	A collection of air or gas in the pleural space.
1460	Pleural effusion	Abnormal accumulation of fluid in the pleural space.
1470	Chylothorax	The presence of lymphatic fluid in the pleural space secondary to a leak from the thoracic duct or its branches. Chylothorax is a specific type of pleural effusion.
1480	Empyema	A collection of purulent material in the pleural space, usually secondary to an infection.
1490	Esophageal disease, Benign	Any benign disease of the esophagus.
1500	Esophageal disease, Malignant	Any malignant disease of the esophagus.
1505	Mediastinal disease	Any disease of the mediastinum awaiting final benign/malignant pathology determination.
1510	Mediastinal disease, Benign	Any benign disease of the mediastinum.
1520	Mediastinal disease, Malignant	Any malignant disease of the mediastinum.
1540	Diaphragm paralysis	Paralysis of diaphragm, unilateral or bilateral.
1550	Diaphragm disease, Other	Any disease of the diaphragm other than paralysis.
2160	Rib tumor, Benign	Non-cancerous tumor of rib(s) (e.g., fibrous dysplasia)
2170	Rib tumor, Malignant	Cancerous tumor of rib(s)- primary (e.g., osteosarcoma, chondrosarcoma)
2180	Rib tumor, Metastatic	Cancerous tumor metastasized to rib(s)from a different primary location
2190	Sternal tumor, Benign	Non-cancerous tumor of sternum (e.g., fibrous dysplasia)

2200	Sternal tumor, Malignant	Cancerous tumor of sternum - primary (e.g., osteosarcoma, chondrosarcoma)
2210	Sternal tumor, Metastatic	Cancerous tumor metastasized to sternum from a different primary location
2220	Pectus carinatum	Pectus carinatum represents a spectrum of protrusion abnormalities of the anterior chest wall. Severe deformity may result in dyspnea and decreased endurance. Some patients develop rigidity of the chest wall with decreased lung compliance, progressive emphysema, and increased frequency of respiratory tract infections.
2230	Pectus excavatum	Pectus excavatum is a congenital chest wall deformity in which several ribs and the sternum grow abnormally, producing a concave, or caved-in, appearance in the anterior chest wall. Pectus excavatum is the most common type of congenital chest wall abnormality. It occurs in an estimated 1 in 300-400 births, with male predominance (male-to-female ratio of 3:1). The condition is typically noticed at birth, and more than 90% of cases are diagnosed within the first year of life. Worsening of the chest's appearance and the onset of respiratory symptoms are usually reported during rapid bone growth in the early teenage years.
2240	Thoracic outlet syndrome	Thoracic outlet syndrome (TOS) is caused by compression at the superior thoracic outlet wherein excess pressure is placed on a neurovascular bundle passing between the anterior scalene and middle scalene muscles. It can affect the brachial plexus (nerves that pass into the arm from the neck), the subclavian artery, and - rarely - the vein, which does not normally pass through the scalene hiatus. TOS may occur due to a positional cause - for example, by abnormal compression from the clavicle (collarbone) and shoulder girdle on arm movement. There are also several static forms, caused by abnormalities, enlargement, or spasm of the various muscles surrounding the arteries, veins, and/or brachial plexus, a fixation of a first rib, or a cervical rib. The most common causes of thoracic outlet syndrome include physical trauma from a car accident, repetitive injuries from a job such as frequent non-ergonomic use of a keyboard, sports-related activities, anatomical defects such as having an extra rib, and pregnancy.
1180	Arrhythmia	Any cardiac rhythm other than normal sinus rhythm.
2040	Arrhythmia, Atrial	Indicate if the patient has the diagnosis of ''Arrhythmia, Atrial''. ''Arrhythmia, Atrial'' ROOT Definition = Non-sinus atrial rhythm with or without atrioventricular conduction. [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease,

Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 373.

2050	Arrhythmia, Junctional	Indicate if the patient has the diagnosis of ''Arrhythmia, Junctional''. "Arrhythmias arising from the atrioventricular junction; may be bradycardia, tachycardia, premature beats, or escape rhythm [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 379.
2060	Arrhythmia, Ventricular	Indicate if the patient has the diagnosis of ''Arrhythmia, Ventricular''. "Arrhythmia, Ventricular'' ROOT Definition = Abnormal rhythm originating from the ventricles [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 393.
1185	Arrhythmia, Heart block	Atrioventricular block may be congenital or acquired, and may be of varying degree (first, second, or third degree).
1190	Arrhythmia, Heart block, Acquired	Atrioventricular block, when acquired, may be post-surgical, or secondary to myocarditis or other etiologies; the block may be first, second or third degree.
1200	Arrhythmia, Heart block, Congenital	Atrioventricular block, when congenital, may be first, second or third degree block.
1220	Arrhythmia, Pacemaker, Indication for replacement	Indications for pacemaker replacement may include end of generator life, malfunction, or infection.
1230	Atrial Isomerism, Left	In isomerism, both appendages are of like morphology or structure; in left atrial isomerism both the right atrium and left atrium appear to be a left atrium structurally.
1240	Atrial Isomerism, Right	In isomerism, both appendages are of like morphology or structure; in right atrial isomerism both the right atrium and left atrium appear to be a right atrium structurally.
2090	Dextrocardia	Indicate if the patient has the diagnosis of ''Dextrocardia''. "Dextrocardia'' is most usually considered synonymous with a right-sided ventricular mass, whilst ''dextroversion'' is frequently defined as a configuration where the ventricular apex points to the

right. In a patient with the usual atrial arrangement, or situs solitus, dextroversion, therefore, implies a turning to the right of the heart [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

2100	Levocardia	Indicate if the patient has the diagnosis of ''Levocardia''. ''Levocardia'' usually considered synonymous with a left-sided ventricular mass, whilst ''levoversion'' is frequently defined as a configuration where the ventricular apex points to the left [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2110	Mesocardia	Indicate if the patient has the diagnosis of ''Mesocardia''. "Mesocardia'' is most usually considered synonymous with the ventricular mass occupying the midline [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2120	Situs inversus	Indicate if the patient has the diagnosis of "Situs inversus" of the atrial chambers. The development of morphologically right-sided structures on one side of the body, and morphologically left-sided structures on the other side, is termed lateralization. Normal

lateralization, the usual arrangement, is also known as ''situs solitus''. The mirror-imaged arrangement is also known as ''situs inversus''. The term ''visceroatrial situs'' is often used to refer to the situs of the viscera and atria when their situs is in agreement. The arrangement of the organs themselves, and the arrangement of the atrial chambers, is not always the same. Should such disharmony be encountered, the sidedness of the organs and atrial chambers must be separately specified [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

1250	Aneurysm, Ventricular, Right (including pseudoaneurysm)	An aneurysm of the right ventricle is defined as a localized dilation or enlargement of the right ventricular wall.
1260	Aneurysm, Ventricular, Left (including pseudoaneurysm)	An aneurysm of the left ventricle is defined as a localized dilation or enlargement of the left ventricular wall.
1270	Aneurysm, Pulmonary artery	An aneurysm of the pulmonary artery is defined as a localized dilation or enlargement of the pulmonary artery trunk and its central branches (right and left pulmonary artery).
1280	Aneurysm, Other	A localized dilation or enlargement of a cardiac vessel or chamber not coded in specific fields available for aortic aneurysm, sinus of Valsalva aneurysm, coronary artery aneurysm, right ventricular aneurysm, left ventricular aneurysm, or pulmonary artery aneurysm.
1290	Hypoplastic RV	Small size of the right ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the right ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
1300	Hypoplastic LV	Small size of the left ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should,

however, be coded as secondary to an accompanying congenital cardiac anomaly if the left ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.

2070	Postoperative bleeding	Indicate if the patient has the diagnosis of "Postoperative bleeding".
1310	Mediastinitis	Inflammation/infection of the mediastinum, the cavity between the lungs which holds the heart, great vessels, trachea, esophagus, thymus, and connective tissues. In the United States mediastinitis occurs most commonly following chest surgery.
1320	Endocarditis	An infection of the endocardial surface of the heart, which may involve one or more heart valves (native or prosthetic) or septal defects or prosthetic patch material placed at previous surgery.
1325	Rheumatic heart disease	Heart disease, usually valvar (e.g., mitral or aortic), following an infection with group A streptococci
1330	Prosthetic valve failure	Indicate if the patient has the diagnosis of "Prosthetic valve failure". This diagnosis is the primary diagnosis to be entered for patients undergoing replacement of a previously placed valve (not conduit) prosthesis, whatever type (e.g., bioprosthetic, mechanical, etc.). Failure may be due to, among others, patient somatic growth, malfunction of the prosthesis, or calcification or overgrowth of the prosthesis (e.g., pannus formation). Secondary or fundamental diagnosis would relate to the underlying valve disease entity. As an example, a patient undergoing removal or replacement of a prosthetic pulmonary valve previously placed for pulmonary insufficiency after repair of tetralogy of Fallot would have as a primary diagnosis "Prosthetic valve failure", as a secondary diagnosis "Pulmonary insufficiency", and as a fundamental diagnosis "Tetralogy of Fallot".
1340	Myocardial infarction	A myocardial infarction is the development of myocardial necrosis caused by a critical imbalance between the oxygen supply and demand of the myocardium. While a myocardial infarction may be caused by any process that causes this imbalance it most commonly results from plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Myocardial infarction is a usual accompaniment of anomalous left coronary artery from the pulmonary artery (ALCAPA).
1350	Cardiac tumor	An abnormal growth of tissue in or on the heart, demonstrating partial or complete lack of structural organization, and no functional coordination with normal cardiac tissue. Commonly, a mass is recognized

which is distinct from the normal structural components of the heart. A primary cardiac tumor is one that arises directly from tissues of the heart, (e.g., myxoma, fibroelastoma, rhabdomyoma, fibroma, lipoma, pheochromocytoma, teratoma, hemangioma, mesothesioloma, sarcoma). A secondary cardiac tumor is one that arises from tissues distant from the heart, with subsequent spread to the otherwise normal tissues of the heart, (e.g., renal cell tumor with caval extension from the kidney to the level of the heart or tumor with extension from other organs or areas of the body (hepatic, adrenal, uterine, infradiaphragmatic)). N.B., in the nomenclature system developed, cardiac thrombus and cardiac vegetation are categorized as primary cardiac tumors.

1360	Pulmonary AV fistula	An abnormal intrapulmonary connection (fistula) between an artery and vein that occurs in the blood vessels of the lungs. Pulmonary AV fistulas may be seen in association with congenital heart defects; the associated cardiac defect should be coded as well.
1370	Pulmonary embolism	A pulmonary embolus is a blockage of an artery in the lungs by fat, air, clumped tumor cells, or a blood clot.
1385	Pulmonary vascular obstructive disease	Pulmonary vascular obstructive disease (PVOD) other than those specifically defined elsewhere (Eisenmenger's pulmonary vascular obstructive disease, primary pulmonary hypertension, persistent fetal circulation). The spectrum includes PVOD arising from (1) pulmonary arterial hypertension or (2) pulmonary venous hypertension or (3) portal hypertension, or (4) collage vascular disease, or (5) drug or toxin induced, or (6) diseases of the respiratory system, or (7) chronic thromboembolic disease, among others.
1390	Pulmonary vascular obstructive disease (Eisenmenger's)	"Eisenmenger syndrome" could briefly be described as "Acquired severe pulmonary vascular disease associated with congenital heart disease (Eisenmenger)". Eisenmenger syndrome is an acquired condition. In Eisenmenger-type pulmonary vascular obstructive disease, long-term left-to-right shunting (e.g., through a ventricular or atrial septal defect, patent ductus arteriosus, aortopulmonary window) can lead to chronic pulmonary hypertension with resultant pathological changes in the pulmonary vessels. The vessels become thick-walled, stiff, noncompliant, and may be obstructed. In Eisenmenger syndrome, the long-term left-to-right shunting will reverse and become right to left. Please note that the specific heart defect should be coded as a secondary diagnosis.
1400	Primary pulmonary hypertension	Primary pulmonary hypertension is a rare disease characterized by elevated pulmonary artery hypertension with no apparent cause. Two forms are included in the nomenclature, a sporadic form and a familial form which can be linked to the BMPR-II gene.

1410	Persistent fetal circulation	Persistence of the blood flow pattern seen in fetal life, in which high pulmonary vascular resistance in the lungs results in decreased blood flow to the lungs. Normally, after birth pulmonary pressure falls with a fall in pulmonary vascular resistance and there is increased perfusion of the lungs. Persistent fetal circulation, also known as persistent pulmonary hypertension of the newborn, can be related to lung or diaphragm malformations or lung immaturity.
1420	Meconium aspiration	Aspiration of amniotic fluid stained with meconium before, during, or after birth can lead to pulmonary sequelae including (1) pneumothorax, (2) pneumomediastinum, (3) pneumopericardium, (4) lung infection, and (5) meconium aspiration syndrome (MAS) with persistent pulmonary hypertension.
2250	Kawasaki disease	Kawasaki disease, also known as Kawasaki syndrome, is an acute febrile illness of unknown etiology that primarily affects children younger than 5 years of age. it was first described in Japan in 1967, and the first cases outside of Japan were reported in Hawaii in 1976. It is characterized by fever, rash, swelling of the hands and feet, irritation and redness of the whites of the eyes, swollen lymph glands in the neck, and irritation and inflammation of the mouth, lips, and throat. Serious complications of Kawasaki disease include coronary artery dilations and aneurysms, and Kawasaki disease is a leading cause of acquired heart disease in children in the United States. The standard treatment with intravenous immunoglobulin and aspirin substantially decreases the development of coronary artery abnormalities.
1560	Cardiac, Other	Any cardiac diagnosis not specifically delineated in other diagnostic codes.
1570	Thoracic and/or mediastinal, Other	Any thoracic and/or mediastinal disease not specifically delineated in other diagnostic codes.
1580	Peripheral vascular, Other	Any peripheral vascular disease (congenital or acquired) or injury (from trauma or iatrogenic); vessels involved may include, but are not limited to femoral artery, femoral vein, iliac artery, brachial artery, etc.
2260	Complication of cardiovascular catheterization procedure	Unspecified complication of cardiovascular catheterization procedure
2270	Complication of cardiovascular catheterization procedure, Device embolization	Migration or movement of device introduced during a cardiac catheterization procedure to an unintended location
2280	Complication of cardiovascular catheterization procedure, Device malfunction	Malfunction of a device introduced during a cardiac catheterization procedure

2290	Complication of cardiovascular catheterization procedure, Perforation	Perforation or puncture caused by a device introduced during a cardiac catheterization procedure
2300	Complication of interventional radiology procedure	Unspecified complication of interventional radiology procedure
2310	Complication of interventional radiology procedure, Device embolization	Migration or movement of device introduced during an interventional radiology procedure to an unintended location
2320	Complication of interventional radiology procedure, Device malfunction	Malfunction of a device introduced during an interventional radiology procedure
2330	Complication of interventional radiology procedure, Perforation	Perforation or puncture caused by a device introduced during an interventional radiology procedure
2340	Foreign body, Intracardiac foreign body	Presence of a foreign body within the heart
2350	Foreign body, Intravascular foreign body	Presence of a foreign body within an artery or vein
2360	Open sternum with closed skin	Sternotomy edges not re-approximated prior to closure of skin incision
2370	Open sternum with open skin (includes membrane placed to close skin)	Sternotomy and skin incision left open following surgery, covered with a membrane or dressing
2380	Retained sternal wire causing irritation	Surgically placed wire causing soft tissue irritation, pain or swelling (not infected)
2390	Syncope	A transient, self-limited loss of consciousness with an inability to maintain postural tone that is followed by spontaneous recovery. The term syncope excludes seizures, coma, shock, or other states of altered consciousness.
2400	Trauma, Blunt	Injury (ies) sustained from blunt force, caused by motor vehicle accidents, falls, blows or crush injuries
2410	Trauma, Penetrating	Injury (ies) sustained as a result of sharp force, including cutting or piercing instruments or objects, bites, or firearm injuries from projectiles.
7000	Normal heart	Normal heart.
7777	Miscellaneous, Other	Any disease (congenital or acquired) not specifically delineated in other diagnostic codes.
4010	Status post - PFO, Primary closure	
4020	Status post - ASD repair, Primary closure	
4030	Status post - ASD repair, Patch	

4040	Status post - ASD repair, Device
6110	Status post - ASD repair, Patch + PAPVC repair
4050	Status post - ASD, Common atrium (single atrium), Septation
4060	Status post - ASD creation/enlargement
4070	Status post - ASD partial closure
4080	Status post - Atrial septal fenestration
4085	Status post - Atrial fenestration closure
4100	Status post - VSD repair, Primary closure
4110	Status post - VSD repair, Patch
4120	Status post - VSD repair, Device
4130	Status post - VSD, Multiple, Repair
4140	Status post - VSD creation/enlargement
4150	Status post - Ventricular septal fenestration
4170	Status post - AVC (AVSD) repair, Complete (CAVSD)
4180	Status post - AVC (AVSD) repair, Intermediate (Transitional)
4190	Status post - AVC (AVSD) repair, Partial (Incomplete) (PAVSD)
6300	Status post - Valvuloplasty, Common atrioventricular valve
6250	Status post - Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve
6230	Status post - Valve replacement, Common atrioventricular valve

4210	Status post - AP window repair
4220	Status post - Pulmonary artery origin from ascending aorta (hemitruncus) repair
4230	Status post - Truncus arteriosus repair
4240	Status post - Valvuloplasty, Truncal valve
6290	Status post - Valvuloplasty converted to valve replacement in the same operation, Truncal valve
4250	Status post - Valve replacement, Truncal valve
6220	Status post - Truncus + Interrupted aortic arch repair (IAA) repair
4260	Status post - PAPVC repair
4270	Status post - PAPVC, Scimitar, Repair
6120	Status post - PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)
4280	Status post - TAPVC repair
6200	Status post - TAPVC repair + Shunt - systemic-to-pulmonary
4290	Status post - Cor triatriatum repair
4300	Status post - Pulmonary venous stenosis repair
4310	Status post - Atrial baffle procedure (non-Mustard, non-Senning)
4330	Status post - Anomalous systemic venous connection repair
4340	Status post - Systemic venous stenosis repair
4350	Status post - TOF repair, No ventriculotomy
4360	Status post - TOF repair, Ventriculotomy,

Nontransanular patch

4370   Status post - TOF repair, Ventriculotomy, Transanular patch

4380   Status post - TOF repair, RV-PA conduit

4390   Status post - TOF - AVC (AVSD) repair

4400   Status post - TOF - Absent pulmonary valve repair

4420   Status post - Pulmonary atresia - VSD (including TOF, PA) repair

6700   Status post - Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])

6710   Status post - Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])

6720   Status post - Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])

6730   Status post - Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Complete unifocalization (all usable MAPCA[s] are incorporated)

6740   Status post - Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Incomplete unifocalization (not all usable MAPCA[s] are incorporated)

6750	Status post - Unifocalization MAPCA(s), Unilateral pulmonary unifocalization
4440	Status post - Unifocalization MAPCA(s)
4450	Status post - Occlusion of MAPCA(s)
4460	Status post - Valvuloplasty, Tricuspid
6280	Status post - Valvuloplasty converted to valve replacement in the same operation, Tricuspid
4465	Status post - Ebstein's repair
4470	Status post - Valve replacement, Tricuspid (TVR)
4480	Status post - Valve closure, Tricuspid (exclusion, univentricular approach)
4490	Status post - Valve excision, Tricuspid (without replacement)
4500	Status post - Valve surgery, Other, Tricuspid
4510	Status post - RVOT procedure
4520	Status post - 1 1/2 ventricular repair
4530	Status post - PA, reconstruction (plasty), Main (trunk)
4540	Status post - PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)
4550	Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)
4570	Status post - DCRV repair
4590	Status post - Valvuloplasty, Pulmonic
6270	Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic
4600	Status post - Valve

replacement, Pulmonic (PVR)

4630	Status post - Valve excision, Pulmonary (without replacement)
4640	Status post - Valve closure, Semilunar
4650	Status post - Valve surgery, Other, Pulmonic
4610	Status post - Conduit placement, RV to PA
4620	Status post - Conduit placement, LV to PA
5774	Status post - Conduit placement, Ventricle to aorta
5772	Status post - Conduit placement, Other
4580	Status post - Conduit reoperation
4660	Status post - Valvuloplasty, Aortic
6240	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic
6310	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure
6320	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure
4670	Status post - Valve replacement, Aortic (AVR)
4680	Status post - Valve replacement, Aortic (AVR), Mechanical
4690	Status post - Valve replacement, Aortic (AVR), Bioprosthetic
4700	Status post - Valve replacement, Aortic (AVR), Homograft
4715	Status post - Aortic root replacement, Bioprosthetic

4720	Status post - Aortic root replacement, Mechanical
4730	Status post - Aortic root replacement, Homograft
4735	Status post - Aortic root replacement, Valve sparing
4740	Status post - Ross procedure
4750	Status post - Konno procedure
4760	Status post - Ross-Konno procedure
4770	Status post - Other annular enlargement procedure
4780	Status post - Aortic stenosis, Subvalvar, Repair
6100	Status post - Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS
4790	Status post - Aortic stenosis, Supravalvar, Repair
4800	Status post - Valve surgery, Other, Aortic
4810	Status post - Sinus of Valsalva, Aneurysm repair
4820	Status post - LV to aorta tunnel repair
4830	Status post - Valvuloplasty, Mitral
6260	Status post - Valvuloplasty converted to valve replacement in the same operation, Mitral
4840	Status post - Mitral stenosis, Supravalvar mitral ring repair
4850	Status post - Valve replacement, Mitral (MVR)
4860	Status post - Valve surgery, Other, Mitral
4870	Status post - Norwood procedure
4880	Status post - HLHS biventricular repair
6755	Status post - Conduit insertion right ventricle to pulmonary artery + Intraventricular tunnel left

ventricle to neoaorta + Arch reconstruction (Rastelli and Norwood type arch reconstruction) (Yasui)

6160   Status post - Hybrid Approach "Stage 1", Application of RPA & LPA bands

6170   Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)

6180   Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands

6140   Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)

6150   Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair

6760   Status post - Hybrid Approach, Transcardiac balloon dilation

6770   Status post - Hybrid Approach, Transcardiac transcatheter device placement

1590   Status post - Transplant, Heart

1610   Status post - Transplant, Heart and lung

4910   Status post - Partial left ventriculectomy (LV volume reduction surgery) (Batista)

4920   Status post - Pericardial drainage procedure

4930   Status post - Pericardiectomy

4940	Status post - Pericardial procedure, Other
4950	Status post - Fontan, Atrio-pulmonary connection
4960	Status post - Fontan, Atrio-ventricular connection
4970	Status post - Fontan, TCPC, Lateral tunnel, Fenestrated
4980	Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated
5000	Status post - Fontan, TCPC, External conduit, Fenestrated
5010	Status post - Fontan, TCPC, External conduit, Nonfenestrated
6780	Status post - Fontan, TCPC, Intra/extracardiac conduit, Fenestrated
6790	Status post - Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated
5025	Status post - Fontan revision or conversion (Re-do Fontan)
5030	Status post - Fontan, Other
6340	Status post - Fontan + Atrioventricular valvuloplasty
5035	Status post - Ventricular septation
5050	Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double switch)
5060	Status post - Congenitally corrected TGA repair, Atrial switch and Rastelli
5070	Status post - Congenitally corrected TGA repair, VSD closure
5080	Status post - Congenitally corrected TGA repair, VSD closure and LV to PA conduit
5090	Status post - Congenitally corrected TGA repair, Other
5110	Status post - Arterial switch operation (ASO)
5120	Status post - Arterial switch

operation (ASO) and VSD repair

5123   Status post - Arterial switch procedure + Aortic arch repair

5125   Status post - Arterial switch procedure and VSD repair + Aortic arch repair

5130   Status post - Senning

5140   Status post - Mustard

5145   Status post - Atrial baffle procedure, Mustard or Senning revision

5150   Status post - Rastelli

5160   Status post - REV

6190   Status post - Aortic root translocation over left ventricle (Including Nikaidoh procedure)

6210   Status post - TGA, Other procedures (Kawashima, LV-PA conduit, other)

5180   Status post - DORV, Intraventricular tunnel repair

5200   Status post - DOLV repair

5210   Status post - Coarctation repair, End to end

5220   Status post - Coarctation repair, End to end, Extended

5230   Status post - Coarctation repair, Subclavian flap

5240   Status post - Coarctation repair, Patch aortoplasty

5250   Status post - Coarctation repair, Interposition graft

5260   Status post - Coarctation repair, Other

5275   Status post - Coarctation repair + VSD repair

5280   Status post - Aortic arch repair

5285   Status post - Aortic arch repair + VSD repair

5290   Status post - Coronary artery fistula ligation

5291   Status post - Anomalous

origin of coronary artery from pulmonary artery repair

5300	Status post - Coronary artery bypass
5305	Status post - Anomalous aortic origin of coronary artery (AAOCA) repair
5310	Status post - Coronary artery procedure, Other
5320	Status post - Interrupted aortic arch repair
5330	Status post - PDA closure, Surgical
5340	Status post - PDA closure, Device
5360	Status post - Vascular ring repair
5365	Status post - Aortopexy
5370	Status post - Pulmonary artery sling repair
5380	Status post - Aortic aneurysm repair
5390	Status post - Aortic dissection repair
5400	Status post - Lung biopsy
1600	Status post - Transplant, Lung(s)
5420	Status post - Lung procedure, Other
5440	Status post - Tracheal procedure
6800	Status post - Muscle flap, Trunk (i.e., intercostal, pectus, or serratus muscle)
6810	Status post - Muscle flap, Trunk (i.e. latissimus dorsi)
6820	Status post - Removal, Sternal wire
6830	Status post - Rib excision, Complete
6840	Status post - Rib excision, Partial
6850	Status post - Sternal fracture - open treatment
6860	Status post - Sternal resection,

Radical resection of sternum

6870   Status post - Sternal resection,
        Radical resection of sternum
        with mediastinal
        lymphadenectomy

6880   Status post - Tumor of chest
        wall - Excision including ribs

6890   Status post - Tumor of chest
        wall - Excision including ribs,
        With reconstruction

6900   Status post - Tumor of soft
        tissue of thorax - Excision of
        deep subfascial or
        intramuscular tumor

6910   Status post - Tumor of soft
        tissue of thorax - Excision of
        subcutaneous tumor

6920   Status post - Tumor of soft
        tissue of thorax - Radical
        resection

6930   Status post - Hyoid myotomy
        and suspension

6940   Status post - Muscle flap,
        Neck

6950   Status post - Procedure on
        neck

6960   Status post - Tumor of soft
        tissue of neck - Excision of
        deep subfascial or
        intramuscular tumor

6970   Status post - Tumor of soft
        tissue of neck - Excision of
        subcutaneous tumor

6980   Status post - Tumor of soft
        tissue of neck - Radical
        resection

6990   Status post - Pectus bar
        removal

7005   Status post - Pectus bar
        repositioning

7010   Status post - Pectus repair,
        Minimally invasive repair
        (Nuss), With thoracoscopy

7020   Status post - Pectus repair,
        Minimally invasive repair
        (Nuss), Without thoracoscopy

7030   Status post - Pectus repair,

Open repair

7040	Status post - Division of scalenus anticus, With resection of a cervical rib
7050	Status post - Division of scalenus anticus, Without resection of a cervical rib
7060	Status post - Rib excision, Excision of cervical rib
7070	Status post - Rib excision, Excision of cervical rib, With sympathectomy
7080	Status post - Rib excision, Excision of first rib
7090	Status post - Rib excision, Excision of first rib, With sympathectomy
7100	Status post - Procedure on thorax
5450	Status post - Pacemaker implantation, Permanent
5460	Status post - Pacemaker procedure
6350	Status post - Explantation of pacing system
5470	Status post - ICD (AICD) implantation
5480	Status post - ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure
5490	Status post - Arrhythmia surgery - atrial, Surgical Ablation
5500	Status post - Arrhythmia surgery - ventricular, Surgical Ablation
6500	Status post - Cardiovascular catheterization procedure, Diagnostic
6520	Status post - Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained
6550	Status post - Cardiovascular catheterization procedure, Diagnostic,

Electrophysiology alteration

6540   Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration

6510   Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained

6530   Status post - Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion

6410   Status post - Cardiovascular catheterization procedure, Therapeutic

6670   Status post - Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy

6570   Status post - Cardiovascular catheterization procedure, Therapeutic, Balloon dilation

6590   Status post - Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy

6600   Status post - Cardiovascular catheterization procedure, Therapeutic, Coil implantation

6610   Status post - Cardiovascular catheterization procedure, Therapeutic, Device implantation

7110   Status post - Cardiovascular catheterization procedure, Therapeutic, Device implantation attempted

6690   Status post - Cardiovascular catheterization procedure, Therapeutic, Electrophysiological ablation

7120   Status post - Cardiovascular catheterization procedure, Therapeutic, Intravascular foreign body removal

6640   Status post - Cardiovascular catheterization procedure,

Therapeutic, Perforation (establishing interchamber and/or intervessel communication)

6580   Status post - Cardiovascular catheterization procedure, Therapeutic, Septostomy

6620   Status post - Cardiovascular catheterization procedure, Therapeutic, Stent insertion

6630   Status post - Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation

6650   Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion

6660   Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve

5590   Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)

5600   Status post - Shunt, Systemic to pulmonary, Central (shunt from aorta)

7130   Status post - Shunt, Systemic to pulmonary, Central (shunt from aorta), Central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta (i.e. Mee shunt)

5610   Status post - Shunt, Systemic to pulmonary, Other

5630   Status post - Shunt, Ligation and takedown

6095   Status post - Shunt, Reoperation

5640   Status post - PA banding (PAB)

5650   Status post - PA debanding

5660   Status post - Damus-Kaye-Stansel procedure (DKS)

(creation of AP anastomosis without arch reconstruction)

5670   Status post - Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)

5680   Status post - Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)

5690   Status post - Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)

5700   Status post - HemiFontan

6330   Status post - Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty

6130   Status post - Superior Cavopulmonary anastomosis(es) + PA reconstruction

7140   Status post - Hepatic vein to azygous vein connection, Direct

7150   Status post - Hepatic vein to azygous vein connection, Interposition graft

7160   Status post - Kawashima operation (superior cavopulmonary connection in setting of interrupted IVC with azygous continuation)

5710   Status post - Palliation, Other

6360   Status post - ECMO cannulation

6370   Status post - ECMO decannulation

5910   Status post - ECMO procedure

5900   Status post - Intraaortic balloon pump (IABP) insertion

5920   Status post - Right/left heart assist device procedure

6390   Status post - VAD

explantation

6380	Status post - VAD implantation
7170	Status post - VAD change out
6420	Status post - Echocardiography procedure, Sedated transesophageal echocardiogram
6430	Status post - Echocardiography procedure, Sedated transthoracic echocardiogram
6435	Status post - Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia
6440	Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)
6450	Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)
6460	Status post - Radiology procedure on cardiac patient, Diagnostic radiology
6470	Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient
6480	Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient
6490	Status post - Radiology procedure on cardiac patient, Therapeutic radiology
5720	Status post - Aneurysm, Ventricular, Right, Repair
5730	Status post - Aneurysm, Ventricular, Left, Repair
5740	Status post - Aneurysm, Pulmonary artery, Repair
5760	Status post - Cardiac tumor

resection

5780	Status post - Pulmonary AV fistula repair/occlusion
5790	Status post - Ligation, Pulmonary artery
5802	Status post - Pulmonary embolectomy, Acute pulmonary embolus
5804	Status post - Pulmonary embolectomy, Chronic pulmonary embolus
5810	Status post - Pleural drainage procedure
5820	Status post - Pleural procedure, Other
5830	Status post - Ligation, Thoracic duct
5840	Status post - Decortication
5850	Status post - Esophageal procedure
5860	Status post - Mediastinal procedure
5870	Status post - Bronchoscopy
5880	Status post - Diaphragm plication
5890	Status post - Diaphragm procedure, Other
5930	Status post - VATS (video-assisted thoracoscopic surgery)
5940	Status post - Minimally invasive procedure
5950	Status post - Bypass for noncardiac lesion
5960	Status post - Delayed sternal closure
5970	Status post - Mediastinal exploration
5980	Status post - Sternotomy wound drainage
7180	Status post - Intravascular stent removal
5990	Status post - Thoracotomy, Other
6000	Status post - Cardiotomy,

Other

    6010   Status post - Cardiac
              procedure, Other

    6020   Status post - Thoracic and/or
              mediastinal procedure, Other

    6030   Status post - Peripheral
              vascular procedure, Other

    6040   Status post - Miscellaneous
              procedure, Other

  11777   Status post - Other procedure

Long Name: Other Card-Congenital Diagnosis 3   *SeqNo:*   4510

Short Name: **OCarCongDiag3**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the third of the three most significant congenital diagnoses.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card-Congenital   *Format:*   Text (categorical values specified by STS)

ParentShortName: OCarCong   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes and Value Definitions:

Code:	Value:	Definition:
10	PFO	A small interatrial communication (or potential communication) confined to the region of the oval fossa (fossa ovalis) characterized by no deficiency of the primary atrial septum (septum primum) and a normal limbus with no deficiency of the septum secundum (superior interatrial fold).
20	ASD, Secundum	A congenital cardiac malformation in which there is an interatrial communication confined to the region of the oval fossa (fossa ovalis), most commonly due to a deficiency of the primary atrial septum (septum primum) but deficiency of the septum secundum (superior interatrial fold) may also contribute.
30	ASD, Sinus venosus	A congenital cardiac malformation in which there is a caval vein (vena cava) and/or pulmonary vein (or veins) that overrides the atrial septum or the septum secundum (superior interatrial fold) producing an interatrial or anomalous venoatrial communication Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an

interatrial communication, this lesion is not a defect of the atrial septum.

40	ASD, Coronary sinus	A congenital cardiac malformation in which there is a deficiency of the walls separating the left atrium from the coronary sinus allowing interatrial communication through the coronary sinus ostium.
50	ASD, Common atrium (single atrium)	Complete absence of the interatrial septum. "Single atrium" is applied to defects with no associated malformation of the atrioventricular valves. "Common atrium" is applied to defects with associated malformation of the atrioventricular valves.
2150	ASD, Postoperative interatrial communication	A surgically created communication between the atria.
71	VSD, Type 1 (Subarterial) (Supracristal) (Conal septal defect) (Infundibular)	A VSD that lies beneath the semilunar valve(s) in the conal or outlet septum.
73	VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)	A VSD that is confluent with and involves the membranous septum and is bordered by an atrioventricular valve, not including type 3 VSDs.
75	VSD, Type 3 (Inlet) (AV canal type)	A VSD that involves the inlet of the right ventricular septum immediately inferior to the AV valve apparatus.
77	VSD, Type 4 (Muscular)	A VSD completely surrounded by muscle.
79	VSD, Type: Gerbode type (LV-RA communication)	A rare form of VSD in which the defect is at the membranous septum; the communication is between the left ventricle and right atrium.
80	VSD, Multiple	More than one VSD exists. Each individual VSD may be coded separately to specify the individual VSD types.
100	AVC (AVSD), Complete (CAVSD)	Indicate if the patient has the diagnosis of "AVC (AVSD), Complete (CAVSD)". An "AVC (AVSD), Complete (CAVSD)" is a "complete atrioventricular canal" or a "complete atrioventricular septal defect" and occurs in a heart with the phenotypic feature of a common atrioventricular junction. An "AVC (AVSD), Complete (CAVSD)" is defined as an AVC with a common AV valve and both a defect in the atrial septum just above the AV valve (ostium primum ASD [a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve]) and a defect in the ventricular septum just below the AV valve. The AV valve is one valve that bridges both the right and left sides of the heart. Balanced AVC is an AVC with two essentially appropriately sized ventricles. Unbalanced AVC is an AVC defect with two ventricles in which one ventricle is inappropriately small. Such a patient may be thought to be a candidate for biventricular repair, or, alternatively, may be managed as having a functionally univentricular heart. AVC lesions with unbalanced ventricles so severe as to preclude biventricular repair

should be classified as single ventricles. Rastelli type A: The common superior (anterior) bridging leaflet is effectively split in two at the septum. The left superior (anterior) leaflet is entirely over the left ventricle and the right superior (anterior) leaflet is similarly entirely over the right ventricle. The division of the common superior (anterior) bridging leaflet into left and right components is caused by extensive attachment of the superior (anterior) bridging leaflet to the crest of the ventricular septum by chordae tendineae. Rastelli type B: Rare, involves anomalous papillary muscle attachment from the right side of the ventricular septum to the left side of the common superior (anterior) bridging leaflet. Rastelli type C: Marked bridging of the ventricular septum by the superior (anterior) bridging leaflet, which floats freely (often termed a "free-floater") over the ventricular septum without chordal attachment to the crest of the ventricular septum.

110	AVC (AVSD), Intermediate (transitional)	An AVC with two distinct left and right AV valve orifices but also with both an ASD just above and a VSD just below the AV valves. While these AV valves in the intermediate form do form two separate orifices they remain abnormal valves. The VSD is often restrictive.
120	AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum)	An AVC with an ostium primum ASD (a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve) and varying degrees of malformation of the left AV valve leading to varying degrees of left AV valve regurgitation. No VSD is present.
140	AP window (aortopulmonary window)	Indicate if the patient has the diagnosis of "AP window (aortopulmonary window)". An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate

superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)

150	Pulmonary artery origin from ascending aorta (hemitruncus)	One pulmonary artery arises from the ascending aorta and the other pulmonary artery arises from the right ventricle. DOES NOT include origin of the right or left pulmonary artery from the innominate artery or the aortic arch via a patent ductus arteriosus or collateral artery.
160	Truncus arteriosus	Indicate if the patient has the diagnosis of "Truncus arteriosus". A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. Often, the infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. In such instances, there may be no ventricular septal defect or a very small ventricular septal defect, in which case the left ventricle and mitral valve may be extremely hypoplastic.
170	Truncal valve insufficiency	Functional abnormality - insufficiency - of the truncal valve. May be further subdivided into grade of insufficiency (I, II, III, IV or mild, moderate, severe).
2010	Truncus arteriosus + Interrupted aortic arch	Indicate if the patient has the diagnosis of "Truncus arteriosus + Interrupted aortic arch". {A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. The infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. If in such case there is no ventricular septal defect, then the left ventricle and mitral valve may be extremely hypoplastic.} {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and

descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.}

180	Partial anomalous pulmonary venous connection (PAPVC)	Some, but not all of the pulmonary veins connect to the right atrium or to one or more of its venous tributaries. This definition excludes sinus venosus defects with normally connected but abnormally draining pulmonary veins (the pulmonary veins may drain abnormally into the right atrium via the atrial septal defect).
190	Partial anomalous pulmonary venous connection (PAPVC), scimitar	The right pulmonary vein(s) connect anomalously to the inferior vena cava or to the right atrium at the insertion of the inferior vena cava. The descending vertical vein resembles a scimitar (Turkish sword) on frontal chest x-ray. Frequently associated with: hypoplasia of the right lung with bronchial anomalies; dextroposition and/or dextrorotation of the heart; hypoplasia of the right pulmonary artery; and anomalous subdiaphragmatic systemic arterial supply to the lower lobe of the right lung directly from the aorta or its main branches.
200	Total anomalous pulmonary venous connection (TAPVC), Type 1 (supracardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 1 (supracardiac) TAPVC, the anomalous connection is at the supracardiac level and can be obstructed or nonobstructed.
210	Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 2 (cardiac) TAPVC, the anomalous connection is to the heart, either to the right atrium directly or to the coronary sinus. Most patients with type 2 TAPVC are nonobstructed.
220	Total anomalous pulmonary venous connection (TAPVC), Type 3 (infracardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 3 (infracardiac) TAPVC, the anomalous connection is at the infracardiac level (below the diaphragm), with the pulmonary venous return entering the right atrium ultimately via the inferior vena cava. In the vast majority of patients infracardiac TAPVC is obstructed.
230	Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect

normally to the left atrium. In Type 4 (mixed) TAPVC, the anomalous connection is at two or more of the above levels (supracardiac, cardiac, infracardiac) and can be obstructed or nonobstructed.

250	Cor triatriatum	In the classic form of cor triatriatum a membrane divides the left atrium (LA) into a posterior accessory chamber that receives the pulmonary veins and an anterior chamber (LA) that communicates with the mitral valve. In differentiating cor triatriatum from supravalvar mitral ring, in cor triatriatum the posterior compartment contains the pulmonary veins while the anterior contains the left atrial appendage and the mitral valve orifice; in supravalvar mitral ring, the anterior compartment contains only the mitral valve orifice. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.
260	Pulmonary venous stenosis	Any pathologic narrowing of one or more pulmonary veins. Can be further subdivided by etiology (congenital, acquired-postoperative, acquired-nonpostoperative) and extent of stenosis (diffusely hypoplastic, long segment focal/tubular stenosis, discrete stenosis).
270	Systemic venous anomaly	Anomalies of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from one or more anomalies of origin, duplication, course, or connection. Examples include abnormal or absent right SVC with LSVC, bilateral SVC, interrupted right or left IVC, azygos continuation of IVC, and anomalies of hepatic drainage. Bilateral SVC may have, among other configurations: 1) RSVC draining to the RA and the LSVC to the LA with completely unroofed coronary sinus, 2) RSVC draining to the RA and LSVC to the coronary sinus which drains (normally) into the RA, or 3) RSVC to the coronary sinus which drains (abnormally) into the LA and LSVC to LA. Anomalies of the inferior vena caval system include, among others: 1) left IVC to LA, 2) biatrial drainage, or 3) interrupted IVC (left or right) with azygos continuation to an LSVC or RSVC.
280	Systemic venous obstruction	Obstruction of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from congenital or acquired stenosis or occlusion. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.

290	TOF	Indicate if the patient has the diagnosis of "TOF". Only use this diagnosis if it is NOT known if the patient has one of the following four more specific diagnoses: (1). "TOF, Pulmonary stenosis", (2). "TOF, AVC (AVSD)", (3). "TOF, Absent pulmonary valve", (4). "Pulmonary atresia, VSD (Including TOF, PA)", or (5). "Pulmonary atresia, VSD-MAPCA (pseudotruncus)".{"TOF" is "Tetralogy of Fallot" and is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy.} (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")
2140	TOF, Pulmonary stenosis	Indicate if the patient has the diagnosis of "TOF, Pulmonary stenosis". Use this diagnosis if the patient has tetralogy of Fallot and pulmonary stenosis. Do not use this diagnosis if the patient has tetralogy of Fallot and pulmonary atresia. Do not use this diagnosis if the patient has tetralogy of Fallot and absent pulmonary valve. Do not use this diagnosis if the patient has tetralogy of Fallot and atrioventricular canal. {Tetralogy of Fallot is defined as a group of

malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")}

300	TOF, AVC (AVSD)	TOF with complete common atrioventricular canal defect is a rare variant of common atrioventricular canal defect with the associated conotruncal abnormality of TOF. The anatomy of the endocardial cushion defect is that of Rastelli type C in almost all cases.
310	TOF, Absent pulmonary valve	Indicate if the patient has the diagnosis of "TOF, Absent pulmonary valve". "TOF, Absent pulmonary valve" is "Tetralogy of Fallot with Absent pulmonary valve" and is defined as a malformation with all of the morphologic characteristics of tetralogy of Fallot (anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta), in which the ventriculo-arterial junction of the right ventricle with the main pulmonary artery features an atypical valve with rudimentary cusps that lack the anatomical semi-

lunar features of normal valve cusps and which functionally do not achieve central coaptation. The physiologic consequence is usually a combination of variable degrees of both stenosis and regurgitation of the pulmonary valve. A developmental accompaniment of this anatomy and physiology is dilation of the main pulmonary artery and central right and left pulmonary arteries, which when extreme, is associated with abnormal arborization of lobar and segmental pulmonary artery branches and with compression of the trachea and mainstem bronchi. One theory holds that absence of the arterial duct or ductal ligament (which is a nearly constant finding in cases of tetralogy of Fallot with absent pulmonary valve) in combination with pulmonary `valve stenosis and regurgitation, comprise the physiologic conditions which predispose to central pulmonary artery dilation during fetal development. (Tetralogy of Fallot with Absent Pulmonary Valve Syndrome is a term frequently used to describe the clinical presentation when it features both circulatory alterations and respiratory distress secondary to airway compression.)

320	Pulmonary atresia	Pulmonary atresia defects which do not readily fall into pulmonary atresia-intact ventricular septum or pulmonary atresia-VSD (with or without MAPCAs) categories. These may include complex lesions in which pulmonary atresia is a secondary diagnosis, for example, complex single ventricle malformations with associated pulmonary atresia.
330	Pulmonary atresia, IVS	Pulmonary atresia (PA) and intact ventricular septum (IVS) is a duct-dependent congenital malformation that forms a spectrum of lesions including atresia of the pulmonary valve, a varying degree of right ventricle and tricuspid valve hypoplasia, and anomalies of the coronary circulation. An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis. Associated Ebstein's anomaly of the tricuspid valve can be present; the tricuspid diameter is enlarged and the prognosis is poor.
340	Pulmonary atresia, VSD (Including TOF, PA)	Pulmonary atresia (PA) and ventricular septal defect (VSD) is a heterogeneous group of congenital cardiac malformations in which there is lack of luminal continuity and absence of blood flow from either ventricle (in cases with ventriculo-arterial discordance) and the pulmonary artery, in a biventricular heart that has an opening or a hole in the interventricular septum (VSD). The malformation forms a spectrum of lesions including tetralogy of Fallot with pulmonary atresia. Tetralogy of Fallot with PA is a specific type of PA-VSD where the intracardiac malformation is more accurately defined (extreme underdevelopment of the RV infundibulum with marked anterior and leftward

displacement of the infundibular septum often fused with the anterior wall of the RV resulting in complete obstruction of blood flow into the pulmonary artery and associated with a large outlet, subaortic ventricular septal defect). In the vast majority of cases of PA-VSD the intracardiac anatomy is that of TOF. The pulmonary circulation in PA-VSD is variable in terms of origin of blood flow, presence or absence of native pulmonary arteries, presence or absence of major aortopulmonary collateral arteries (MAPCA(s)), and distal distribution (pulmonary parenchymal segment arborization) abnormalities. Native pulmonary arteries may be present or absent. If MAPCAs are present this code should not be used; instead, Pulmonary atresia, VSD-MAPCA (pseudotruncus) should be used.

350	Pulmonary atresia, VSD-MAPCA	MAPCA(s) are large and distinct arteries, highly variable in number, that usually arise from the descending thoracic aorta, but uncommonly may originate from the aortic arch or the subclavian, carotid or even the coronary arteries. MAPCA(s) may be associated with present or absent native pulmonary arteries. If present, the native pulmonary arteries may be hypoplastic, and either confluent or nonconfluent. Systemic pulmonary collateral arteries have been categorized into 3 types based on their site of origin and the way they connect to the pulmonary circulation: direct aortopulmonary collaterals, indirect aortopulmonary collaterals, and true bronchial arteries. Only the first two should be considered MAPCA(s). If MAPCA(s) are associated with PA-VSD or TOF, PA this code should be used.
360	MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD)	Rarely MAPCA(s) may occur in patents who do not have PA-VSD, but have severe pulmonary stenosis. The intracardiac anatomy in patients who have MAPCA(s) without PA should be specifically coded in each case as well.
370	Ebstein's anomaly	Indicate if the patient has the diagnosis of "Ebstein's anomaly". Ebstein's anomaly is a malformation of the tricuspid valve and right ventricle that is characterized by a spectrum of several features: (1) incomplete delamination of tricuspid valve leaflets from the myocardium of the right ventricle; (2) downward (apical) displacement of the functional annulus; (3) dilation of the "atrialized" portion of the right ventricle with variable degrees of hypertrophy and thinning of the wall; (4) redundancy, fenestrations, and tethering of the anterior leaflets; and (5) dilation of the right atrioventricular junction (the true tricuspid annulus). These anatomical and functional abnormalities cause tricuspid regurgitation (and rarely tricuspid stenosis) that results in right atrial and right ventricular dilation and atrial and ventricular arrhythmias. With increasing degrees of anatomic severity of malformation, the

fibrous transformation of leaflets from their muscular precursors remains incomplete, with the septal leaflet being most severely involved, the posterior leaflet less severely involved, and the anterior leaflet usually the least severely involved. Associated cardiac anomalies include an interatrial communication, the presence of accessory conduction pathways often associated with Wolff-Parkinson-White syndrome, and dilation of the right atrium and right ventricle in patients with severe Ebstein's anomaly. (Varying degrees of right ventricular outflow tract obstruction may be present, including pulmonary atresia in some cases. Such cases of Ebstein's anomaly with pulmonary atresia should be coded with a Primary Diagnosis of "Ebstein's anomaly", and a Secondary Diagnosis of "Pulmonary atresia".) (Some patients with atrioventricular discordance and ventriculoarterial discordance in situs solitus [congenitally corrected transposition] have an Ebstein-like deformity of the left-sided morphologically tricuspid valve. The nature of the displacement of the septal and posterior leaflets is similar to that in right-sided Ebstein's anomaly in patients with atrioventricular concordance and ventriculoarterial concordance in situs solitus. These patients with "Congenitally corrected TGA" and an Ebstein-like deformity of the left-sided morphologically tricuspid valve should be coded with a Primary Diagnosis of "Congenitally corrected TGA", and a Secondary Diagnosis of "Ebstein's anomaly".)

380	Tricuspid regurgitation, non-Ebstein's related	Non-Ebstein's tricuspid regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, absent papillary muscle/chordae) or acquired (post cardiac surgery or secondary to rheumatic fever, endocarditis, trauma, tumor, cardiomyopathy, iatrogenic or other causes).
390	Tricuspid stenosis	Tricuspid stenosis may be due to congenital factors (valvar hypoplasia, abnormal subvalvar apparatus, double-orifice valve, parachute deformity) or acquired (post cardiac surgery or secondary to carcinoid, rheumatic fever, tumor, systemic disease, iatrogenic, or other causes).
400	Tricuspid regurgitation and tricuspid stenosis	Tricuspid regurgitation present with tricuspid stenosis may be due to congenital factors or acquired.
410	Tricuspid valve, Other	Tricuspid valve pathology not otherwise specified in diagnosis definitions 370, 380, 390 and 400.
420	Pulmonary stenosis, Valvar	Pulmonary stenosis, Valvar ranges from critical neonatal pulmonic valve stenosis with hypoplasia of the right ventricle to valvar pulmonary stenosis in the infant, child, or adult, usually better tolerated but potentially associated with infundibular stenosis. Pulmonary branch hypoplasia can be associated. Only 10% of neonates with Pulmonary stenosis, Valvar with intact ventricular septum have RV-to-coronary artery

fistula(s). An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis; this occurs in only 2% of neonates with Pulmonary stenosis, Valvar with IVS.

430	Pulmonary artery stenosis (hypoplasia), Main (trunk)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis (hypoplasia), Main (trunk)". "Pulmonary artery stenosis (hypoplasia), Main (trunk)" is defined as a congenital or acquired anomaly with pulmonary trunk (main pulmonary artery) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Since the narrowing is distal to the pulmonic valve, it may also be known as supravalvar pulmonary stenosis.
440	Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)" is defined as a congenital or acquired anomaly with central pulmonary artery branch (within the hilar bifurcation involving the right or left pulmonary artery, or both) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Coarctation of the pulmonary artery is related to abnormal extension of the ductus arteriosus into a pulmonary branch, more frequently the left branch.
450	Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)" is defined as a congenital or acquired anomaly with peripheral pulmonary artery narrowing or hypoplasia (at or beyond the hilar bifurcation). The stenosis or hypoplasia may be isolated or associated with other cardiac lesions.
470	Pulmonary artery, Discontinuous	Indicate if the patient has the diagnosis of "Pulmonary artery, Discontinuous". Pulmonary artery, Discontinuous" is defined as a congenital or acquired anomaly with discontinuity between the branch pulmonary arteries or between a branch pulmonary artery and the main pulmonary artery trunk.
490	Pulmonary stenosis, Subvalvar	Subvalvar (infundibular) pulmonary stenosis is a narrowing of the outflow tract of the right ventricle below the pulmonic valve. It may be due to a localized fibrous diaphragm just below the valve, an obstructing muscle bundle or to a long narrow fibromuscular channel.
500	DCRV	The double chambered right ventricle is characterized by a low infundibular (subvalvar) stenosis rather than the rare isolated infundibular stenosis that develops more superiorly in the infundibulum, and is often

associated with one or several closing VSDs. In some cases, the VSD is already closed. The stenosis creates two chambers in the RV, one inferior including the inlet and trabecular portions of the RV and one superior including the infundibulum.

510	Pulmonary valve, Other	Other anomalies of the pulmonary valve may be listed here including but not restricted to absent pulmonary valve.
530	Pulmonary insufficiency	Pulmonary valve insufficiency or regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, etc.) or acquired (for example, post cardiac surgery for repair of tetralogy of Fallot, etc.).
540	Pulmonary insufficiency and pulmonary stenosis	Pulmonary valve insufficiency and pulmonary stenosis beyond the neonatal period, in infancy and childhood, may be secondary to leaflet tissue that has become thickened and myxomatous. Retraction of the commissure attachment frequently creates an associated supravalvar stenosis.
2130	Shunt failure	Indicate if the patient has the diagnosis of "Shunt failure". This diagnostic subgroup includes failure of any of a variety of shunts ("Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)", "Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)", "Shunt, Systemic to pulmonary, Other", and "Sano Shunt"), secondary to any of the following etiologies: shunt thrombosis, shunt occlusion, shunt stenosis, shunt obstruction, and shunt outgrowth. This diagnosis ("Shunt failure") would be the primary diagnosis in a patient with, for example, "Hypoplastic left heart syndrome (HLHS)" who underwent a "Norwood procedure" with a "Modified Blalock-Taussig Shunt" and now requires reoperation for thrombosis of the "Modified Blalock-Taussig Shunt". The underlying or fundamental diagnosis in this patient is "Hypoplastic left heart syndrome (HLHS)", but the primary diagnosis for the operation to be performed to treat the thrombosis of the "Modified Blalock-Taussig Shunt" would be "Shunt failure". Please note that the choice "2130 Shunt failure" does not include "520 Conduit failure".
520	Conduit failure	Indicate if the patient has the diagnosis of "Conduit failure". This diagnostic subgroup includes failure of any of a variety of conduits (ventricular [right or left]-to-PA conduits, as well as a variety of other types of conduits [ventricular {right or left}-to-aorta, RA-to-RV, etc.]), secondary to any of the following etiologies: conduit outgrowth, obstruction, stenosis, insufficiency, or insufficiency and stenosis. This diagnosis ("Conduit failure") would be the primary diagnosis in a patient with, for example, "Truncus arteriosus" repaired in

infancy who years later is hospitalized because of conduit stenosis/insufficiency. The underlying or fundamental diagnosis in this patient is "Truncus arteriosus", but the primary diagnosis for the operation to be performed during the hospitalization (in this case, "Conduit reoperation") would be "Conduit failure".

Please note that the choice "520 Conduit failure" does not include "2130 Shunt failure".

550	Aortic stenosis, Subvalvar	Subaortic obstruction can be caused by different lesions: subaortic membrane or tunnel, accessory mitral valve tissue, abnormal insertion of the mitral anterior leaflet to the ventricular septum, deviation of the outlet septum (seen in coarctation of the aorta and interrupted aortic arch), or a restrictive bulboventricular foramen in single ventricle complexes. The Shone complex consists of subvalvar aortic stenosis in association with supravalvar mitral ring, parachute mitral valve, and coarctation of aorta. Subvalvar aortic stenosis may be categorized into two types: localized subvalvar aortic stenosis, which consists of a fibrous or fibromuscular ridge, and diffuse tunnel subvalvar aortic stenosis, in which circumferential narrowing commences at the annular level and extends downward for 1-3 cm. Idiopathic hypertrophic subaortic stenosis (IHSS) is also known as hypertrophic obstructive cardiomyopathy (HOCM), and is characterized by a primary hypertrophy of the myocardium. The obstructive forms involve different degrees of dynamic subvalvar aortic obstruction from a thickened ventricular wall and anterior motion of the mitral valve. Definitive nomenclature and therapeutic options for IHSS are listed under cardiomyopathy.
560	Aortic stenosis, Valvar	Valvar aortic stenosis may be congenital or acquired. In its congenital form there are two types: critical (infantile), seen in the newborn in whom systemic perfusion depends on a patent ductus arteriosus, and noncritical, seen in infancy or later. Acquired valvar stenosis may be seen after as a result of rheumatic valvar disease, or from stenotic changes of an aortic valve prosthesis. Congenital valvar stenosis may result: (1) from complete fusion of commissures (acommissural) that results in a dome-shaped valve with a pinpoint opening (seen most commonly in infants with critical aortic valve stenosis); (2) from a unicommissural valve with one defined commissure and eccentric orifice (often with two raphes radiating from the ostium indicating underdeveloped commissures of a tricuspid aortic valve); (3) from a bicuspid aortic valve, with leaflets that can be equal in size or discrepant, and in left-right or anterior-posterior position; and finally (4) from a dysplastic tricuspid valve, which may have a gelatinous appearance with thick rarely equal in size

leaflets, often obscuring the commissures. The dysplastic, tricuspid or bicuspid form of aortic valve deformity may not be initially obstructive but may become stenotic later in life due to leaflet thickening and calcification.

570	Aortic stenosis, Supravalvar	Congenital supravalvar aortic stenosis is described as three forms: an hourglass deformity, a fibrous membrane, and a diffuse narrowing of the ascending aorta. The disease can be inherited as an autosomal dominant trait or part of Williams-Beuren syndrome in association with mental retardation, elfin facies, failure to thrive, and occasionally infantile hypercalcemia. Supravalvar aortic stenosis may involve the coronary artery ostia, and the aortic leaflets may be tethered. The coronary arteries can become tortuous and dilated due to elevated pressures and early atherosclerosis may ensue. Supravalvar aortic stenosis may also be acquired: (1) after a neoaortic reconstruction such as arterial switch, Ross operation, or Norwood procedure; (2) at a suture line from a previous aortotomy or cannulation; and (3) from a narrowed conduit.
590	Aortic valve atresia	Aortic valve atresia will most often be coded under the Hypoplastic left heart syndrome/complex diagnostic codes since it most often occurs as part of a spectrum of cardiac malformations. However, there is a small subset of patients with aortic valve atresia who have a well-developed left ventricle and mitral valve and a large VSD (nonrestrictive or restrictive). The diagnostic code "Aortic valve atresia" enables users to report those patients with aortic valve atresia and a well-developed systemic ventricle without recourse to either a hypoplastic left heart syndrome/complex diagnosis or a single ventricle diagnosis.
600	Aortic insufficiency	Congenital aortic regurgitation/insufficiency is rare as an isolated entity. There are rare reports of congenital malformation of the aortic valve that result in aortic insufficiency shortly after birth from an absent or underdeveloped aortic valve cusp. Aortic insufficiency is more commonly seen with other associated cardiac anomalies: (1) in stenotic aortic valves (commonly stenotic congenital bicuspid aortic valves) with some degree of aortic regurgitation due to aortic leaflet abnormality; (2) in association with a VSD (especially in supracristal or conal type I VSD, more commonly seen in Asian populations); (3) secondary to aortic-left ventricular tunnel; (4) secondary to tethering or retraction of aortic valve leaflets in cases of supravalvar aortic stenosis that may involve the aortic valve; and similarly (5) secondary to encroachment on an aortic cusp by a subaortic membrane; or (6) turbulence caused by a stenotic jet can create progressive aortic regurgitation. Aortic insufficiency may also result from: (1) post-procedure such as closed or open

valvotomy or aortic valve repair, VSD closure, balloon valvotomy, or diagnostic catheterization; (2) in the neo-aorta post arterial switch, pulmonary autograft (Ross) procedure, homograft placement, Norwood procedure, or Damus-Kaye-Stansel procedure; (3) as a result of endocarditis secondary to perforated or prolapsed leaflets or annular dehiscence; (4) secondary to annulo-aortic ectasia with prolapsed or noncoapting leaflets; (5) secondary to trauma, blunt or penetrating; or (6) as a result of aortitis, bacterial, viral or autoimmune. Aortic regurgitation secondary to prosthetic failure should be coded first as either conduit failure or prosthetic valve failure, as applicable, and secondarily as aortic regurgitation secondary to prosthetic failure (perivalvar or due to structural failure). The underlying fundamental diagnosis that led to the initial conduit or valve prosthesis placement should also be described.

610	Aortic insufficiency and aortic stenosis	Aortic insufficiency is often seen in association with stenotic aortic valve, commonly the stenotic congenital bicuspid aortic valve. The degree of aortic regurgitation is due to the severity of the aortic leaflet abnormality.
620	Aortic valve, Other	This diagnostic subgroup may be used to delineate aortic valve cusp number (unicuspid, bicuspid, tricuspid, more than three cusps), commissural fusion (normal, partially fused, completely fused), and valve leaflet (normal, thickened, dysplastic, calcified, gelatinous), annulus (normal, hypoplastic, calcified), or sinus description (normal, dilated). Note that any extensive descriptors chosen within those made available by a vendor will be converted, at harvest, to Aortic valve, Other.
630	Sinus of Valsalva aneurysm	The sinus of Valsalva is defined as that portion of the aortic root between the aortic root annulus and the sinotubular ridge. A congenital sinus of Valsalva aneurysm is a dilation usually of a single sinus of Valsalva. These most commonly originate from the right sinus (65%-85%), less commonly from the noncoronary sinus (10%-30%), and rarely from the left sinus (<5%). A true sinus of Valsalva aneurysm presents above the aortic annulus. The hierarchical coding system distinguishes between congenital versus acquired, ruptured versus nonruptured, sinus of origin, and chamber/site of penetration (right atrium, right ventricle, left atrium, left ventricle, pulmonary artery, pericardium). A nonruptured congenital sinus of Valsalva aneurysm may vary from a mild dilation of a single aortic sinus to an extensive windsock deformity. Rupture of a congenital sinus of Valsalva aneurysm into an adjacent chamber occurs most commonly between the ages of 15-30 years. Rupture may occur spontaneously, after trauma, after strenuous physical exertion, or from acute bacterial endocarditis. Congenital etiology is supported by the frequent

association of sinus of Valsalva aneurysms with VSDs. Other disease processes are also associated with sinus of Valsalva aneurysm and include: syphilis, endocarditis, cystic medial necrosis, atherosclerosis, and trauma. Acquired sinus of Valsalva aneurysms more frequently involve multiple sinuses of Valsalva; when present in multiple form they are more appropriately classified as aneurysms of the aortic root.

640	LV to aorta tunnel	The aortico-left ventricular tunnel (LV-to-aorta tunnel) is an abnormal paravalvular (alongside or in the vicinity of a valve) communication between the aorta and left ventricle, commonly divided into 4 types: (1) type I, a simple tunnel with a slit-like opening at the aortic end and no aortic valve distortion; (2) type II, a large extracardiac aortic wall aneurysm of the tunnel with an oval opening at the aortic end, with or without ventricular distortion; (3) type III, intracardiac aneurysm of the septal portion of the tunnel, with or without right ventricular outflow obstruction; and (4) type IV, a combination of types II and III. Further differentiation within these types may be notation of right coronary artery arising from the wall of the tunnel. If a LV-to-aorta tunnel communicates with the right ventricle, many feel that the defect is really a ruptured sinus of Valsalva aneurysm.
650	Mitral stenosis, Supravalvar mitral ring	Supravalvar mitral ring is formed by a circumferential ridge of tissue that is attached to the anterior mitral valve leaflet (also known as the aortic leaflet) slightly below its insertion on the annulus and to the atrium slightly above the attachment of the posterior mitral valve leaflet (also known as the mural leaflet). Depending on the diameter of the ring orifice, varying degrees of obstruction exist. The underlying valve is usually abnormal and frequently stenotic or hypoplastic. Supravalvar mitral ring is commonly associated with other stenotic lesions such as parachute or hammock valve (subvalvar stenosis), papillary muscle fusion (subvalvar stenosis), and double orifice mitral valve (valvar stenosis). Differentiation from cor triatriatum focuses on the compartments created by the supravalvar ring. In cor triatriatum the posterior compartment contains the pulmonary veins; the anterior contains the left atrial appendage and the mitral valve orifice. In supravalvar mitral ring, the posterior compartment contains the pulmonary veins and the left atrial appendage; the anterior compartment contains only the mitral valve orifice. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
660	Mitral stenosis, Valvar	Valvar mitral stenosis may arise from congenital (annular and / or leaflet) or acquired causes, both

surgical (after mitral valve repair or replacement or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia, myxomatous degeneration, trauma, or cardiomyopathy). Mitral valve annular hypoplasia is distinguished from severe mitral valve hypoplasia and mitral valve atresia, which are typically components of hypoplastic left heart syndrome. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

670	Mitral stenosis, Subvalvar	Congenital subvalvar mitral stenosis may be due to obstructive pathology of either the chordae tendineae and / or papillary muscles which support the valve leaflets. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
680	Mitral stenosis, Subvalvar, Parachute	In parachute mitral valve, all chordae are attached to a single papillary muscle originating from the posterior ventricular wall. When the interchordal spaces are partially obliterated valvar stenosis results. This defect also causes valvar insufficiency, most commonly due to a cleft leaflet, a poorly developed anterior leaflet, short chordae, or annular dilation. This lesion is also part of Shone's anomaly, which consists of the parachute mitral valve, supravalvar mitral ring, subaortic stenosis, and coarctation of the aorta. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
695	Mitral stenosis	Stenotic lesions of the mitral valve not otherwise specified in the diagnosis definitions 650, 660, 670, and 680.
700	Mitral regurgitation and mitral stenosis	Mitral regurgitation and mitral stenosis may arise from congenital or acquired causes or after cardiac surgery. Additional details to aid in coding specific components of the diagnosis are available in the individual mitral stenosis or mitral regurgitation field definitions. When coding multiple mitral valve lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
710	Mitral regurgitation	Mitral regurgitation may arise from congenital (at the annular, leaflet or subvalvar level) or acquired causes both surgical (after mitral valve repair or replacement, subaortic stenosis repair, atrioventricular canal repair, cardiac transplantation, or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia (with chordal rupture or papillary muscle infarct), myxomatous degeneration including

Barlow's syndrome, trauma, or cardiomyopathy). Congenital lesions at the annular level include annular dilation or deformation (usually deformation is consequent to associated lesions). At the valve leaflet level, mitral regurgitation may be due to a cleft, hypoplasia or agenesis of leaflet(s), excessive leaflet tissue, or a double orifice valve. At the subvalvar level, mitral regurgitation may be secondary to chordae tendineae anomalies (agenesis, rupture, elongation, or shortening as in funnel valve), or to papillary muscle anomalies (hypoplasia or agenesis, shortening, elongation, single-parachute, or multiple-hammock valve). When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

720	Mitral valve, Other	Mitral valve pathology not otherwise coded in diagnosis definitions 650 through 710.
730	Hypoplastic left heart syndrome (HLHS)	Hypoplastic left heart syndrome (HLHS) is a spectrum of cardiac malformations characterized by a severe underdevelopment of the left heart-aorta complex, consisting of aortic and/or mitral valve atresia, stenosis, or hypoplasia with marked hypoplasia or absence of the left ventricle, and hypoplasia of the ascending aorta and of the aortic arch with coarctation of the aorta. Hypoplastic left heart complex is a subset of patients at the favorable end of the spectrum of HLHS characterized by hypoplasia of the structures of the left heart-aorta complex, consisting of aortic and mitral valve hypoplasia without valve stenosis or atresia, hypoplasia of the left ventricle, hypoplasia of the left ventricular outflow tract, hypoplasia of the ascending aorta and of the aortic arch, with or without coarctation of the aorta.
2080	Shone's syndrome	Shone's syndrome is a syndrome of multilevel hypoplasia and obstruction of left sided cardiovascular structures including more than one of the following lesions: (1) supravalvar ring of the left atrium, (2) a parachute deformity of the mitral valve, (3) subaortic stenosis, and (4) aortic coarctation. The syndrome is based on the original report from Shone [1] that was based on analysis of 8 autopsied cases and described the tendency of these four obstructive, or potentially obstructive, conditions to coexist. Only 2 of the 8 cases exhibited all four conditions, with the other cases exhibiting only two or three of the anomalies [2]. [1] Shone JD, Sellers RD, Anderson RG, Adams P, Lillehei CW, Edwards JE. The developmental complex of "parachute mitral valve", supravalvar ring of left atrium, subaortic stenosis, and coarctation of the aorta. Am J Cardiol 1963; 11: 714–725. [2]. Tchervenkov CI, Jacobs JP, Weinberg PM, Aiello VD, Beland MJ, Colan SD, Elliott MJ, Franklin RC, Gaynor JW, Krogmann

ON, Kurosawa H, Maruszewski B, Stellin G. The nomenclature, definition and classification of hypoplastic left heart syndrome. Cardiology in the Young, 2006; 16(4): 339–368, August 2006.

Please note that the term "2080 Shone's syndrome" may be the "Fundamental Diagnosis" of a patient; however, the term "2080 Shone's syndrome" may not be the "Primary Diagnosis" of an operation. The term "2080 Shone's syndrome" may be a "Secondary Diagnosis" of an operation.

740	Cardiomyopathy (including dilated, restrictive, and hypertrophic)	Cardiomyopathy is a term applied to a wide spectrum of cardiac diseases in which the predominant feature is poor myocardial function in the absence of any anatomic abnormalities. Cardiomyopathies can be divided into three relatively easily distinguishable entities: (1) dilated, characterized by ventricular dilation and systolic dysfunction; (2) hypertrophic, characterized by physiologically inappropriate hypertrophy of the left ventricle; and (3) restrictive, characterized by diastolic dysfunction, with a presentation often identical to constrictive pericarditis. Also included in this diagnostic category are patients with a cardiomyopathy or syndrome confined to the right ventricle, for example: (1) arrhythmogenic right ventricular dysplasia; (2) Uhl's syndrome (hypoplasia of right ventricular myocardium, parchment heart); or (3)
750	Cardiomyopathy, End-stage congenital heart disease	Myocardial abnormality in which there is systolic and/or diastolic dysfunction in the presence of structural congenital heart disease without any (or any further) surgically correctable lesions.
760	Pericardial effusion	Inflammatory stimulation of the pericardium that results in the accumulation of appreciable amounts of pericardial fluid (also known as effusive pericarditis). The effusion may be idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced).
770	Pericarditis	Inflammatory process of the pericardium that leads to either (1) effusive pericarditis with accumulation of appreciable amounts of pericardial fluid or (2) constrictive pericarditis that leads to pericardial thickening and compression of the cardiac chambers, ultimately with an associated significant reduction in cardiac function. Etiologies are varied and include idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced) pericarditis.
780	Pericardial disease, Other	A structural or functional abnormality of the visceral or parietal pericardium that may, or may not, have a significant impact on cardiac function. Included are absence or partial defects of the pericardium.
790	Single ventricle, DILV	A congenital cardiac malformation in which both atria

connect to a single, morphologically left ventricle.

The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart".

The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

800	Single ventricle, DIRV	A congenital cardiac malformation in which both atria connect to a single, morphologically right ventricle

The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart".

The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in

which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

| 810 | Single ventricle, Mitral atresia | A congenital cardiac malformation in which there is no orifice of mitral valve |

The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart".

The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left

heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

| 820 | Single ventricle, Tricuspid atresia |

A congenital cardiac malformation in which there is no orifice of tricuspid valve.

The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart".

The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

830	Single ventricle, Unbalanced AV canal	Single ventricle anomalies with a common atrioventricular (AV) valve and only one completely well developed ventricle. If the common AV valve opens predominantly into the morphologic left ventricle, the defect is termed a left ventricular (LV)–type or LV-dominant AV septal defect. If the common AV valve opens predominantly into the morphologic right ventricle, the defect is termed a right ventricular (RV)–type or RV-dominant AV septal defect.

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The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart". |
| 840 | Single ventricle, Heterotaxia syndrome | "Heterotaxia syndrome" is synonymous with "heterotaxy", "visceral heterotaxy", and "heterotaxy syndrome". Heterotaxy is defined as an abnormality |

where the internal thoraco-abdominal organs demonstrate abnormal arrangement across the left-right axis of the body. By convention, heterotaxy does not include patients with either the expected usual or normal arrangement of the internal organs along the left-right axis, also known as 'situs solitus', nor patients with complete mirror-imaged arrangement of the internal organs along the left-right axis also known as 'situs inversus'.

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The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

850	Single ventricle, Other	If the single ventricle is of primitive or indeterminate type, other is chosen in coding. It is recognized that a considerable variety of other structural cardiac

malformations (e.g., biventricular hearts with straddling atrioventricular valves, pulmonary atresia with intact ventricular septum, some complex forms of double outlet right ventricle) may at times be best managed in a fashion similar to that which is used to treat univentricular hearts. They are not to be coded in this section of the nomenclature, but according to the underlying lesions.

The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart".

The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

| 851 | Single Ventricle + Total anomalous pulmonary venous connection (TAPVC) | Indicate if the patient has the diagnosis of "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)". In the event of Single Ventricle occurring in association with Total anomalous |

pulmonary venous connection (TAPVC), code "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)", and then use additional (secondary) diagnostic codes to describe the Single Ventricle and the Total anomalous pulmonary venous connection (TAPVC) separately to provide further documentation about the Single Ventricle and Total anomalous pulmonary venous connection (TAPVC) types. {"Total anomalous pulmonary venous connection (TAPVC)" is defined as a heart where all of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium.}

The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart".

The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".

Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 -

21, February 2006.

870	Congenitally corrected TGA	Indicate if the patient has the diagnosis of "Congenitally corrected TGA". Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.
872	Congenitally corrected TGA, IVS	Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS". "Congenitally corrected TGA, IVS" is "Congenitally corrected transposition with an intact ventricular septum", in other words, "Congenitally corrected transposition with no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)
874	Congenitally corrected TGA, IVS-LVOTO	Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS-LVOTO". "Congenitally corrected TGA, IVS-LVOTO" is "Congenitally corrected transposition with an intact ventricular septum

and left ventricular outflow tract obstruction", in other words, "Congenitally corrected transposition with left ventricular outflow tract obstruction and no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

876	Congenitally corrected TGA, VSD	Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD". "Congenitally corrected TGA, VSD" is "Congenitally corrected transposition with a VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)
878	Congenitally corrected TGA, VSD-LVOTO	Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD-LVOTO". "Congenitally corrected TGA, VSD-LVOTO" is "Congenitally corrected transposition with a VSD and left ventricular outflow tract obstruction". (Congenitally corrected

transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

880	TGA, IVS	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
890	TGA, IVS-LVOTO	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum and associated left ventricular obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
900	TGA, VSD	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either

d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

910	TGA, VSD-LVOTO	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects and left ventricular outflow tract obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
930	DORV, VSD type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, VSD type, there is an associated subaortic or doubly-committed VSD and no pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
940	DORV, TOF type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TOF type, there is an associated subaortic or doubly-committed VSD and pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). DORV can occur in association with pulmonary atresia, keeping in mind in coding that in the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles (in this situation DORV is coded as a primary diagnosis). Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with

univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate Single ventricle listing.

950	DORV, TGA type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TGA type, there is an associated subpulmonary VSD. Most frequently, there is no pulmonary outflow tract obstruction (Taussig-Bing heart). The aorta is usually to the right and slightly anterior to or side-by-side with the pulmonary artery. Associated aortic outflow tract stenosis (subaortic, aortic arch obstruction) is commonly associated with the Taussig-Bing heart and if present should be coded as a secondary diagnosis. Rarely, there is associated pulmonary outflow tract obstruction. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
960	DORV, Remote VSD (uncommitted VSD)	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, Remote VSD type, there is a remote or noncommitted VSD. The VSD is far removed from both the aortic and pulmonary valves, usually within the inlet septum. Many of these VSD's are in hearts with DORV and common atrioventricular canal/septal defect. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
2030	DORV + AVSD (AV Canal)	Indicate if the patient has the diagnosis of "DORV + AVSD (AV Canal)". In the event of DORV occurring in association with AVSD (AV Canal), code "DORV + AVSD (AV Canal)", and then use additional (secondary) diagnostic codes to describe the DORV and the AVSD (AV Canal) separately to provide further documentation about the DORV and AVSD (AV Canal) types. {"DORV" is "Double outlet right ventricle" and is defined as a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle.} In this case, the DORV exists

in combination with an atrioventricular septal defect and common atrioventricular junction guarded by a common atrioventricular valve.

975	DORV, IVS	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In the rare case of double outlet right ventricle with IVS the ventricular septum is intact. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connections with DORV are to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
980	DOLV	Double outlet left ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the left ventricle. In the nomenclature developed for DOLV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DOLV is to be coded under congenitally corrected TGA. DOLV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
990	Coarctation of aorta	Indicate if the patient has the diagnosis of "Coarctation of aorta". A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.
1000	Aortic arch hypoplasia	Hypoplasia of the aortic arch is hypoplasia of the proximal or distal transverse arch or the aortic isthmus. The isthmus (arch between the left subclavian and insertion of the patent ductus arteriosus / ligamentum arteriosum) is hypoplastic if its diameter is less than 40% of the diameter of the ascending aorta. The proximal transverse arch (arch between the innominate and left carotid arteries) and distal transverse arch (arch between the left carotid and left subclavian arteries) are hypoplastic if their diameters are less than 60% and 50%, respectively, of the diameter of the ascending aorta.
92	VSD + Aortic arch hypoplasia	A ventricular septal defect, any type, associated with hypoplasia of the aortic arch. (See diagnosis definition 1000 for a definition of hypoplasia of the aortic arch.)
94	VSD + Coarctation of aorta	Indicate if the patient has the diagnosis of "VSD +

Coarctation of aorta". In the event of a VSD occurring in association with Coarctation of aorta, code "VSD + Coarctation of aorta", and then use additional (secondary) diagnostic codes to describe the VSD and the Coarctation of aorta separately to provide further documentation about the individual VSD and Coarctation of aorta types. {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)} {A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.}

1010	Coronary artery anomaly, Anomalous aortic origin of coronary artery (AAOCA)	Anomalous aortic origins of the coronary arteries include a spectrum of anatomic variations of the normal coronary artery origins. Coronary artery anomalies of aortic origin to be coded under this diagnostic field include: anomalies of take-off (high take-off), origin (sinus), branching, and number. An anomalous course of the coronary artery vessels is also significant, particularly those coronary arteries that arise or course between the great vessels.
1020	Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA)	In patients with anomalous pulmonary origin of the coronary artery, the coronary artery (most commonly the left coronary artery) arises from the pulmonary artery rather than from the aorta. Rarely, the right coronary artery, the circumflex, or both coronary arteries may arise from the pulmonary artery.
1030	Coronary artery anomaly, Fistula	The most common of coronary artery anomalies, a coronary arteriovenous fistula is a communication between a coronary artery and either a chamber of the heart (coronary-cameral fistula) or any segment of the systemic or pulmonary circulation (coronary arteriovenous fistula). They may be congenital or acquired (traumatic, infectious, iatrogenic) in origin, and are mostly commonly seen singly, but occasionally multiple fistulas are present. Nomenclature schemes have been developed that further categorize the fistulas by vessel of origin and chamber of termination, and one angiographic classification scheme by Sakakibara has surgical implications. Coronary artery fistulas can be associated with other congenital heart anomalies such as tetralogy of Fallot, atrial septal defect, ventricular septal

defect, and pulmonary atresia with intact ventricular septum, among others. The major cardiac defect should be listed as the primary diagnosis and the coronary artery fistula should be as an additional secondary diagnoses.

1040	Coronary artery anomaly, Aneurysm	Coronary artery aneurysms are defined as dilations of a coronary vessel 1.5 times the adjacent normal coronaries. There are two forms, saccular and fusiform (most common), and both may be single or multiple. These aneurysms may be congenital or acquired (atherosclerotic, Kawasaki, systemic diseases other than Kawasaki, iatrogenic, infectious, or traumatic) in origin.
1050	Coronary artery anomaly, Other	Coronary artery anomalies which may fall within this category include coronary artery bridging and coronary artery stenosis, as well as secondary coronary artery variations seen in congenital heart defects such as tetralogy of Fallot, transposition of the great arteries, and truncus arteriosus (with the exception of variations that can be addressed by a more specific coronary artery anomaly code).
1070	Interrupted aortic arch	Indicate if the patient has the diagnosis of "Interrupted aortic arch". Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.
2020	Interrupted aortic arch + VSD	Indicate if the patient has the diagnosis of "Interrupted aortic arch + VSD". In the event of interrupted aortic arch occurring in association with VSD, code "Interrupted aortic arch + VSD", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the VSD separately to provide further documentation about the individual interrupted aortic arch and VSD types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD

is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)}

2000	Interrupted aortic arch + AP window (aortopulmonary window)	Indicate if the patient has the diagnosis of "Interrupted aortic arch + AP window (aortopulmonary window)". In the event of interrupted aortic arch occurring in association with AP window, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the AP window separately to provide further documentation about the individual interrupted aortic arch and AP window types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted

aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)}

1080	Patent ductus arteriosus	Indicate if the patient has the diagnosis of "Patent ductus arteriosus". The ductus arteriosus (arterial duct) is an essential feature of fetal circulation, connecting the main pulmonary trunk with the descending aorta, distal to the origin of the left subclavian artery. In most patients it is on the left side. If a right aortic arch is present, it may be on the right or the left; very rarely it is bilateral. When luminal patency of the duct persists post-natally, it is referred to as patent ductus arteriosus (patent arterial duct). The length and diameter may vary considerably from case to case. The media of the ductus consists mainly of smooth muscle that is arranged spirally, and the intima is much thicker than that of the aorta. (A patent ductus arteriosus is a vascular arterial connection between the thoracic aorta and the pulmonary artery. Most commonly a PDA has its origin from the descending thoracic aorta, just distal and opposite the origin of the left subclavian artery. The insertion of the ductus is most commonly into the very proximal left pulmonary artery at its junction with the main pulmonary artery. Origination and insertion sites can be variable, however.)
1090	Vascular ring	The term vascular ring refers to a group of congenital vascular anomalies that encircle and compress the esophagus and trachea. The compression may be from a complete anatomic ring (double aortic arch or right aortic arch with a left ligamentum) or from a compressive effect of an aberrant vessel (innominate artery compression syndrome).
1100	Pulmonary artery sling	In pulmonary artery sling, the left pulmonary artery originates from the right pulmonary artery and courses posteriorly between the trachea and esophagus in its route to the left lung hilum, causing a sling-like compression of the trachea.
1110	Aortic aneurysm (including pseudoaneurysm)	An aneurysm of the aorta is defined as a localized dilation or enlargement of the aorta at any site along its length (from aortic annulus to aortoiliac bifurcation). A true aortic aneurysm involves all layers of the aortic wall. A false aortic aneurysm (pseudoaneurysm) is defined as a dilated segment of the aorta not containing all layers of the aortic wall and may include postoperative or post-procedure false aneurysms at anastomotic sites, traumatic aortic injuries or transections, and infectious processes leading to a contained rupture.
1120	Aortic dissection	Aortic dissection is a separation of the layers of the aortic wall. Extension of the plane of the dissection may progress to free rupture into the pericardium, mediastinum, or pleural space if not contained by the

outer layers of the media and adventitia. Dissections may be classified as acute or chronic (if they have been present for more than 14 days).

1130	Lung disease, Benign	Lung disease arising from any etiology (congenital or acquired) which does not result in death or lung or heart-lung transplant; examples might be non-life threatening asthma or emphysema, benign cysts.
1140	Lung disease, Malignant	Lung disease arising from any etiology (congenital or acquired, including pulmonary parenchymal disease, pulmonary vascular disease, congenital heart disease, neoplasm, etc.) which may result in death or lung or heart-lung transplant.
1160	Tracheal stenosis	Tracheal stenosis is a reduction in the anatomic luminal diameter of the trachea by more than 50% of the remaining trachea. This stenosis may be congenital or acquired (as in post-intubation or traumatic tracheal stenosis).
1170	Airway disease	Included in this diagnostic category would be airway pathology not included under the definition of tracheal stenosis such as tracheomalacia, bronchotracheomalacia, tracheal right upper lobe, bronchomalacia, subglottic stenosis, bronchial stenosis, etc.
1430	Pleural disease, Benign	Benign diseases of the mediastinal or visceral pleura.
1440	Pleural disease, Malignant	Malignant diseases of the mediastinal or visceral pleura.
1450	Pneumothorax	A collection of air or gas in the pleural space.
1460	Pleural effusion	Abnormal accumulation of fluid in the pleural space.
1470	Chylothorax	The presence of lymphatic fluid in the pleural space secondary to a leak from the thoracic duct or its branches. Chylothorax is a specific type of pleural effusion.
1480	Empyema	A collection of purulent material in the pleural space, usually secondary to an infection.
1490	Esophageal disease, Benign	Any benign disease of the esophagus.
1500	Esophageal disease, Malignant	Any malignant disease of the esophagus.
1505	Mediastinal disease	Any disease of the mediastinum awaiting final benign/malignant pathology determination.
1510	Mediastinal disease, Benign	Any benign disease of the mediastinum.
1520	Mediastinal disease, Malignant	Any malignant disease of the mediastinum.
1540	Diaphragm paralysis	Paralysis of diaphragm, unilateral or bilateral.
1550	Diaphragm disease, Other	Any disease of the diaphragm other than paralysis.
2160	Rib tumor, Benign	Non-cancerous tumor of rib(s) (e.g., fibrous dysplasia)
2170	Rib tumor, Malignant	Cancerous tumor of rib(s)- primary (e.g., osteosarcoma, chondrosarcoma)

2180	Rib tumor, Metastatic	Cancerous tumor metastasized to rib(s)from a different primary location
2190	Sternal tumor, Benign	Non-cancerous tumor of sternum (e.g., fibrous dysplasia)
2200	Sternal tumor, Malignant	Cancerous tumor of sternum - primary (e.g., osteosarcoma, chondrosarcoma)
2210	Sternal tumor, Metastatic	Cancerous tumor metastasized to sternum from a different primary location
2220	Pectus carinatum	Pectus carinatum represents a spectrum of protrusion abnormalities of the anterior chest wall. Severe deformity may result in dyspnea and decreased endurance. Some patients develop rigidity of the chest wall with decreased lung compliance, progressive emphysema, and increased frequency of respiratory tract infections.
2230	Pectus excavatum	Pectus excavatum is a congenital chest wall deformity in which several ribs and the sternum grow abnormally, producing a concave, or caved-in, appearance in the anterior chest wall. Pectus excavatum is the most common type of congenital chest wall abnormality. It occurs in an estimated 1 in 300-400 births, with male predominance (male-to-female ratio of 3:1). The condition is typically noticed at birth, and more than 90% of cases are diagnosed within the first year of life. Worsening of the chest's appearance and the onset of respiratory symptoms are usually reported during rapid bone growth in the early teenage years.
2240	Thoracic outlet syndrome	Thoracic outlet syndrome (TOS) is caused by compression at the superior thoracic outlet wherein excess pressure is placed on a neurovascular bundle passing between the anterior scalene and middle scalene muscles. It can affect the brachial plexus (nerves that pass into the arm from the neck), the subclavian artery, and - rarely - the vein, which does not normally pass through the scalene hiatus. TOS may occur due to a positional cause - for example, by abnormal compression from the clavicle (collarbone) and shoulder girdle on arm movement. There are also several static forms, caused by abnormalities, enlargement, or spasm of the various muscles surrounding the arteries, veins, and/or brachial plexus, a fixation of a first rib, or a cervical rib. The most common causes of thoracic outlet syndrome include physical trauma from a car accident, repetitive injuries from a job such as frequent non-ergonomic use of a keyboard, sports-related activities, anatomical defects such as having an extra rib, and pregnancy.
1180	Arrhythmia	Any cardiac rhythm other than normal sinus rhythm.
2040	Arrhythmia, Atrial	Indicate if the patient has the diagnosis of ''Arrhythmia, Atrial''. ''Arrhythmia, Atrial'' ROOT Definition =

Non-sinus atrial rhythm with or without atrioventricular conduction. [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 373.

2050	Arrhythmia, Junctional	Indicate if the patient has the diagnosis of ''Arrhythmia, Junctional''. "Arrhythmias arising from the atrioventricular junction; may be bradycardia, tachycardia, premature beats, or escape rhythm [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 379.
2060	Arrhythmia, Ventricular	Indicate if the patient has the diagnosis of ''Arrhythmia, Ventricular''. "Arrhythmia, Ventricular'' ROOT Definition = Abnormal rhythm originating from the ventricles [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 393.
1185	Arrhythmia, Heart block	Atrioventricular block may be congenital or acquired, and may be of varying degree (first, second, or third degree).
1190	Arrhythmia, Heart block, Acquired	Atrioventricular block, when acquired, may be post-surgical, or secondary to myocarditis or other etiologies; the block may be first, second or third degree.
1200	Arrhythmia, Heart block, Congenital	Atrioventricular block, when congenital, may be first, second or third degree block.
1220	Arrhythmia, Pacemaker, Indication for replacement	Indications for pacemaker replacement may include end of generator life, malfunction, or infection.
1230	Atrial Isomerism, Left	In isomerism, both appendages are of like morphology or structure; in left atrial isomerism both the right atrium and left atrium appear to be a left atrium structurally.
1240	Atrial Isomerism, Right	In isomerism, both appendages are of like morphology or structure; in right atrial isomerism both the right atrium and left atrium appear to be a right atrium structurally.

2090	Dextrocardia	Indicate if the patient has the diagnosis of ''Dextrocardia''. "Dextrocardia'' is most usually considered synonymous with a right-sided ventricular mass, whilst ''dextroversion'' is frequently defined as a configuration where the ventricular apex points to the right. In a patient with the usual atrial arrangement, or situs solitus, dextroversion, therefore, implies a turning to the right of the heart [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2100	Levocardia	Indicate if the patient has the diagnosis of ''Levocardia''. ''Levocardia'' usually considered synonymous with a left-sided ventricular mass, whilst ''levoversion'' is frequently defined as a configuration where the ventricular apex points to the left [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2110	Mesocardia	Indicate if the patient has the diagnosis of ''Mesocardia''. "Mesocardia'' is most usually considered synonymous with the ventricular mass occupying the midline [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

2120	Situs inversus	Indicate if the patient has the diagnosis of "Situs inversus" of the atrial chambers. The development of morphologically right-sided structures on one side of the body, and morphologically left-sided structures on the other side, is termed lateralization. Normal lateralization, the usual arrangement, is also known as ''situs solitus''. The mirror-imaged arrangement is also known as ''situs inversus''. The term ''visceroatrial situs'' is often used to refer to the situs of the viscera and atria when their situs is in agreement. The arrangement of the organs themselves, and the arrangement of the atrial chambers, is not always the same. Should such disharmony be encountered, the sidedness of the organs and atrial chambers must be separately specified [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
1250	Aneurysm, Ventricular, Right (including pseudoaneurysm)	An aneurysm of the right ventricle is defined as a localized dilation or enlargement of the right ventricular wall.
1260	Aneurysm, Ventricular, Left (including pseudoaneurysm)	An aneurysm of the left ventricle is defined as a localized dilation or enlargement of the left ventricular wall.
1270	Aneurysm, Pulmonary artery	An aneurysm of the pulmonary artery is defined as a localized dilation or enlargement of the pulmonary artery trunk and its central branches (right and left pulmonary artery).
1280	Aneurysm, Other	A localized dilation or enlargement of a cardiac vessel or chamber not coded in specific fields available for aortic aneurysm, sinus of Valsalva aneurysm, coronary artery aneurysm, right ventricular aneurysm, left ventricular aneurysm, or pulmonary artery aneurysm.
1290	Hypoplastic RV	Small size of the right ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the right ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.

1300	Hypoplastic LV	Small size of the left ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the left ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
2070	Postoperative bleeding	Indicate if the patient has the diagnosis of "Postoperative bleeding".
1310	Mediastinitis	Inflammation/infection of the mediastinum, the cavity between the lungs which holds the heart, great vessels, trachea, esophagus, thymus, and connective tissues. In the United States mediastinitis occurs most commonly following chest surgery.
1320	Endocarditis	An infection of the endocardial surface of the heart, which may involve one or more heart valves (native or prosthetic) or septal defects or prosthetic patch material placed at previous surgery.
1325	Rheumatic heart disease	Heart disease, usually valvar (e.g., mitral or aortic), following an infection with group A streptococci
1330	Prosthetic valve failure	Indicate if the patient has the diagnosis of "Prosthetic valve failure". This diagnosis is the primary diagnosis to be entered for patients undergoing replacement of a previously placed valve (not conduit) prosthesis, whatever type (e.g., bioprosthetic, mechanical, etc.). Failure may be due to, among others, patient somatic growth, malfunction of the prosthesis, or calcification or overgrowth of the prosthesis (e.g., pannus formation). Secondary or fundamental diagnosis would relate to the underlying valve disease entity. As an example, a patient undergoing removal or replacement of a prosthetic pulmonary valve previously placed for pulmonary insufficiency after repair of tetralogy of Fallot would have as a primary diagnosis "Prosthetic valve failure", as a secondary diagnosis "Pulmonary insufficiency", and as a fundamental diagnosis "Tetralogy of Fallot".
1340	Myocardial infarction	A myocardial infarction is the development of myocardial necrosis caused by a critical imbalance between the oxygen supply and demand of the myocardium. While a myocardial infarction may be caused by any process that causes this imbalance it most commonly results from plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Myocardial infarction is a usual accompaniment of anomalous left coronary artery from the pulmonary artery (ALCAPA).

1350	Cardiac tumor	An abnormal growth of tissue in or on the heart, demonstrating partial or complete lack of structural organization, and no functional coordination with normal cardiac tissue. Commonly, a mass is recognized which is distinct from the normal structural components of the heart. A primary cardiac tumor is one that arises directly from tissues of the heart, (e.g., myxoma, fibroelastoma, rhabdomyoma, fibroma, lipoma, pheochromocytoma, teratoma, hemangioma, mesothesioloma, sarcoma). A secondary cardiac tumor is one that arises from tissues distant from the heart, with subsequent spread to the otherwise normal tissues of the heart, (e.g., renal cell tumor with caval extension from the kidney to the level of the heart or tumor with extension from other organs or areas of the body (hepatic, adrenal, uterine, infradiaphragmatic)). N.B., in the nomenclature system developed, cardiac thrombus and cardiac vegetation are categorized as primary cardiac tumors.
1360	Pulmonary AV fistula	An abnormal intrapulmonary connection (fistula) between an artery and vein that occurs in the blood vessels of the lungs. Pulmonary AV fistulas may be seen in association with congenital heart defects; the associated cardiac defect should be coded as well.
1370	Pulmonary embolism	A pulmonary embolus is a blockage of an artery in the lungs by fat, air, clumped tumor cells, or a blood clot.
1385	Pulmonary vascular obstructive disease	Pulmonary vascular obstructive disease (PVOD) other than those specifically defined elsewhere (Eisenmenger's pulmonary vascular obstructive disease, primary pulmonary hypertension, persistent fetal circulation). The spectrum includes PVOD arising from (1) pulmonary arterial hypertension or (2) pulmonary venous hypertension or (3) portal hypertension, or (4) collage vascular disease, or (5) drug or toxin induced, or (6) diseases of the respiratory system, or (7) chronic thromboembolic disease, among others.
1390	Pulmonary vascular obstructive disease (Eisenmenger's)	"Eisenmenger syndrome" could briefly be described as "Acquired severe pulmonary vascular disease associated with congenital heart disease (Eisenmenger)". Eisenmenger syndrome is an acquired condition. In Eisenmenger-type pulmonary vascular obstructive disease, long-term left-to-right shunting (e.g., through a ventricular or atrial septal defect, patent ductus arteriosus, aortopulmonary window) can lead to chronic pulmonary hypertension with resultant pathological changes in the pulmonary vessels. The vessels become thick-walled, stiff, noncompliant, and may be obstructed. In Eisenmenger syndrome, the long-term left-to-right shunting will reverse and become right to left. Please note that the specific heart defect should be coded as a secondary diagnosis.
1400	Primary pulmonary	Primary pulmonary hypertension is a rare disease

	hypertension	characterized by elevated pulmonary artery hypertension with no apparent cause. Two forms are included in the nomenclature, a sporadic form and a familial form which can be linked to the BMPR-II gene.
1410	Persistent fetal circulation	Persistence of the blood flow pattern seen in fetal life, in which high pulmonary vascular resistance in the lungs results in decreased blood flow to the lungs. Normally, after birth pulmonary pressure falls with a fall in pulmonary vascular resistance and there is increased perfusion of the lungs. Persistent fetal circulation, also known as persistent pulmonary hypertension of the newborn, can be related to lung or diaphragm malformations or lung immaturity.
1420	Meconium aspiration	Aspiration of amniotic fluid stained with meconium before, during, or after birth can lead to pulmonary sequelae including (1) pneumothorax, (2) pneumomediastinum, (3) pneumopericardium, (4) lung infection, and (5) meconium aspiration syndrome (MAS) with persistent pulmonary hypertension.
2250	Kawasaki disease	Kawasaki disease, also known as Kawasaki syndrome, is an acute febrile illness of unknown etiology that primarily affects children younger than 5 years of age. it was first described in Japan in 1967, and the first cases outside of Japan were reported in Hawaii in 1976. It is characterized by fever, rash, swelling of the hands and feet, irritation and redness of the whites of the eyes, swollen lymph glands in the neck, and irritation and inflammation of the mouth, lips, and throat. Serious complications of Kawasaki disease include coronary artery dilations and aneurysms, and Kawasaki disease is a leading cause of acquired heart disease in children in the United States. The standard treatment with intravenous immunoglobulin and aspirin substantially decreases the development of coronary artery abnormalities.
1560	Cardiac, Other	Any cardiac diagnosis not specifically delineated in other diagnostic codes.
1570	Thoracic and/or mediastinal, Other	Any thoracic and/or mediastinal disease not specifically delineated in other diagnostic codes.
1580	Peripheral vascular, Other	Any peripheral vascular disease (congenital or acquired) or injury (from trauma or iatrogenic); vessels involved may include, but are not limited to femoral artery, femoral vein, iliac artery, brachial artery, etc.
2260	Complication of cardiovascular catheterization procedure	Unspecified complication of cardiovascular catheterization procedure
2270	Complication of cardiovascular catheterization procedure, Device embolization	Migration or movement of device introduced during a cardiac catheterization procedure to an unintended location

2280	Complication of cardiovascular catheterization procedure, Device malfunction	Malfunction of a device introduced during a cardiac catheterization procedure
2290	Complication of cardiovascular catheterization procedure, Perforation	Perforation or puncture caused by a device introduced during a cardiac catheterization procedure
2300	Complication of interventional radiology procedure	Unspecified complication of interventional radiology procedure
2310	Complication of interventional radiology procedure, Device embolization	Migration or movement of device introduced during an interventional radiology procedure to an unintended location
2320	Complication of interventional radiology procedure, Device malfunction	Malfunction of a device introduced during an interventional radiology procedure
2330	Complication of interventional radiology procedure, Perforation	Perforation or puncture caused by a device introduced during an interventional radiology procedure
2340	Foreign body, Intracardiac foreign body	Presence of a foreign body within the heart
2350	Foreign body, Intravascular foreign body	Presence of a foreign body within an artery or vein
2360	Open sternum with closed skin	Sternotomy edges not re-approximated prior to closure of skin incision
2370	Open sternum with open skin (includes membrane placed to close skin)	Sternotomy and skin incision left open following surgery, covered with a membrane or dressing
2380	Retained sternal wire causing irritation	Surgically placed wire causing soft tissue irritation, pain or swelling (not infected)
2390	Syncope	A transient, self-limited loss of consciousness with an inability to maintain postural tone that is followed by spontaneous recovery. The term syncope excludes seizures, coma, shock, or other states of altered consciousness.
2400	Trauma, Blunt	Injury (ies) sustained from blunt force, caused by motor vehicle accidents, falls, blows or crush injuries
2410	Trauma, Penetrating	Injury (ies) sustained as a result of sharp force, including cutting or piercing instruments or objects, bites, or firearm injuries from projectiles.
7000	Normal heart	Normal heart.
7777	Miscellaneous, Other	Any disease (congenital or acquired) not specifically delineated in other diagnostic codes.
4010	Status post - PFO, Primary closure	

4020	Status post - ASD repair, Primary closure
4030	Status post - ASD repair, Patch
4040	Status post - ASD repair, Device
6110	Status post - ASD repair, Patch + PAPVC repair
4050	Status post - ASD, Common atrium (single atrium), Septation
4060	Status post - ASD creation/enlargement
4070	Status post - ASD partial closure
4080	Status post - Atrial septal fenestration
4085	Status post - Atrial fenestration closure
4100	Status post - VSD repair, Primary closure
4110	Status post - VSD repair, Patch
4120	Status post - VSD repair, Device
4130	Status post - VSD, Multiple, Repair
4140	Status post - VSD creation/enlargement
4150	Status post - Ventricular septal fenestration
4170	Status post - AVC (AVSD) repair, Complete (CAVSD)
4180	Status post - AVC (AVSD) repair, Intermediate (Transitional)
4190	Status post - AVC (AVSD) repair, Partial (Incomplete) (PAVSD)
6300	Status post - Valvuloplasty, Common atrioventricular valve
6250	Status post - Valvuloplasty converted to valve replacement in the same operation, Common

atrioventricular valve

6230   Status post - Valve replacement, Common atrioventricular valve

4210   Status post - AP window repair

4220   Status post - Pulmonary artery origin from ascending aorta (hemitruncus) repair

4230   Status post - Truncus arteriosus repair

4240   Status post - Valvuloplasty, Truncal valve

6290   Status post - Valvuloplasty converted to valve replacement in the same operation, Truncal valve

4250   Status post - Valve replacement, Truncal valve

6220   Status post - Truncus + Interrupted aortic arch repair (IAA) repair

4260   Status post - PAPVC repair

4270   Status post - PAPVC, Scimitar, Repair

6120   Status post - PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)

4280   Status post - TAPVC repair

6200   Status post - TAPVC repair + Shunt - systemic-to-pulmonary

4290   Status post - Cor triatriatum repair

4300   Status post - Pulmonary venous stenosis repair

4310   Status post - Atrial baffle procedure (non-Mustard, non-Senning)

4330   Status post - Anomalous systemic venous connection repair

4340   Status post - Systemic venous stenosis repair

4350   Status post - TOF repair, No ventriculotomy

4360   Status post - TOF repair, Ventriculotomy, Nontransanular patch

4370   Status post - TOF repair, Ventriculotomy, Transanular patch

4380   Status post - TOF repair, RV-PA conduit

4390   Status post - TOF - AVC (AVSD) repair

4400   Status post - TOF - Absent pulmonary valve repair

4420   Status post - Pulmonary atresia - VSD (including TOF, PA) repair

6700   Status post - Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])

6710   Status post - Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])

6720   Status post - Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])

6730   Status post - Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Complete unifocalization (all usable MAPCA[s] are incorporated)

6740   Status post - Unifocalization

	MAPCA(s), Bilateral pulmonary unifocalization - Incomplete unifocalization (not all usable MAPCA[s] are incorporated)
6750	Status post - Unifocalization MAPCA(s), Unilateral pulmonary unifocalization
4440	Status post - Unifocalization MAPCA(s)
4450	Status post - Occlusion of MAPCA(s)
4460	Status post - Valvuloplasty, Tricuspid
6280	Status post - Valvuloplasty converted to valve replacement in the same operation, Tricuspid
4465	Status post - Ebstein's repair
4470	Status post - Valve replacement, Tricuspid (TVR)
4480	Status post - Valve closure, Tricuspid (exclusion, univentricular approach)
4490	Status post - Valve excision, Tricuspid (without replacement)
4500	Status post - Valve surgery, Other, Tricuspid
4510	Status post - RVOT procedure
4520	Status post - 1 1/2 ventricular repair
4530	Status post - PA, reconstruction (plasty), Main (trunk)
4540	Status post - PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)
4550	Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)
4570	Status post - DCRV repair
4590	Status post - Valvuloplasty, Pulmonic

6270	Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic
4600	Status post - Valve replacement, Pulmonic (PVR)
4630	Status post - Valve excision, Pulmonary (without replacement)
4640	Status post - Valve closure, Semilunar
4650	Status post - Valve surgery, Other, Pulmonic
4610	Status post - Conduit placement, RV to PA
4620	Status post - Conduit placement, LV to PA
5774	Status post - Conduit placement, Ventricle to aorta
5772	Status post - Conduit placement, Other
4580	Status post - Conduit reoperation
4660	Status post - Valvuloplasty, Aortic
6240	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic
6310	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure
6320	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure
4670	Status post - Valve replacement, Aortic (AVR)
4680	Status post - Valve replacement, Aortic (AVR), Mechanical
4690	Status post - Valve replacement, Aortic (AVR), Bioprosthetic

4700	Status post - Valve replacement, Aortic (AVR), Homograft
4715	Status post - Aortic root replacement, Bioprosthetic
4720	Status post - Aortic root replacement, Mechanical
4730	Status post - Aortic root replacement, Homograft
4735	Status post - Aortic root replacement, Valve sparing
4740	Status post - Ross procedure
4750	Status post - Konno procedure
4760	Status post - Ross-Konno procedure
4770	Status post - Other annular enlargement procedure
4780	Status post - Aortic stenosis, Subvalvar, Repair
6100	Status post - Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS
4790	Status post - Aortic stenosis, Supravalvar, Repair
4800	Status post - Valve surgery, Other, Aortic
4810	Status post - Sinus of Valsalva, Aneurysm repair
4820	Status post - LV to aorta tunnel repair
4830	Status post - Valvuloplasty, Mitral
6260	Status post - Valvuloplasty converted to valve replacement in the same operation, Mitral
4840	Status post - Mitral stenosis, Supravalvar mitral ring repair
4850	Status post - Valve replacement, Mitral (MVR)
4860	Status post - Valve surgery, Other, Mitral
4870	Status post - Norwood procedure
4880	Status post - HLHS

biventricular repair

6755   Status post - Conduit insertion right ventricle to pulmonary artery + Intraventricular tunnel left ventricle to neoaorta + Arch reconstruction (Rastelli and Norwood type arch reconstruction) (Yasui)

6160   Status post - Hybrid Approach "Stage 1", Application of RPA & LPA bands

6170   Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)

6180   Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands

6140   Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)

6150   Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair

6760   Status post - Hybrid Approach, Transcardiac balloon dilation

6770   Status post - Hybrid Approach, Transcardiac transcatheter device placement

1590   Status post - Transplant, Heart

1610   Status post - Transplant, Heart and lung

4910   Status post - Partial left

ventriculectomy (LV volume reduction surgery) (Batista)

4920   Status post - Pericardial drainage procedure

4930   Status post - Pericardiectomy

4940   Status post - Pericardial procedure, Other

4950   Status post - Fontan, Atrio-pulmonary connection

4960   Status post - Fontan, Atrio-ventricular connection

4970   Status post - Fontan, TCPC, Lateral tunnel, Fenestrated

4980   Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated

5000   Status post - Fontan, TCPC, External conduit, Fenestrated

5010   Status post - Fontan, TCPC, External conduit, Nonfenestrated

6780   Status post - Fontan, TCPC, Intra/extracardiac conduit, Fenestrated

6790   Status post - Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated

5025   Status post - Fontan revision or conversion (Re-do Fontan)

5030   Status post - Fontan, Other

6340   Status post - Fontan + Atrioventricular valvuloplasty

5035   Status post - Ventricular septation

5050   Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double switch)

5060   Status post - Congenitally corrected TGA repair, Atrial switch and Rastelli

5070   Status post - Congenitally corrected TGA repair, VSD closure

5080   Status post - Congenitally corrected TGA repair, VSD closure and LV to PA conduit

5090	Status post - Congenitally corrected TGA repair, Other
5110	Status post - Arterial switch operation (ASO)
5120	Status post - Arterial switch operation (ASO) and VSD repair
5123	Status post - Arterial switch procedure + Aortic arch repair
5125	Status post - Arterial switch procedure and VSD repair + Aortic arch repair
5130	Status post - Senning
5140	Status post - Mustard
5145	Status post - Atrial baffle procedure, Mustard or Senning revision
5150	Status post - Rastelli
5160	Status post - REV
6190	Status post - Aortic root translocation over left ventricle (Including Nikaidoh procedure)
6210	Status post - TGA, Other procedures (Kawashima, LV-PA conduit, other)
5180	Status post - DORV, Intraventricular tunnel repair
5200	Status post - DOLV repair
5210	Status post - Coarctation repair, End to end
5220	Status post - Coarctation repair, End to end, Extended
5230	Status post - Coarctation repair, Subclavian flap
5240	Status post - Coarctation repair, Patch aortoplasty
5250	Status post - Coarctation repair, Interposition graft
5260	Status post - Coarctation repair, Other
5275	Status post - Coarctation repair + VSD repair
5280	Status post - Aortic arch repair
5285	Status post - Aortic arch

repair + VSD repair

5290   Status post - Coronary artery
        fistula ligation

5291   Status post - Anomalous
        origin of coronary artery from
        pulmonary artery repair

5300   Status post - Coronary artery
        bypass

5305   Status post - Anomalous
        aortic origin of coronary
        artery (AAOCA) repair

5310   Status post - Coronary artery
        procedure, Other

5320   Status post - Interrupted
        aortic arch repair

5330   Status post - PDA closure,
        Surgical

5340   Status post - PDA closure,
        Device

5360   Status post - Vascular ring
        repair

5365   Status post - Aortopexy

5370   Status post - Pulmonary
        artery sling repair

5380   Status post - Aortic aneurysm
        repair

5390   Status post - Aortic dissection
        repair

5400   Status post - Lung biopsy

1600   Status post - Transplant,
        Lung(s)

5420   Status post - Lung procedure,
        Other

5440   Status post - Tracheal
        procedure

6800   Status post - Muscle flap,
        Trunk (i.e., intercostal,
        pectus, or serratus muscle)

6810   Status post - Muscle flap,
        Trunk (i.e. latissimus dorsi)

6820   Status post - Removal, Sternal
        wire

6830   Status post - Rib excision,
        Complete

6840   Status post - Rib excision,

Partial

6850   Status post - Sternal fracture - open treatment

6860   Status post - Sternal resection, Radical resection of sternum

6870   Status post - Sternal resection, Radical resection of sternum with mediastinal lymphadenectomy

6880   Status post - Tumor of chest wall - Excision including ribs

6890   Status post - Tumor of chest wall - Excision including ribs, With reconstruction

6900   Status post - Tumor of soft tissue of thorax - Excision of deep subfascial or intramuscular tumor

6910   Status post - Tumor of soft tissue of thorax - Excision of subcutaneous tumor

6920   Status post - Tumor of soft tissue of thorax - Radical resection

6930   Status post - Hyoid myotomy and suspension

6940   Status post - Muscle flap, Neck

6950   Status post - Procedure on neck

6960   Status post - Tumor of soft tissue of neck - Excision of deep subfascial or intramuscular tumor

6970   Status post - Tumor of soft tissue of neck - Excision of subcutaneous tumor

6980   Status post - Tumor of soft tissue of neck - Radical resection

6990   Status post - Pectus bar removal

7005   Status post - Pectus bar repositioning

7010   Status post - Pectus repair, Minimally invasive repair (Nuss), With thoracoscopy

7020   Status post - Pectus repair,
       Minimally invasive repair
       (Nuss), Without thoracoscopy

7030   Status post - Pectus repair,
       Open repair

7040   Status post - Division of
       scalenus anticus, With
       resection of a cervical rib

7050   Status post - Division of
       scalenus anticus, Without
       resection of a cervical rib

7060   Status post - Rib excision,
       Excision of cervical rib

7070   Status post - Rib excision,
       Excision of cervical rib, With
       sympathectomy

7080   Status post - Rib excision,
       Excision of first rib

7090   Status post - Rib excision,
       Excision of first rib, With
       sympathectomy

7100   Status post - Procedure on
       thorax

5450   Status post - Pacemaker
       implantation, Permanent

5460   Status post - Pacemaker
       procedure

6350   Status post - Explantation of
       pacing system

5470   Status post - ICD (AICD)
       implantation

5480   Status post - ICD (AICD)
       ([automatic] implantable
       cardioverter defibrillator)
       procedure

5490   Status post - Arrhythmia
       surgery - atrial, Surgical
       Ablation

5500   Status post - Arrhythmia
       surgery - ventricular, Surgical
       Ablation

6500   Status post - Cardiovascular
       catheterization procedure,
       Diagnostic

6520   Status post - Cardiovascular
       catheterization procedure,

Diagnostic, Angiographic
data obtained

6550   Status post - Cardiovascular
        catheterization procedure,
        Diagnostic,
        Electrophysiology alteration

6540   Status post - Cardiovascular
        catheterization procedure,
        Diagnostic, Hemodynamic
        alteration

6510   Status post - Cardiovascular
        catheterization procedure,
        Diagnostic, Hemodynamic
        data obtained

6530   Status post - Cardiovascular
        catheterization procedure,
        Diagnostic, Transluminal test
        occlusion

6410   Status post - Cardiovascular
        catheterization procedure,
        Therapeutic

6670   Status post - Cardiovascular
        catheterization procedure,
        Therapeutic, Adjunctive
        therapy

6570   Status post - Cardiovascular
        catheterization procedure,
        Therapeutic, Balloon dilation

6590   Status post - Cardiovascular
        catheterization procedure,
        Therapeutic, Balloon
        valvotomy

6600   Status post - Cardiovascular
        catheterization procedure,
        Therapeutic, Coil implantation

6610   Status post - Cardiovascular
        catheterization procedure,
        Therapeutic, Device
        implantation

7110   Status post - Cardiovascular
        catheterization procedure,
        Therapeutic, Device
        implantation attempted

6690   Status post - Cardiovascular
        catheterization procedure,
        Therapeutic,
        Electrophysiological ablation

7120   Status post - Cardiovascular

catheterization procedure, Therapeutic, Intravascular foreign body removal

6640   Status post - Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)

6580   Status post - Cardiovascular catheterization procedure, Therapeutic, Septostomy

6620   Status post - Cardiovascular catheterization procedure, Therapeutic, Stent insertion

6630   Status post - Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation

6650   Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion

6660   Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve

5590   Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)

5600   Status post - Shunt, Systemic to pulmonary, Central (shunt from aorta)

7130   Status post - Shunt, Systemic to pulmonary, Central (shunt from aorta), Central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta (i.e. Mee shunt)

5610   Status post - Shunt, Systemic to pulmonary, Other

5630   Status post - Shunt, Ligation and takedown

6095   Status post - Shunt, Reoperation

5640   Status post - PA banding
        (PAB)

5650   Status post - PA debanding

5660   Status post - Damus-Kaye-
        Stansel procedure (DKS)
        (creation of AP anastomosis
        without arch reconstruction)

5670   Status post - Bidirectional
        cavopulmonary anastomosis
        (BDCPA) (bidirectional
        Glenn)

5680   Status post - Glenn
        (unidirectional
        cavopulmonary anastomosis)
        (unidirectional Glenn)

5690   Status post - Bilateral
        bidirectional cavopulmonary
        anastomosis (BBDCPA)
        (bilateral bidirectional Glenn)

5700   Status post - HemiFontan

6330   Status post - Superior
        cavopulmonary
        anastomosis(es) (Glenn or
        HemiFontan) +
        Atrioventricular valvuloplasty

6130   Status post - Superior
        Cavopulmonary
        anastomosis(es) + PA
        reconstruction

7140   Status post - Hepatic vein to
        azygous vein connection,
        Direct

7150   Status post - Hepatic vein to
        azygous vein connection,
        Interposition graft

7160   Status post - Kawashima
        operation (superior
        cavopulmonary connection in
        setting of interrupted IVC
        with azygous continuation)

5710   Status post - Palliation, Other

6360   Status post - ECMO
        cannulation

6370   Status post - ECMO
        decannulation

5910   Status post - ECMO procedure

5900   Status post - Intraaortic

balloon pump (IABP) insertion

5920   Status post - Right/left heart assist device procedure

6390   Status post - VAD explantation

6380   Status post - VAD implantation

7170   Status post - VAD change out

6420   Status post - Echocardiography procedure, Sedated transesophageal echocardiogram

6430   Status post - Echocardiography procedure, Sedated transthoracic echocardiogram

6435   Status post - Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia

6440   Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)

6450   Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)

6460   Status post - Radiology procedure on cardiac patient, Diagnostic radiology

6470   Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient

6480   Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient

6490   Status post - Radiology procedure on cardiac patient, Therapeutic radiology

5720   Status post - Aneurysm, Ventricular, Right, Repair

5730   Status post - Aneurysm,

Ventricular, Left, Repair

5740   Status post - Aneurysm, Pulmonary artery, Repair

5760   Status post - Cardiac tumor resection

5780   Status post - Pulmonary AV fistula repair/occlusion

5790   Status post - Ligation, Pulmonary artery

5802   Status post - Pulmonary embolectomy, Acute pulmonary embolus

5804   Status post - Pulmonary embolectomy, Chronic pulmonary embolus

5810   Status post - Pleural drainage procedure

5820   Status post - Pleural procedure, Other

5830   Status post - Ligation, Thoracic duct

5840   Status post - Decortication

5850   Status post - Esophageal procedure

5860   Status post - Mediastinal procedure

5870   Status post - Bronchoscopy

5880   Status post - Diaphragm plication

5890   Status post - Diaphragm procedure, Other

5930   Status post - VATS (video-assisted thoracoscopic surgery)

5940   Status post - Minimally invasive procedure

5950   Status post - Bypass for noncardiac lesion

5960   Status post - Delayed sternal closure

5970   Status post - Mediastinal exploration

5980   Status post - Sternotomy wound drainage

7180   Status post - Intravascular

stent removal

5990	Status post - Thoracotomy, Other
6000	Status post - Cardiotomy, Other
6010	Status post - Cardiac procedure, Other
6020	Status post - Thoracic and/or mediastinal procedure, Other
6030	Status post - Peripheral vascular procedure, Other
6040	Status post - Miscellaneous procedure, Other
11777	Status post - Other procedure

Long Name: Other Card-Congenital Procedure 1   *SeqNo:*   4515

Short Name: **OCarCongProc1**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the first of the three most significant congenital procedures.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card-Congenital   *Format:*   Text (categorical values specified by STS)

ParentShortName: OCarCong   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
10	PFO, Primary closure	Suture closure of patent foramen ovale (PFO).
20	ASD repair, Primary closure	Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
30	ASD repair, Patch	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD.
40	ASD repair, Device	Closure of any type ASD (including PFO) using a device.
2110	ASD repair, Patch + PAPVC repair	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD plus PAPVC repair, any type
50	ASD, Common atrium (single atrium), Septation	Septation of common (single) atrium using any type patch material.
60	ASD creation/enlargement	Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities

including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.

70	ASD partial closure	Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
80	Atrial septal fenestration	Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
85	Atrial fenestration closure	Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
100	VSD repair, Primary closure	Suture closure of any type VSD.
110	VSD repair, Patch	Patch closure (using any type of patch material) of any type VSD.
120	VSD repair, Device	Closure of any type VSD using a device.
130	VSD, Multiple, Repair	Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
140	VSD creation/enlargement	Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
150	Ventricular septal fenestration	Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.
170	AVC (AVSD) repair, Complete (CAVSD)	Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
180	AVC (AVSD) repair, Intermediate (Transitional)	Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
190	AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
2300	Valvuloplasty, Common atrioventricular valve	Common AV valve repair, any type
2250	Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	Common AV valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
2230	Valve replacement, Common	Replacement of the common AV valve with a prosthetic

	atrioventricular valve	valve
210	AP window repair	Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
220	Pulmonary artery origin from ascending aorta (hemitruncus) repair	Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
230	Truncus arteriosus repair	Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
240	Valvuloplasty, Truncal valve	Truncal valve repair, any type.
2290	Valvuloplasty converted to valve replacement in the same operation, Truncal valve	Truncal valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
250	Valve replacement, Truncal valve	Replacement of the truncal valve with a prosthetic valve.
2220	Truncus + Interrupted aortic arch repair (IAA) repair	Truncus arteriosus repair usually includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. (Very rarely, there is no VSD) plus repair of interrupted aortic arch
260	PAPVC repair	PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
270	PAPVC, Scimitar, Repair	In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
2120	PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)	An intracardiac baffle is created to redirect pulmonary venous return to the left atrium and SVC sewn to right atrial appendage)

280	TAPVC repair	Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.
2200	TAPVC repair + Shunt - systemic-to-pulmonary	Repair of TAPVC, any type plus a systemic to pulmonary shunt creation
290	Cor triatriatum repair	Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
300	Pulmonary venous stenosis repair	Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
310	Atrial baffle procedure (non-Mustard, non-Senning)	The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.
330	Anomalous systemic venous connection repair	With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
340	Systemic venous stenosis repair	Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
350	TOF repair, No ventriculotomy	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
360	TOF repair, Ventriculotomy, Nontransanular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with

use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.

370	TOF repair, Ventriculotomy, Transanular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
380	TOF repair, RV-PA conduit	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
390	TOF - AVC (AVSD) repair	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
400	TOF - Absent pulmonary valve repair	Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
420	Pulmonary atresia - VSD (including TOF, PA) repair	For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.
2700	Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization +	1-stage repair that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])

		VSD closure + RV to PA connection [with or without conduit])
2710	Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])	VSD closure + RV to PA connection [with or without conduit])
2720	Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])	Completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalization
2730	Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Complete unifocalization (all usable MAPCA[s] are incorporated)	Complete unifocalization , all usable MAPCA[s] are incorporated
2740	Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Incomplete unifocalization (not all usable MAPCA[s] are incorporated)	Incomplete unifocalization, not all usable MAPCA[s] are incorporated
2750	Unifocalization MAPCA(s), Unilateral pulmonary unifocalization	MAPCA(s), Unilateral pulmonary unifocalization (one side)
440	Unifocalization MAPCA(s)	Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.
450	Occlusion of MAPCA(s)	Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
460	Valvuloplasty, Tricuspid	Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, and papillary muscle translocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead

use the Ebstein's repair procedure code.

2280	Valvuloplasty converted to valve replacement in the same operation, Tricuspid	Tricuspid valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
465	Ebstein's repair	To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
470	Valve replacement, Tricuspid (TVR)	Replacement of the tricuspid valve with a prosthetic valve.
480	Valve closure, Tricuspid (exclusion, univentricular approach)	In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
490	Valve excision, Tricuspid (without replacement)	Excision of the tricuspid valve without placement of a prosthetic valve.
500	Valve surgery, Other, Tricuspid	Other tricuspid valve surgery not specified in procedure codes.
510	RVOT procedure	Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
520	1 1/2 ventricular repair	Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
530	PA, reconstruction (plasty), Main (trunk)	Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
540	PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding

(single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.

550	PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
570	DCRV repair	Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
590	Valvuloplasty, Pulmonic	Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
2270	Valvuloplasty converted to valve replacement in the same operation, Pulmonic	Pulmonic valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
600	Valve replacement, Pulmonic (PVR)	Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
630	Valve excision, Pulmonary (without replacement)	Excision of the pulmonary valve without placement of a prosthetic valve.
640	Valve closure, Semilunar	Closure of a semilunar valve (pulmonic or aortic) by any technique.
650	Valve surgery, Other, Pulmonic	Other pulmonic valve surgery not specified in procedure codes.
610	Conduit placement, RV to PA	Placement of a conduit, any type, from RV to PA.
620	Conduit placement, LV to PA	Placement of a conduit, any type, from LV to PA.
1774	Conduit placement, Ventricle to aorta	Placement of a conduit from the right or left ventricle to the aorta.
1772	Conduit placement, Other	Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
580	Conduit reoperation	Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc.).
660	Valvuloplasty, Aortic	Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed),

commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).

2240	Valvuloplasty converted to valve replacement in the same operation, Aortic	Aortic valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
2310	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	Aortic valve repair attempted, converted to valve replacement with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit during the same operation
2320	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure	Aortic valve repair attempted, converted to Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
670	Valve replacement, Aortic (AVR)	Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
680	Valve replacement, Aortic (AVR), Mechanical	Replacement of the aortic valve with a mechanical prosthetic valve.
690	Valve replacement, Aortic (AVR), Bioprosthetic	Replacement of the aortic valve with a bioprosthetic prosthetic valve.
700	Valve replacement, Aortic (AVR), Homograft	Replacement of the aortic valve with a homograft prosthetic valve.
715	Aortic root replacement, Bioprosthetic	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
720	Aortic root replacement, Mechanical	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechanical prosthesis in a composite conduit.
730	Aortic root replacement, Homograft	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
735	Aortic root replacement, Valve sparing	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
740	Ross procedure	Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.

750	Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
760	Ross-Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
770	Other annular enlargement procedure	Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manouguian and Nicks aortic annular enlargement procedures.
780	Aortic stenosis, Subvalvar, Repair	Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation) , Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
2100	Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	Subvalvar aortic stenosis repair including excision and myectomy
790	Aortic stenosis, Supravalvar, Repair	Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
800	Valve surgery, Other, Aortic	Other aortic valve surgery not specified in other procedure codes.
810	Sinus of Valsalva, Aneurysm repair	Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.). Aortic root replacement procedures in association with sinus of Valsalva

aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.

820	LV to aorta tunnel repair	LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
830	Valvuloplasty, Mitral	Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissuorotomy, leaflet repair, or papillary muscle repair.
2260	Valvuloplasty converted to valve replacement in the same operation, Mitral	Mitral valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
840	Mitral stenosis, Supravalvar mitral ring repair	Supravalvar mitral ring repair.
850	Valve replacement, Mitral (MVR)	Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
860	Valve surgery, Other, Mitral	Other mitral valve surgery not specified in procedure codes.
870	Norwood procedure	The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neoaortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection.

When coding the procedure "Norwood procedure", the primary procedure of the operation should be "Norwood procedure". The second procedure that is coded as part of the Norwood (Stage 1) operation (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:
1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)
2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)
3. Shunt, Systemic to pulmonary, Other
4. Conduit placement, RV to PA
5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)

6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)
7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
8. HemiFontan

880	HLHS biventricular repair	Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.
2755	Conduit insertion right ventricle to pulmonary artery + Intraventricular tunnel left ventricle to neoaorta + Arch reconstruction (Rastelli and Norwood type arch reconstruction) (Yasui)	
2160	Hybrid Approach "Stage 1", Application of RPA & LPA bands	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
2170	Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
2180	Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of

procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

2140	Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
2150	Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
2760	Hybrid Approach, Transcardiac balloon dilation	
2770	Hybrid Approach, Transcardiac transcatheter device placement	
890	Transplant, Heart	Heart transplantation, any technique, allograft or xenograft.
900	Transplant, Heart and lung	Heart and lung (single or double) transplantation.
910	Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.
920	Pericardial drainage procedure	Pericardial drainage can include a range of therapies

including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).

930	Pericardiectomy	Surgical removal of the pericardium.
940	Pericardial procedure, Other	Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
950	Fontan, Atrio-pulmonary connection	The atrio-pulmonary Fontan is a type of Fontan with connection of the atrium to the pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
960	Fontan, Atrio-ventricular connection	The atrio-ventricular Fontan is a type of Fontan with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
970	Fontan, TCPC, Lateral tunnel, Fenestrated	The lateral tunnel Fontan is a TCPC type of Fontan Procedure created with anastomosis of SVC and right atrium to the branch pulmonary artery and an intra-atrial baffle to direct IVC flow to pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
980	Fontan, TCPC, Lateral tunnel, Nonfenestrated	The lateral tunnel Fontan is a TCPC type of Fontan Procedure created with anastomosis of SVC and right atrium to the branch pulmonary artery and an intra-atrial baffle to direct IVC flow to pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.

1000	Fontan, TCPC, External conduit, Fenestrated	The external conduit Fontan is a TCPC type of Fontan operation created with anastomosis of SVC to the branch pulmonary artery a conduit outside of the heart to connect the infradiaphragmatic systemic venous return to the pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
1010	Fontan, TCPC, External conduit, Nonfenestrated	The external conduit Fontan is a TCPC type of Fontan operation created with anastomosis of SVC to the branch pulmonary artery a conduit outside of the heart to connect the infradiaphragmatic systemic venous return to the pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
2780	Fontan, TCPC, Intra/extracardiac conduit, Fenestrated	The TCPC with Intra/extracardiac conduit is a TCPC type of Fontan operation created with a tube where the tube is attached to the inferior caval vein inside of the heart, and then the tube passes outside of the heart and is attached to the pulmonary artery outside of the heart. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
2790	Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated	The TCPC with Intra/extracardiac conduit is a TCPC type of Fontan operation created with a tube where the tube is attached to the inferior caval vein inside of the heart, and then the tube passes outside of the heart and is attached to the pulmonary artery outside of the heart. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower

		body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
1025	Fontan revision or conversion (Re-do Fontan)	"Fontan revision or conversion (Re-do Fontan)" is defined as an operation where a previously created Fontan circuit is either modified or taken down and changed into a different type of Fontan. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways.
1030	Fontan, Other	Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
2340	Fontan + Atrioventricular valvuloplasty	"Fontan + Atrioventricular valvuloplasty" is defined as an operation to repair the systemic atrioventricular valve combined with a Fontan operation. Please also code the type of Fontan operation performed as the second procedure of this operation. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
1035	Ventricular septation	Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
1050	Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
1060	Congenitally corrected TGA repair, Atrial switch and Rastelli	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
1070	Congenitally corrected TGA repair, VSD closure	Repair of congenitally corrected TGA by VSD closure only.
1080	Congenitally corrected TGA	Repair of congenitally corrected TGA by VSD closure

	repair, VSD closure and LV to PA conduit	and placement of an LV-to-PA conduit.
1090	Congenitally corrected TGA repair, Other	Any procedures for correction of CCTGA not otherwise specified in other listed procedure codes.
1110	Arterial switch operation (ASO)	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
1120	Arterial switch operation (ASO) and VSD repair	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
1123	Arterial switch procedure + Aortic arch repair	Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
1125	Arterial switch procedure and VSD repair + Aortic arch repair	Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
1130	Senning	Atrial baffle procedure for rerouting of venous flow in TGA resulting in a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
1140	Mustard	Atrial baffle procedure for rerouting of venous flow in TGA resulting in a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
1145	Atrial baffle procedure, Mustard or Senning revision	Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).
1150	Rastelli	Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.
1160	REV	The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for

patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.

2190	Aortic root translocation over left ventricle (Including Nikaidoh procedure)	
2210	TGA, Other procedures (Kawashima, LV-PA conduit, other)	
1180	DORV, Intraventricular tunnel repair	Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima
1200	DOLV repair	Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
1210	Coarctation repair, End to end	Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
1220	Coarctation repair, End to end, Extended	Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended

anastomosis.

1230	Coarctation repair, Subclavian flap	Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
1240	Coarctation repair, Patch aortoplasty	Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
1250	Coarctation repair, Interposition graft	Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
1260	Coarctation repair, Other	Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
1275	Coarctation repair + VSD repair	Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
1280	Aortic arch repair	Aortic arch repair, any technique.
1285	Aortic arch repair + VSD repair	Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
1290	Coronary artery fistula ligation	Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
1291	Anomalous origin of coronary artery from pulmonary artery repair	Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, or bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
1300	Coronary artery bypass	Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
1305	Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
1310	Coronary artery procedure, Other	Any coronary artery procedure not specifically listed.
1320	Interrupted aortic arch repair	Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc.).

		Does not include repair of IAA-VSD.
1330	PDA closure, Surgical	Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc.).
1340	PDA closure, Device	Closure of a PDA by device using transcatheter techniques.
1360	Vascular ring repair	Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
1365	Aortopexy	Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
1370	Pulmonary artery sling repair	Pulmonary artery sling repair by any technique.
1380	Aortic aneurysm repair	Aortic aneurysm repair by any technique.
1390	Aortic dissection repair	Aortic dissection repair by any technique.
1400	Lung biopsy	Lung biopsy, any technique.
1410	Transplant, lung(s)	Lung or lobe transplantation of any type.
1420	Lung procedure, Other	Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
1440	Tracheal procedure	Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
2800	Muscle flap, Trunk (i.e. intercostal, pectus, or serratus muscle)	A trunk muscle flap (intercostal, pectus, or serratus muscle) is rotated to buttress or augment a suture line, anastomosis or fill the pleural space.
2810	Muscle flap, Trunk (i.e. latissimus dorsi)	A trunk muscle flap (latissimus dorsi) is rotated to buttress or augment a suture line, anastomosis or fill the pleural space.
2820	Removal, Sternal wire	Excision of wire used to approximate sternum, previous sternotomy
2830	Rib excision, Complete	Complete excision of rib(s)
2840	Rib excision, Partial	Partial excision of rib(s)
2850	Sternal fracture - open treatment	Repair of a sternal fracture with sutures, wires, plates or bars.
2860	Sternal resection, Radical resection of sternum	Involves removal of the sternum with complex reconstruction requirements for either a tumor or severe sternal infection.
2870	Sternal resection, Radical resection of sternum with	Involves resection of the sternum and mediastinal lymph node dissection.

mediastinal lymphadenectomy

2880	Tumor of chest wall - Excision including ribs	Excision of ribs and attached muscles for a benign or malignant tumor of the chest wall. When three or less ribs are taken or if the defect is covered by the scapula, reconstruction may not be necessary.
2890	Tumor of chest wall - Excision including ribs, With reconstruction	Resection of the chest wall tumor with reconstruction of the defect, usually with plastic mesh (marlex, prolene), methylmethracralate/mesh sandwich or a muscle flap.
2900	Tumor of soft tissue of thorax - Excision of deep subfascial or intramuscular tumor	Excision of a deep chest wall tumor that involves the muscles but not the ribs. These would usually be benign tumors such as a fibroma or a deep lipoma.
2910	Tumor of soft tissue of thorax - Excision of subcutaneous tumor	Excision of tumor in the skin/fat of the chest wall-typically a lipoma.
2920	Tumor of soft tissue of thorax - Radical resection	En-bloc, radical excision of a cancer of the chest wall muscles, involving the skin, fat and muscles. Typically it would be a desmoid tumor or a sarcoma malignant fibrous histiocytoma, rhabdomyosarcoma.
2930	Hyoid myotomy and suspension	Typically done as a suprahyoid laryngeal release to reduce tension on a cervical tracheal resection anastomosis. The hyoid bone is cut laterally on both sides to allow it to drop down and thus lower the larynx and trachea.
2940	Muscle flap, Neck	A neck muscle flap is rotated to buttress or augment a suture line, anastomosis or fill a space. Commonly used neck muscles are strap muscles, sternocleidomastoid muscle, levator scapulae.
2950	Procedure on neck	Unlisted procedure of the neck
2960	Tumor of soft tissue of neck - Excision of deep subfascial or intramuscular tumor	Excision of a tumor that involves the muscles of the neck. These would usually be benign tumors such as a fibroma or a deep lipoma.
2970	Tumor of soft tissue of neck - Excision of subcutaneous tumor	Excision of a tumor in the skin/fat of the neck-typically a lipoma.
2980	Tumor of soft tissue of neck - Radical resection	A surgical procedure in which the fibrofatty contents of the neck are removed for the treatment of cervical lymphatic metastases. Neck dissection is most commonly used in the management of cancers of the upper aerodigestive tract. It is also used for malignancies of the skin of the head and neck area, the thyroid, and the salivary glands.
2990	Pectus bar removal	Removal of a previously implanted chest wall bar
3000	Pectus bar repositioning	Repositioning of a previously implanted chest wall bar
3010	Pectus repair, Minimally invasive repair (Nuss), With thoracoscopy	Placement of a Nuss transverse chest wall bar to push the sternum forward to repair a pectus deformity, with thoracoscopy
3020	Pectus repair, Minimally	Placement of a Nuss transverse chest wall bar to push

	invasive repair (Nuss), Without thoracoscopy	the sternum forward to repair a pectus deformity, without thoracoscopy
3030	Pectus repair, Open repair	Resection of several costal cartilages, a partial osteotomy of the sternum, and often placement of a temporary bar for stabilization of pectus chest wall deformity
3040	Division of scalenus anticus, With resection of a cervical rib	Repair of Thoracic Outlet Syndrome variant where the scalenus anticus muscle or a band from it impinges on the brachial plexus along with resection of the abnormal cervical rib
3050	Division of scalenus anticus, Without resection of a cervical rib	Repair of Thoracic Outlet Syndrome variant where the scalenus anticus muscle or a band from it impinges on the brachial plexus along without resection of the abnormal cervical rib
3060	Rib excision, Excision of cervical rib	Removal of the first rib or a cervical rib for treatment of Thoracic Outlet Syndrome
3070	Rib excision, Excision of cervical rib, With sympathectomy	Removal of the first rib or a cervical rib and sympathectomy for treatment of Thoracic Outlet Syndrome
3080	Rib excision, Excision of first rib	Removal of the first rib
3090	Rib excision, Excision of first rib, With sympathectomy	Removal of the first rib and sympathectomy
3100	Procedure on thorax	Unlisted procedure on thorax
1450	Pacemaker implantation, Permanent	Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc.).
1460	Pacemaker procedure	Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
2350	Explantation of pacing system	Removal of pacemaker generator and wires
1470	ICD (AICD) implantation	Implantation of an (automatic) implantable cardioverter defibrillator system.
1480	ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
1490	Arrhythmia surgery - atrial, Surgical Ablation	Surgical ablation (any type) of any atrial arrhythmia.
1500	Arrhythmia surgery - ventricular, Surgical Ablation	Surgical ablation (any type) of any ventricular arrhythmia.
2500	Cardiovascular catheterization procedure, Diagnostic	Invasive diagnostic procedure involving the heart and great vessels

2520	Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	Invasive diagnostic procedure involving the heart and great vessels using angiography
2550	Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
2540	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	Invasive diagnostic procedure involving pressure or flow alteration in the cardiovascular system
2510	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	Invasive diagnostic procedure involving pressure and flow assessment of the heart and great vessels
2530	Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion	
2410	Cardiovascular catheterization procedure, Therapeutic	Invasive therapeutic procedure involving the heart and great vessels
2670	Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy	
1540	Cardiovascular catheterization procedure, Therapeutic, Balloon dilation	Invasive therapeutic procedure involving balloon dilation of a cardiovascular structure
2590	Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy	Invasive therapeutic procedure involving balloon dilation of a valve
1580	Cardiovascular catheterization procedure, Therapeutic, Coil implantation	Invasive therapeutic procedure involving implantation of a coil
1560	Cardiovascular catheterization procedure, Therapeutic, Device implantation	Invasive therapeutic procedure involving implantation of a device
3110	Cardiovascular catheterization procedure, Therapeutic, Device implantation attempted	Invasive therapeutic procedure involving attempted but unsuccessful implantation of a device
2690	Cardiovascular catheterization procedure, Therapeutic, Electrophysiological ablation.	Invasive therapeutic procedure involving Catheter based creation of lesions in the heart with radiofrequency energy, cryotherapy , or ultrasound energy to cure or control arrhythmias

3120	Cardiovascular catheterization procedure, Therapeutic, Intravascular foreign body removal	Invasive therapeutic procedure involving removal of an intravascular foreign body
2640	Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)	Invasive therapeutic procedure establishing interchamber and/or intervessel communication
2580	Cardiovascular catheterization procedure, Therapeutic, Septostomy	Invasive therapeutic procedure establishing an intracardiac septal communication
1550	Cardiovascular catheterization procedure, Therapeutic, Stent insertion	Invasive therapeutic procedure involving implantation of a stent
2630	Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation	Invasive therapeutic procedure involving dilation of a previously implanted stent
2650	Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion	
2660	Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve	Invasive therapeutic procedure involving deployment/ implantation of a valve
1590	Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
1600	Shunt, Systemic to pulmonary, Central (shunt from aorta)	A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
3130	Shunt, Systemic to pulmonary, Central (shunt from aorta), Central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta (i.e. Mee shunt)	Creation of a central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta
1610	Shunt, Systemic to pulmonary, Other	Placement of any other systemic-to-pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
1630	Shunt, Ligation and takedown	Takedown of any shunt.
2095	Shunt, Reoperation	Revision or replacement of a previously created shunt

1640	PA banding (PAB)	Placement of a pulmonary artery band, any type.
1650	PA debanding	Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
1660	Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
1670	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
1680	Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
1690	Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
1700	HemiFontan	A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
2330	Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
2130	Superior Cavopulmonary anastomosis(es) + PA reconstruction	
3140	Hepatic vein to azygous vein connection, Direct	
3150	Hepatic vein to azygous vein connection, Interposition graft	
3160	Kawashima operation	

	(superior cavopulmonary connection in setting of interrupted IVC with azygous continuation)	
1710	Palliation, Other	Any other palliative procedure not specifically listed.
2360	ECMO cannulation	Insertion of cannulas for extracorporeal membrane oxygenation
2370	ECMO decannulation	Removal of cannulas for extracorporeal membrane oxygenation
1910	ECMO procedure	Any ECMO procedure (cannulation, decannulation, etc.).
1900	Intraaortic balloon pump (IABP) insertion	Insertion of intraaortic balloon pump by any technique.
1920	Right/left heart assist device procedure	Any right, left, or biventricular assist device procedure (placement, removal etc.).
2390	VAD explantation	Removal of ventricular assist device
2380	VAD implantation	Insertion of a ventricular assist device
3170	VAD change out	Removal of previously inserted ventricular assist device and insertion of a new device
2420	Echocardiography procedure, Sedated transesophageal echocardiogram	Procedural sedation for echocardiogram
2430	Echocardiography procedure, Sedated transthoracic echocardiogram	Procedural sedation for echocardiogram, transthoracic
2435	Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	Anesthesia provided by cardiac anesthesiologist for patient with congenital heart disease undergoing a non-cardiovascular, non-thoracic procedure
2440	Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	A patient with congenital heart disease undergoing cardiac CT scan
2450	Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	A patient with congenital heart disease undergoing cardiac MRI
2460	Radiology procedure on cardiac patient, Diagnostic radiology	A patient with congenital heart disease undergoing a diagnostic radiology procedure
2470	Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	A patient with congenital heart disease undergoing a non-cardiac CT scan
2480	Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	A patient with congenital heart disease undergoing non-cardiac MRI

2490	Radiology procedure on cardiac patient, Therapeutic radiology	A patient with congenital heart disease undergoing a therapeutic radiology procedure
1720	Aneurysm, Ventricular, Right, Repair	Repair of right ventricular aneurysm, any technique.
1730	Aneurysm, Ventricular, Left, Repair	Repair of left ventricular aneurysm, any technique.
1740	Aneurysm, Pulmonary artery, Repair	Repair of pulmonary artery aneurysm, any technique.
1760	Cardiac tumor resection	Resection of cardiac tumor, any type.
1780	Pulmonary AV fistula repair/occlusion	Repair or occlusion of a pulmonary arteriovenous fistula.
1790	Ligation, Pulmonary artery	Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
1802	Pulmonary embolectomy, Acute pulmonary embolus	Acute pulmonary embolism (clot) removal, through catheter or surgery.
1804	Pulmonary embolectomy, Chronic pulmonary embolus	Chronic pulmonary embolism (clot) removal, through catheter or surgery.
1810	Pleural drainage procedure	Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
1820	Pleural procedure, Other	Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
1830	Ligation, Thoracic duct	Ligation of the thoracic duct; most commonly for persistent chylothorax.
1840	Decortication	Decortication of the lung by any technique.
1850	Esophageal procedure	Any procedure performed on the esophagus.
1860	Mediastinal procedure	Any non-cardiovascular mediastinal procedure not otherwise listed.
1870	Bronchoscopy	Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
1880	Diaphragm plication	Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
1890	Diaphragm procedure, Other	Any diaphragm procedure not specifically listed.
1930	VATS (video-assisted thoracoscopic surgery)	Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
1940	Minimally invasive procedure	Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).

1950	Bypass for noncardiac lesion	Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
1960	Delayed sternal closure	Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
1970	Mediastinal exploration	Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
1980	Sternotomy wound drainage	Drainage of the sternotomy wound.
3180	Intravascular stent removal	Removal of a previously placed intravascular stent
1990	Thoracotomy, Other	Any procedure performed through a thoracotomy incision not otherwise listed.
2000	Cardiotomy, Other	Any procedure involving an incision in the heart that is not otherwise listed.
2010	Cardiac procedure, Other	Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
2020	Thoracic and/or mediastinal procedure, Other	Any thoracic and/or mediastinal procedure not otherwise listed.
2030	Peripheral vascular procedure, Other	Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
2040	Miscellaneous procedure, Other	Any miscellaneous procedure not otherwise listed.
2050	Organ procurement	Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
7777	Other procedure	Any procedure on any organ system not otherwise listed.
7800	Operation canceled before skin incision	Surgical procedure canceled after patient enters the operating room but prior to skin incision
7810	Operation aborted after skin incision	Surgical procedure canceled after skin incision made

Long Name: Other Card-Congenital Procedure 2   *SeqNo:*   4520

Short Name: **OCarCongProc2**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the second of the three most significant congenital procedures.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card-Congenital   *Format:*   Text (categorical values specified by STS)

ParentShortName: OCarCong   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
10	PFO, Primary closure	Suture closure of patent foramen ovale (PFO).
20	ASD repair, Primary closure	Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
30	ASD repair, Patch	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD.
40	ASD repair, Device	Closure of any type ASD (including PFO) using a device.
2110	ASD repair, Patch + PAPVC repair	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD plus PAPVC repair, any type
50	ASD, Common atrium (single atrium), Septation	Septation of common (single) atrium using any type patch material.
60	ASD creation/enlargement	Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
70	ASD partial closure	Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
80	Atrial septal fenestration	Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
85	Atrial fenestration closure	Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
100	VSD repair, Primary closure	Suture closure of any type VSD.
110	VSD repair, Patch	Patch closure (using any type of patch material) of any type VSD.
120	VSD repair, Device	Closure of any type VSD using a device.

130	VSD, Multiple, Repair	Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
140	VSD creation/enlargement	Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
150	Ventricular septal fenestration	Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.
170	AVC (AVSD) repair, Complete (CAVSD)	Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
180	AVC (AVSD) repair, Intermediate (Transitional)	Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
190	AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
2300	Valvuloplasty, Common atrioventricular valve	Common AV valve repair, any type
2250	Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	Common AV valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
2230	Valve replacement, Common atrioventricular valve	Replacement of the common AV valve with a prosthetic valve
210	AP window repair	Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
220	Pulmonary artery origin from ascending aorta (hemitruncus) repair	Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
230	Truncus arteriosus repair	Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g.,

Interrupted aortic arch repair).

240	Valvuloplasty, Truncal valve	Truncal valve repair, any type.
2290	Valvuloplasty converted to valve replacement in the same operation, Truncal valve	Truncal valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
250	Valve replacement, Truncal valve	Replacement of the truncal valve with a prosthetic valve.
2220	Truncus + Interrupted aortic arch repair (IAA) repair	Truncus arteriosus repair usually includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. (Very rarely, there is no VSD) plus repair of interrupted aortic arch
260	PAPVC repair	PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
270	PAPVC, Scimitar, Repair	In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
2120	PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)	An intracardiac baffle is created to redirect pulmonary venous return to the left atrium and SVC sewn to right atrial appendage)
280	TAPVC repair	Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.
2200	TAPVC repair + Shunt - systemic-to-pulmonary	Repair of TAPVC, any type plus a systemic to pulmonary shunt creation
290	Cor triatriatum repair	Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.

300	Pulmonary venous stenosis repair	Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
310	Atrial baffle procedure (non-Mustard, non-Senning)	The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.
330	Anomalous systemic venous connection repair	With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
340	Systemic venous stenosis repair	Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
350	TOF repair, No ventriculotomy	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
360	TOF repair, Ventriculotomy, Nontransanular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
370	TOF repair, Ventriculotomy, Transanular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
380	TOF repair, RV-PA conduit	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with

placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.

390	TOF - AVC (AVSD) repair	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
400	TOF - Absent pulmonary valve repair	Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
420	Pulmonary atresia - VSD (including TOF, PA) repair	For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.
2700	Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])	1-stage repair that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])
2710	Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])	VSD closure + RV to PA connection [with or without conduit])
2720	Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])	Completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalization

2730	Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Complete unifocalization (all usable MAPCA[s] are incorporated)	Complete unifocalization , all usable MAPCA[s] are incorporated
2740	Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Incomplete unifocalization (not all usable MAPCA[s] are incorporated)	Incomplete unifocalization, not all usable MAPCA[s] are incorporated
2750	Unifocalization MAPCA(s), Unilateral pulmonary unifocalization	MAPCA(s), Unilateral pulmonary unifocalization (one side)
440	Unifocalization MAPCA(s)	Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.
450	Occlusion of MAPCA(s)	Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
460	Valvuloplasty, Tricuspid	Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, and papillary muscle translocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
2280	Valvuloplasty converted to valve replacement in the same operation, Tricuspid	Tricuspid valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
465	Ebstein's repair	To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
470	Valve replacement, Tricuspid (TVR)	Replacement of the tricuspid valve with a prosthetic valve.
480	Valve closure, Tricuspid (exclusion, univentricular approach)	In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with

Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.

490	Valve excision, Tricuspid (without replacement)	Excision of the tricuspid valve without placement of a prosthetic valve.
500	Valve surgery, Other, Tricuspid	Other tricuspid valve surgery not specified in procedure codes.
510	RVOT procedure	Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
520	1 1/2 ventricular repair	Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
530	PA, reconstruction (plasty), Main (trunk)	Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
540	PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
550	PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
570	DCRV repair	Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
590	Valvuloplasty, Pulmonic	Valvuloplasty of the pulmonic valve may include a

range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.

2270	Valvuloplasty converted to valve replacement in the same operation, Pulmonic	Pulmonic valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
600	Valve replacement, Pulmonic (PVR)	Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
630	Valve excision, Pulmonary (without replacement)	Excision of the pulmonary valve without placement of a prosthetic valve.
640	Valve closure, Semilunar	Closure of a semilunar valve (pulmonic or aortic) by any technique.
650	Valve surgery, Other, Pulmonic	Other pulmonic valve surgery not specified in procedure codes.
610	Conduit placement, RV to PA	Placement of a conduit, any type, from RV to PA.
620	Conduit placement, LV to PA	Placement of a conduit, any type, from LV to PA.
1774	Conduit placement, Ventricle to aorta	Placement of a conduit from the right or left ventricle to the aorta.
1772	Conduit placement, Other	Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
580	Conduit reoperation	Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc.).
660	Valvuloplasty, Aortic	Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
2240	Valvuloplasty converted to valve replacement in the same operation, Aortic	Aortic valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
2310	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	Aortic valve repair attempted, converted to valve replacement with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit during the same operation
2320	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure	Aortic valve repair attempted, converted to Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.

670	Valve replacement, Aortic (AVR)	Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
680	Valve replacement, Aortic (AVR), Mechanical	Replacement of the aortic valve with a mechanical prosthetic valve.
690	Valve replacement, Aortic (AVR), Bioprosthetic	Replacement of the aortic valve with a bioprosthetic prosthetic valve.
700	Valve replacement, Aortic (AVR), Homograft	Replacement of the aortic valve with a homograft prosthetic valve.
715	Aortic root replacement, Bioprosthetic	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
720	Aortic root replacement, Mechanical	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechanical prosthesis in a composite conduit.
730	Aortic root replacement, Homograft	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
735	Aortic root replacement, Valve sparing	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
740	Ross procedure	Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
750	Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
760	Ross-Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
770	Other annular enlargement procedure	Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manouguian and Nicks aortic annular enlargement procedures.

780	Aortic stenosis, Subvalvar, Repair	Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation) , Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
2100	Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	Subvalvar aortic stenosis repair including excision and myectomy
790	Aortic stenosis, Supravalvar, Repair	Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
800	Valve surgery, Other, Aortic	Other aortic valve surgery not specified in other procedure codes.
810	Sinus of Valsalva, Aneurysm repair	Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
820	LV to aorta tunnel repair	LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
830	Valvuloplasty, Mitral	Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissuorotomy, leaflet repair, or papillary muscle repair.

2260	Valvuloplasty converted to valve replacement in the same operation, Mitral	Mitral valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
840	Mitral stenosis, Supravalvar mitral ring repair	Supravalvar mitral ring repair.
850	Valve replacement, Mitral (MVR)	Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
860	Valve surgery, Other, Mitral	Other mitral valve surgery not specified in procedure codes.
870	Norwood procedure	The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neoaortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection. When coding the procedure "Norwood procedure", the primary procedure of the operation should be "Norwood procedure". The second procedure that is coded as part of the Norwood (Stage 1) operation (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices: 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS) 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery) 3. Shunt, Systemic to pulmonary, Other 4. Conduit placement, RV to PA 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn) 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn) 8. HemiFontan
880	HLHS biventricular repair	Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.

2755	Conduit insertion right ventricle to pulmonary artery + Intraventricular tunnel left ventricle to neoaorta + Arch reconstruction (Rastelli and Norwood type arch reconstruction) (Yasui)	
2160	Hybrid Approach "Stage 1", Application of RPA & LPA bands	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
2170	Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
2180	Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
2140	Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part

of a planned staged approach that is typically commenced with a hybrid procedure.

2150	Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
2760	Hybrid Approach, Transcardiac balloon dilation	
2770	Hybrid Approach, Transcardiac transcatheter device placement	
890	Transplant, Heart	Heart transplantation, any technique, allograft or xenograft.
900	Transplant, Heart and lung	Heart and lung (single or double) transplantation.
910	Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.
920	Pericardial drainage procedure	Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
930	Pericardiectomy	Surgical removal of the pericardium.
940	Pericardial procedure, Other	Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
950	Fontan, Atrio-pulmonary connection	The atrio-pulmonary Fontan is a type of Fontan with connection of the atrium to the pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
960	Fontan, Atrio-ventricular connection	The atrio-ventricular Fontan is a type of Fontan with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved. "The Fontan" is defined as an operation or intervention that results in

caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.

970	Fontan, TCPC, Lateral tunnel, Fenestrated	The lateral tunnel Fontan is a TCPC type of Fontan Procedure created with anastomosis of SVC and right atrium to the branch pulmonary artery and an intra-atrial baffle to direct IVC flow to pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
980	Fontan, TCPC, Lateral tunnel, Nonfenestrated	The lateral tunnel Fontan is a TCPC type of Fontan Procedure created with anastomosis of SVC and right atrium to the branch pulmonary artery and an intra-atrial baffle to direct IVC flow to pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
1000	Fontan, TCPC, External conduit, Fenestrated	The external conduit Fontan is a TCPC type of Fontan operation created with anastomosis of SVC to the branch pulmonary artery a conduit outside of the heart to connect the infradiaphragmatic systemic venous return to the pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
1010	Fontan, TCPC, External conduit, Nonfenestrated	The external conduit Fontan is a TCPC type of Fontan operation created with anastomosis of SVC to the branch pulmonary artery a conduit outside of the heart to connect the infradiaphragmatic systemic venous

return to the pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.

2780	Fontan, TCPC, Intra/extracardiac conduit, Fenestrated	The TCPC with Intra/extracardiac conduit is a TCPC type of Fontan operation created with a tube where the tube is attached to the inferior caval vein inside of the heart, and then the tube passes outside of the heart and is attached to the pulmonary artery outside of the heart. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
2790	Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated	The TCPC with Intra/extracardiac conduit is a TCPC type of Fontan operation created with a tube where the tube is attached to the inferior caval vein inside of the heart, and then the tube passes outside of the heart and is attached to the pulmonary artery outside of the heart. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
1025	Fontan revision or conversion (Re-do Fontan)	"Fontan revision or conversion (Re-do Fontan)" is defined as an operation where a previously created Fontan circuit is either modified or taken down and changed into a different type of Fontan. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary

circulation through separate connections that are either direct connections or tubular pathways.

| 1030 | Fontan, Other | Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. |

| 2340 | Fontan + Atrioventricular valvuloplasty | "Fontan + Atrioventricular valvuloplasty" is defined as an operation to repair the systemic atrioventricular valve combined with a Fontan operation. Please also code the type of Fontan operation performed as the second procedure of this operation. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. |

| 1035 | Ventricular septation | Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately. |

| 1050 | Congenitally corrected TGA repair, Atrial switch and ASO (double switch) | Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately. |

| 1060 | Congenitally corrected TGA repair, Atrial switch and Rastelli | Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit. |

| 1070 | Congenitally corrected TGA repair, VSD closure | Repair of congenitally corrected TGA by VSD closure only. |

| 1080 | Congenitally corrected TGA repair, VSD closure and LV to PA conduit | Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit. |

| 1090 | Congenitally corrected TGA repair, Other | Any procedures for correction of CCTGA not otherwise specified in other listed procedure codes. |

| 1110 | Arterial switch operation (ASO) | Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. |

| 1120 | Arterial switch operation (ASO) and VSD repair | Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch. |

1123	Arterial switch procedure + Aortic arch repair	Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
1125	Arterial switch procedure and VSD repair + Aortic arch repair	Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
1130	Senning	Atrial baffle procedure for rerouting of venous flow in TGA resulting in a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
1140	Mustard	Atrial baffle procedure for rerouting of venous flow in TGA resulting in a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
1145	Atrial baffle procedure, Mustard or Senning revision	Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).
1150	Rastelli	Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.
1160	REV	The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it

had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.

2190	Aortic root translocation over left ventricle (Including Nikaidoh procedure)	
2210	TGA, Other procedures (Kawashima, LV-PA conduit, other)	
1180	DORV, Intraventricular tunnel repair	Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima
1200	DOLV repair	Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
1210	Coarctation repair, End to end	Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
1220	Coarctation repair, End to end, Extended	Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
1230	Coarctation repair, Subclavian flap	Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
1240	Coarctation repair, Patch aortoplasty	Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
1250	Coarctation repair, Interposition graft	Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
1260	Coarctation repair, Other	Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic

bypass graft, etc.

1275	Coarctation repair + VSD repair	Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
1280	Aortic arch repair	Aortic arch repair, any technique.
1285	Aortic arch repair + VSD repair	Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
1290	Coronary artery fistula ligation	Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
1291	Anomalous origin of coronary artery from pulmonary artery repair	Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, or bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
1300	Coronary artery bypass	Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
1305	Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
1310	Coronary artery procedure, Other	Any coronary artery procedure not specifically listed.
1320	Interrupted aortic arch repair	Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc.). Does not include repair of IAA-VSD.
1330	PDA closure, Surgical	Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc.).
1340	PDA closure, Device	Closure of a PDA by device using transcatheter techniques.
1360	Vascular ring repair	Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
1365	Aortopexy	Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
1370	Pulmonary artery sling repair	Pulmonary artery sling repair by any technique.
1380	Aortic aneurysm repair	Aortic aneurysm repair by any technique.
1390	Aortic dissection repair	Aortic dissection repair by any technique.
1400	Lung biopsy	Lung biopsy, any technique.

1410	Transplant, lung(s)	Lung or lobe transplantation of any type.
1420	Lung procedure, Other	Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
1440	Tracheal procedure	Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
2800	Muscle flap, Trunk (i.e. intercostal, pectus, or serratus muscle)	A trunk muscle flap (intercostal, pectus, or serratus muscle) is rotated to buttress or augment a suture line, anastomosis or fill the pleural space.
2810	Muscle flap, Trunk (i.e. latissimus dorsi)	A trunk muscle flap (latissimus dorsi) is rotated to buttress or augment a suture line, anastomosis or fill the pleural space.
2820	Removal, Sternal wire	Excision of wire used to approximate sternum, previous sternotomy
2830	Rib excision, Complete	Complete excision of rib(s)
2840	Rib excision, Partial	Partial excision of rib(s)
2850	Sternal fracture - open treatment	Repair of a sternal fracture with sutures, wires, plates or bars.
2860	Sternal resection, Radical resection of sternum	Involves removal of the sternum with complex reconstructive requirements for either a tumor or severe sternal infection.
2870	Sternal resection, Radical resection of sternum with mediastinal lymphadenectomy	Involves resection of the sternum and mediastinal lymph node dissection.
2880	Tumor of chest wall - Excision including ribs	Excision of ribs and attached muscles for a benign or malignant tumor of the chest wall. When three or less ribs are taken or if the defect is covered by the scapula, reconstruction may not be necessary.
2890	Tumor of chest wall - Excision including ribs, With reconstruction	Resection of the chest wall tumor with reconstruction of the defect, usually with plastic mesh (marlex, prolene), methylmethracralate/mesh sandwich or a muscle flap.
2900	Tumor of soft tissue of thorax - Excision of deep subfascial or intramuscular tumor	Excision of a deep chest wall tumor that involves the muscles but not the ribs. These would usually be benign tumors such as a fibroma or a deep lipoma.
2910	Tumor of soft tissue of thorax - Excision of subcutaneous tumor	Excision of tumor in the skin/fat of the chest wall- typically a lipoma.
2920	Tumor of soft tissue of thorax - Radical resection	En-bloc, radical excision of a cancer of the chest wall muscles, involving the skin, fat and muscles. Typically

it would be a desmoid tumor or a sarcoma malignant fibrous histiocytoma, rhabdomyosarcoma.

2930	Hyoid myotomy and suspension	Typically done as a suprahyoid laryngeal release to reduce tension on a cervical tracheal resection anastomosis. The hyoid bone is cut laterally on both sides to allow it to drop down and thus lower the larynx and trachea.
2940	Muscle flap, Neck	A neck muscle flap is rotated to buttress or augment a suture line, anastomosis or fill a space. Commonly used neck muscles are strap muscles, sternocleidomastoid muscle, levator scapulae.
2950	Procedure on neck	Unlisted procedure of the neck
2960	Tumor of soft tissue of neck - Excision of deep subfascial or intramuscular tumor	Excision of a tumor that involves the muscles of the neck. These would usually be benign tumors such as a fibroma or a deep lipoma.
2970	Tumor of soft tissue of neck - Excision of subcutaneous tumor	Excision of a tumor in the skin/fat of the neck-typically a lipoma.
2980	Tumor of soft tissue of neck - Radical resection	A surgical procedure in which the fibrofatty contents of the neck are removed for the treatment of cervical lymphatic metastases. Neck dissection is most commonly used in the management of cancers of the upper aerodigestive tract. It is also used for malignancies of the skin of the head and neck area, the thyroid, and the salivary glands.
2990	Pectus bar removal	Removal of a previously implanted chest wall bar
3000	Pectus bar repositioning	Repositioning of a previously implanted chest wall bar
3010	Pectus repair, Minimally invasive repair (Nuss), With thoracoscopy	Placement of a Nuss transverse chest wall bar to push the sternum forward to repair a pectus deformity, with thoracoscopy
3020	Pectus repair, Minimally invasive repair (Nuss), Without thoracoscopy	Placement of a Nuss transverse chest wall bar to push the sternum forward to repair a pectus deformity, without thoracoscopy
3030	Pectus repair, Open repair	Resection of several costal cartilages, a partial osteotomy of the sternum, and often placement of a temporary bar for stabilization of pectus chest wall deformity
3040	Division of scalenus anticus, With resection of a cervical rib	Repair of Thoracic Outlet Syndrome variant where the scalenus anticus muscle or a band from it impinges on the brachial plexus along with resection of the abnormal cervical rib
3050	Division of scalenus anticus, Without resection of a cervical rib	Repair of Thoracic Outlet Syndrome variant where the scalenus anticus muscle or a band from it impinges on the brachial plexus along without resection of the abnormal cervical rib
3060	Rib excision, Excision of cervical rib	Removal of the first rib or a cervical rib for treatment of Thoracic Outlet Syndrome
3070	Rib excision, Excision of	Removal of the first rib or a cervical rib and

	cervical rib, With sympathectomy	sympathectomy for treatment of Thoracic Outlet Syndrome
3080	Rib excision, Excision of first rib	Removal of the first rib
3090	Rib excision, Excision of first rib, With sympathectomy	Removal of the first rib and sympathectomy
3100	Procedure on thorax	Unlisted procedure on thorax
1450	Pacemaker implantation, Permanent	Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc.).
1460	Pacemaker procedure	Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
2350	Explantation of pacing system	Removal of pacemaker generator and wires
1470	ICD (AICD) implantation	Implantation of an (automatic) implantable cardioverter defibrillator system.
1480	ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
1490	Arrhythmia surgery - atrial, Surgical Ablation	Surgical ablation (any type) of any atrial arrhythmia.
1500	Arrhythmia surgery - ventricular, Surgical Ablation	Surgical ablation (any type) of any ventricular arrhythmia.
2500	Cardiovascular catheterization procedure, Diagnostic	Invasive diagnostic procedure involving the heart and great vessels
2520	Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	Invasive diagnostic procedure involving the heart and great vessels using angiography
2550	Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
2540	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	Invasive diagnostic procedure involving pressure or flow alteration in the cardiovascular system
2510	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	Invasive diagnostic procedure involving pressure and flow assessment of the heart and great vessels
2530	Cardiovascular	

	catheterization procedure, Diagnostic, Transluminal test occlusion	
2410	Cardiovascular catheterization procedure, Therapeutic	Invasive therapeutic procedure involving the heart and great vessels
2670	Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy	
1540	Cardiovascular catheterization procedure, Therapeutic, Balloon dilation	Invasive therapeutic procedure involving balloon dilation of a cardiovascular structure
2590	Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy	Invasive therapeutic procedure involving balloon dilation of a valve
1580	Cardiovascular catheterization procedure, Therapeutic, Coil implantation	Invasive therapeutic procedure involving implantation of a coil
1560	Cardiovascular catheterization procedure, Therapeutic, Device implantation	Invasive therapeutic procedure involving implantation of a device
3110	Cardiovascular catheterization procedure, Therapeutic, Device implantation attempted	Invasive therapeutic procedure involving attempted but unsuccessful implantation of a device
2690	Cardiovascular catheterization procedure, Therapeutic, Electrophysiological ablation.	Invasive therapeutic procedure involving Catheter based creation of lesions in the heart with radiofrequency energy, cryotherapy , or ultrasound energy to cure or control arrhythmias
3120	Cardiovascular catheterization procedure, Therapeutic, Intravascular foreign body removal	Invasive therapeutic procedure involving removal of an intravascular foreign body
2640	Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)	Invasive therapeutic procedure establishing interchamber and/or intervessel communication
2580	Cardiovascular catheterization procedure, Therapeutic, Septostomy	Invasive therapeutic procedure establishing an intracardiac septal communication
1550	Cardiovascular catheterization procedure, Therapeutic, Stent insertion	Invasive therapeutic procedure involving implantation of a stent

2630	Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation	Invasive therapeutic procedure involving dilation of a previously implanted stent
2650	Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion	
2660	Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve	Invasive therapeutic procedure involving deployment/ implantation of a valve
1590	Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
1600	Shunt, Systemic to pulmonary, Central (shunt from aorta)	A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
3130	Shunt, Systemic to pulmonary, Central (shunt from aorta), Central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta (i.e. Mee shunt)	Creation of a central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta
1610	Shunt, Systemic to pulmonary, Other	Placement of any other systemic-to-pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
1630	Shunt, Ligation and takedown	Takedown of any shunt.
2095	Shunt, Reoperation	Revision or replacement of a previously created shunt
1640	PA banding (PAB)	Placement of a pulmonary artery band, any type.
1650	PA debanding	Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
1660	Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
1670	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
1680	Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
1690	Bilateral bidirectional cavopulmonary anastomosis	Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).

	(BBDCPA) (bilateral bidirectional Glenn)	
1700	HemiFontan	A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
2330	Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
2130	Superior Cavopulmonary anastomosis(es) + PA reconstruction	
3140	Hepatic vein to azygous vein connection, Direct	
3150	Hepatic vein to azygous vein connection, Interposition graft	
3160	Kawashima operation (superior cavopulmonary connection in setting of interrupted IVC with azygous continuation)	
1710	Palliation, Other	Any other palliative procedure not specifically listed.
2360	ECMO cannulation	Insertion of cannulas for extracorporeal membrane oxygenation
2370	ECMO decannulation	Removal of cannulas for extracorporeal membrane oxygenation
1910	ECMO procedure	Any ECMO procedure (cannulation, decannulation, etc.).
1900	Intraaortic balloon pump (IABP) insertion	Insertion of intraaortic balloon pump by any technique.
1920	Right/left heart assist device procedure	Any right, left, or biventricular assist device procedure (placement, removal etc.).

2390	VAD explantation	Removal of ventricular assist device
2380	VAD implantation	Insertion of a ventricular assist device
3170	VAD change out	Removal of previously inserted ventricular assist device and insertion of a new device
2420	Echocardiography procedure, Sedated transesophageal echocardiogram	Procedural sedation for echocardiogram
2430	Echocardiography procedure, Sedated transthoracic echocardiogram	Procedural sedation for echocardiogram, transthoracic
2435	Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	Anesthesia provided by cardiac anesthesiologist for patient with congenital heart disease undergoing a non-cardiovascular, non-thoracic procedure
2440	Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	A patient with congenital heart disease undergoing cardiac CT scan
2450	Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	A patient with congenital heart disease undergoing cardiac MRI
2460	Radiology procedure on cardiac patient, Diagnostic radiology	A patient with congenital heart disease undergoing a diagnostic radiology procedure
2470	Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	A patient with congenital heart disease undergoing a non-cardiac CT scan
2480	Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	A patient with congenital heart disease undergoing non-cardiac MRI
2490	Radiology procedure on cardiac patient, Therapeutic radiology	A patient with congenital heart disease undergoing a therapeutic radiology procedure
1720	Aneurysm, Ventricular, Right, Repair	Repair of right ventricular aneurysm, any technique.
1730	Aneurysm, Ventricular, Left, Repair	Repair of left ventricular aneurysm, any technique.
1740	Aneurysm, Pulmonary artery, Repair	Repair of pulmonary artery aneurysm, any technique.
1760	Cardiac tumor resection	Resection of cardiac tumor, any type.
1780	Pulmonary AV fistula repair/occlusion	Repair or occlusion of a pulmonary arteriovenous fistula.
1790	Ligation, Pulmonary artery	Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.

1802	Pulmonary embolectomy, Acute pulmonary embolus	Acute pulmonary embolism (clot) removal, through catheter or surgery.
1804	Pulmonary embolectomy, Chronic pulmonary embolus	Chronic pulmonary embolism (clot) removal, through catheter or surgery.
1810	Pleural drainage procedure	Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
1820	Pleural procedure, Other	Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
1830	Ligation, Thoracic duct	Ligation of the thoracic duct; most commonly for persistent chylothorax.
1840	Decortication	Decortication of the lung by any technique.
1850	Esophageal procedure	Any procedure performed on the esophagus.
1860	Mediastinal procedure	Any non-cardiovascular mediastinal procedure not otherwise listed.
1870	Bronchoscopy	Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
1880	Diaphragm plication	Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
1890	Diaphragm procedure, Other	Any diaphragm procedure not specifically listed.
1930	VATS (video-assisted thoracoscopic surgery)	Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
1940	Minimally invasive procedure	Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
1950	Bypass for noncardiac lesion	Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
1960	Delayed sternal closure	Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
1970	Mediastinal exploration	Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
1980	Sternotomy wound drainage	Drainage of the sternotomy wound.

3180	Intravascular stent removal	Removal of a previously placed intravascular stent
1990	Thoracotomy, Other	Any procedure performed through a thoracotomy incision not otherwise listed.
2000	Cardiotomy, Other	Any procedure involving an incision in the heart that is not otherwise listed.
2010	Cardiac procedure, Other	Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
2020	Thoracic and/or mediastinal procedure, Other	Any thoracic and/or mediastinal procedure not otherwise listed.
2030	Peripheral vascular procedure, Other	Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
2040	Miscellaneous procedure, Other	Any miscellaneous procedure not otherwise listed.
2050	Organ procurement	Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
7777	Other procedure	Any procedure on any organ system not otherwise listed.
7800	Operation canceled before skin incision	Surgical procedure canceled after patient enters the operating room but prior to skin incision
7810	Operation aborted after skin incision	Surgical procedure canceled after skin incision made

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Long Name: Other Card-Congenital Procedure 3   *SeqNo:*   4525

Short Name: **OCarCongProc3**   *Core:*   Yes

Section Name: Other Cardiac Procedures   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the third of the three most significant congenital procedures.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Card-Congenital   *Format:*   Text (categorical values specified by STS)

ParentShortName: OCarCong   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
10	PFO, Primary closure	Suture closure of patent foramen ovale (PFO).
20	ASD repair, Primary closure	Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
30	ASD repair, Patch	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD.
40	ASD repair, Device	Closure of any type ASD (including PFO) using a device.

2110	ASD repair, Patch + PAPVC repair	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD plus PAPVC repair, any type
50	ASD, Common atrium (single atrium), Septation	Septation of common (single) atrium using any type patch material.
60	ASD creation/enlargement	Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
70	ASD partial closure	Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
80	Atrial septal fenestration	Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
85	Atrial fenestration closure	Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
100	VSD repair, Primary closure	Suture closure of any type VSD.
110	VSD repair, Patch	Patch closure (using any type of patch material) of any type VSD.
120	VSD repair, Device	Closure of any type VSD using a device.
130	VSD, Multiple, Repair	Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
140	VSD creation/enlargement	Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
150	Ventricular septal fenestration	Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.
170	AVC (AVSD) repair, Complete (CAVSD)	Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
180	AVC (AVSD) repair, Intermediate (Transitional)	Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
190	AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
2300	Valvuloplasty, Common	Common AV valve repair, any type

atrioventricular valve

2250	Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	Common AV valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
2230	Valve replacement, Common atrioventricular valve	Replacement of the common AV valve with a prosthetic valve
210	AP window repair	Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
220	Pulmonary artery origin from ascending aorta (hemitruncus) repair	Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
230	Truncus arteriosus repair	Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
240	Valvuloplasty, Truncal valve	Truncal valve repair, any type.
2290	Valvuloplasty converted to valve replacement in the same operation, Truncal valve	Truncal valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
250	Valve replacement, Truncal valve	Replacement of the truncal valve with a prosthetic valve.
2220	Truncus + Interrupted aortic arch repair (IAA) repair	Truncus arteriosus repair usually includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. (Very rarely, there is no VSD) plus repair of interrupted aortic arch
260	PAPVC repair	PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
270	PAPVC, Scimitar, Repair	In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant

thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.

2120	PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)	An intracardiac baffle is created to redirect pulmonary venous return to the left atrium and SVC sewn to right atrial appendage)
280	TAPVC repair	Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.
2200	TAPVC repair + Shunt - systemic-to-pulmonary	Repair of TAPVC, any type plus a systemic to pulmonary shunt creation
290	Cor triatriatum repair	Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
300	Pulmonary venous stenosis repair	Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
310	Atrial baffle procedure (non-Mustard, non-Senning)	The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.
330	Anomalous systemic venous connection repair	With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
340	Systemic venous stenosis repair	Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
350	TOF repair, No ventriculotomy	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If

the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.

360	TOF repair, Ventriculotomy, Nontransanular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
370	TOF repair, Ventriculotomy, Transanular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
380	TOF repair, RV-PA conduit	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
390	TOF - AVC (AVSD) repair	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
400	TOF - Absent pulmonary valve repair	Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
420	Pulmonary atresia - VSD (including TOF, PA) repair	For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used,

not Rastelli procedure or tetralogy of Fallot repair with transannular patch.

2700	Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])	1-stage repair that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])
2710	Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])	VSD closure + RV to PA connection [with or without conduit])
2720	Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])	Completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalization
2730	Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Complete unifocalization (all usable MAPCA[s] are incorporated)	Complete unifocalization , all usable MAPCA[s] are incorporated
2740	Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Incomplete unifocalization (not all usable MAPCA[s] are incorporated)	Incomplete unifocalization, not all usable MAPCA[s] are incorporated
2750	Unifocalization MAPCA(s), Unilateral pulmonary unifocalization	MAPCA(s), Unilateral pulmonary unifocalization (one side)
440	Unifocalization MAPCA(s)	Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.
450	Occlusion of MAPCA(s)	Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
460	Valvuloplasty, Tricuspid	Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, and papillary muscle translocation with or without detachment. Annuloplasty techniques that may be done

solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.

2280	Valvuloplasty converted to valve replacement in the same operation, Tricuspid	Tricuspid valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
465	Ebstein's repair	To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
470	Valve replacement, Tricuspid (TVR)	Replacement of the tricuspid valve with a prosthetic valve.
480	Valve closure, Tricuspid (exclusion, univentricular approach)	In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
490	Valve excision, Tricuspid (without replacement)	Excision of the tricuspid valve without placement of a prosthetic valve.
500	Valve surgery, Other, Tricuspid	Other tricuspid valve surgery not specified in procedure codes.
510	RVOT procedure	Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
520	1 1/2 ventricular repair	Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
530	PA, reconstruction (plasty), Main (trunk)	Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.

540	PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
550	PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
570	DCRV repair	Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
590	Valvuloplasty, Pulmonic	Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
2270	Valvuloplasty converted to valve replacement in the same operation, Pulmonic	Pulmonic valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
600	Valve replacement, Pulmonic (PVR)	Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
630	Valve excision, Pulmonary (without replacement)	Excision of the pulmonary valve without placement of a prosthetic valve.
640	Valve closure, Semilunar	Closure of a semilunar valve (pulmonic or aortic) by any technique.
650	Valve surgery, Other, Pulmonic	Other pulmonic valve surgery not specified in procedure codes.
610	Conduit placement, RV to PA	Placement of a conduit, any type, from RV to PA.
620	Conduit placement, LV to PA	Placement of a conduit, any type, from LV to PA.
1774	Conduit placement, Ventricle to aorta	Placement of a conduit from the right or left ventricle to the aorta.
1772	Conduit placement, Other	Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
580	Conduit reoperation	Conduit reoperation is the code to be used in the event

		of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc.).
660	Valvuloplasty, Aortic	Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
2240	Valvuloplasty converted to valve replacement in the same operation, Aortic	Aortic valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
2310	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	Aortic valve repair attempted, converted to valve replacement with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit during the same operation
2320	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure	Aortic valve repair attempted, converted to Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
670	Valve replacement, Aortic (AVR)	Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
680	Valve replacement, Aortic (AVR), Mechanical	Replacement of the aortic valve with a mechanical prosthetic valve.
690	Valve replacement, Aortic (AVR), Bioprosthetic	Replacement of the aortic valve with a bioprosthetic prosthetic valve.
700	Valve replacement, Aortic (AVR), Homograft	Replacement of the aortic valve with a homograft prosthetic valve.
715	Aortic root replacement, Bioprosthetic	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
720	Aortic root replacement, Mechanical	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechanical prosthesis in a composite conduit.
730	Aortic root replacement, Homograft	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
735	Aortic root replacement,	Replacement of the aortic root (that portion of the aorta

	Valve sparing	attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
740	Ross procedure	Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
750	Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
760	Ross-Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
770	Other annular enlargement procedure	Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manouguian and Nicks aortic annular enlargement procedures.
780	Aortic stenosis, Subvalvar, Repair	Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation) , Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
2100	Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	Subvalvar aortic stenosis repair including excision and myectomy
790	Aortic stenosis, Supravalvar, Repair	Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
800	Valve surgery, Other, Aortic	Other aortic valve surgery not specified in other procedure codes.

810	Sinus of Valsalva, Aneurysm repair	Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
820	LV to aorta tunnel repair	LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
830	Valvuloplasty, Mitral	Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissuorotomy, leaflet repair, or papillary muscle repair.
2260	Valvuloplasty converted to valve replacement in the same operation, Mitral	Mitral valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
840	Mitral stenosis, Supravalvar mitral ring repair	Supravalvar mitral ring repair.
850	Valve replacement, Mitral (MVR)	Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
860	Valve surgery, Other, Mitral	Other mitral valve surgery not specified in procedure codes.
870	Norwood procedure	The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neoaortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection. When coding the procedure "Norwood procedure", the primary procedure of the operation should be "Norwood procedure". The second procedure that is coded as part of the Norwood (Stage 1) operation (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices: 1. Shunt, Systemic to pulmonary, Modified Blalock-

Taussig Shunt (MBTS)
2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)
3. Shunt, Systemic to pulmonary, Other
4. Conduit placement, RV to PA
5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)
6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)
7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
8. HemiFontan

880	HLHS biventricular repair	Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.
2755	Conduit insertion right ventricle to pulmonary artery + Intraventricular tunnel left ventricle to neoaorta + Arch reconstruction (Rastelli and Norwood type arch reconstruction) (Yasui)	
2160	Hybrid Approach "Stage 1", Application of RPA & LPA bands	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
2170	Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid

approach" are truly "Hybrid Procedures".

2180	Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
2140	Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
2150	Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
2760	Hybrid Approach, Transcardiac balloon dilation	
2770	Hybrid Approach, Transcardiac transcatheter device placement	
890	Transplant, Heart	Heart transplantation, any technique, allograft or

xenograft.

900	Transplant, Heart and lung	Heart and lung (single or double) transplantation.
910	Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.
920	Pericardial drainage procedure	Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
930	Pericardiectomy	Surgical removal of the pericardium.
940	Pericardial procedure, Other	Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
950	Fontan, Atrio-pulmonary connection	The atrio-pulmonary Fontan is a type of Fontan with connection of the atrium to the pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
960	Fontan, Atrio-ventricular connection	The atrio-ventricular Fontan is a type of Fontan with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
970	Fontan, TCPC, Lateral tunnel, Fenestrated	The lateral tunnel Fontan is a TCPC type of Fontan Procedure created with anastomosis of SVC and right atrium to the branch pulmonary artery and an intra-atrial baffle to direct IVC flow to pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
980	Fontan, TCPC, Lateral tunnel, Nonfenestrated	The lateral tunnel Fontan is a TCPC type of Fontan Procedure created with anastomosis of SVC and right atrium to the branch pulmonary artery and an intra-atrial baffle to direct IVC flow to pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a

Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.

1000	Fontan, TCPC, External conduit, Fenestrated	The external conduit Fontan is a TCPC type of Fontan operation created with anastomosis of SVC to the branch pulmonary artery a conduit outside of the heart to connect the infradiaphragmatic systemic venous return to the pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
1010	Fontan, TCPC, External conduit, Nonfenestrated	The external conduit Fontan is a TCPC type of Fontan operation created with anastomosis of SVC to the branch pulmonary artery a conduit outside of the heart to connect the infradiaphragmatic systemic venous return to the pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
2780	Fontan, TCPC, Intra/extracardiac conduit, Fenestrated	The TCPC with Intra/extracardiac conduit is a TCPC type of Fontan operation created with a tube where the tube is attached to the inferior caval vein inside of the heart, and then the tube passes outside of the heart and is attached to the pulmonary artery outside of the heart. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.

2790	Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated	The TCPC with Intra/extracardiac conduit is a TCPC type of Fontan operation created with a tube where the tube is attached to the inferior caval vein inside of the heart, and then the tube passes outside of the heart and is attached to the pulmonary artery outside of the heart. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
1025	Fontan revision or conversion (Re-do Fontan)	"Fontan revision or conversion (Re-do Fontan)" is defined as an operation where a previously created Fontan circuit is either modified or taken down and changed into a different type of Fontan. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways.
1030	Fontan, Other	Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
2340	Fontan + Atrioventricular valvuloplasty	"Fontan + Atrioventricular valvuloplasty" is defined as an operation to repair the systemic atrioventricular valve combined with a Fontan operation. Please also code the type of Fontan operation performed as the second procedure of this operation. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
1035	Ventricular septation	Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
1050	Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well;

this should be coded separately.

1060	Congenitally corrected TGA repair, Atrial switch and Rastelli	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
1070	Congenitally corrected TGA repair, VSD closure	Repair of congenitally corrected TGA by VSD closure only.
1080	Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
1090	Congenitally corrected TGA repair, Other	Any procedures for correction of CCTGA not otherwise specified in other listed procedure codes.
1110	Arterial switch operation (ASO)	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
1120	Arterial switch operation (ASO) and VSD repair	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
1123	Arterial switch procedure + Aortic arch repair	Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
1125	Arterial switch procedure and VSD repair + Aortic arch repair	Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
1130	Senning	Atrial baffle procedure for rerouting of venous flow in TGA resulting in a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
1140	Mustard	Atrial baffle procedure for rerouting of venous flow in TGA resulting in a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
1145	Atrial baffle procedure, Mustard or Senning revision	Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).

1150	Rastelli	Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.
1160	REV	The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.
2190	Aortic root translocation over left ventricle (Including Nikaidoh procedure)	
2210	TGA, Other procedures (Kawashima, LV-PA conduit, other)	
1180	DORV, Intraventricular tunnel repair	Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima
1200	DOLV repair	Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective

codes.

1210	Coarctation repair, End to end	Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
1220	Coarctation repair, End to end, Extended	Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
1230	Coarctation repair, Subclavian flap	Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
1240	Coarctation repair, Patch aortoplasty	Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
1250	Coarctation repair, Interposition graft	Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
1260	Coarctation repair, Other	Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
1275	Coarctation repair + VSD repair	Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
1280	Aortic arch repair	Aortic arch repair, any technique.
1285	Aortic arch repair + VSD repair	Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
1290	Coronary artery fistula ligation	Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
1291	Anomalous origin of coronary artery from pulmonary artery repair	Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, or bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
1300	Coronary artery bypass	Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).

1305	Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
1310	Coronary artery procedure, Other	Any coronary artery procedure not specifically listed.
1320	Interrupted aortic arch repair	Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc.). Does not include repair of IAA-VSD.
1330	PDA closure, Surgical	Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc.).
1340	PDA closure, Device	Closure of a PDA by device using transcatheter techniques.
1360	Vascular ring repair	Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
1365	Aortopexy	Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
1370	Pulmonary artery sling repair	Pulmonary artery sling repair by any technique.
1380	Aortic aneurysm repair	Aortic aneurysm repair by any technique.
1390	Aortic dissection repair	Aortic dissection repair by any technique.
1400	Lung biopsy	Lung biopsy, any technique.
1410	Transplant, lung(s)	Lung or lobe transplantation of any type.
1420	Lung procedure, Other	Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
1440	Tracheal procedure	Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
2800	Muscle flap, Trunk (i.e. intercostal, pectus, or serratus muscle)	A trunk muscle flap (intercostal, pectus, or serratus muscle) is rotated to buttress or augment a suture line, anastomosis or fill the pleural space.
2810	Muscle flap, Trunk (i.e. latissimus dorsi)	A trunk muscle flap (latissimus dorsi) is rotated to buttress or augment a suture line, anastomosis or fill the pleural space.
2820	Removal, Sternal wire	Excision of wire used to approximate sternum, previous sternotomy
2830	Rib excision, Complete	Complete excision of rib(s)
2840	Rib excision, Partial	Partial excision of rib(s)

2850	Sternal fracture - open treatment	Repair of a sternal fracture with sutures, wires, plates or bars.
2860	Sternal resection, Radical resection of sternum	Involves removal of the sternum with complex reconstructive requirements for either a tumor or severe sternal infection.
2870	Sternal resection, Radical resection of sternum with mediastinal lymphadenectomy	Involves resection of the sternum and mediastinal lymph node dissection.
2880	Tumor of chest wall - Excision including ribs	Excision of ribs and attached muscles for a benign or malignant tumor of the chest wall. When three or less ribs are taken or if the defect is covered by the scapula, reconstruction may not be necessary.
2890	Tumor of chest wall - Excision including ribs, With reconstruction	Resection of the chest wall tumor with reconstruction of the defect, usually with plastic mesh (marlex, prolene), methylmethracralate/mesh sandwich or a muscle flap.
2900	Tumor of soft tissue of thorax - Excision of deep subfascial or intramuscular tumor	Excision of a deep chest wall tumor that involves the muscles but not the ribs. These would usually be benign tumors such as a fibroma or a deep lipoma.
2910	Tumor of soft tissue of thorax - Excision of subcutaneous tumor	Excision of tumor in the skin/fat of the chest wall-typically a lipoma.
2920	Tumor of soft tissue of thorax - Radical resection	En-bloc, radical excision of a cancer of the chest wall muscles, involving the skin, fat and muscles. Typically it would be a desmoid tumor or a sarcoma malignant fibrous histiocytoma, rhabdomyosarcoma.
2930	Hyoid myotomy and suspension	Typically done as a suprahyoid laryngeal release to reduce tension on a cervical tracheal resection anastomosis. The hyoid bone is cut laterally on both sides to allow it to drop down and thus lower the larynx and trachea.
2940	Muscle flap, Neck	A neck muscle flap is rotated to buttress or augment a suture line, anastomosis or fill a space. Commonly used neck muscles are strap muscles, sternocleidomastoid muscle, levator scapulae.
2950	Procedure on neck	Unlisted procedure of the neck
2960	Tumor of soft tissue of neck - Excision of deep subfascial or intramuscular tumor	Excision of a tumor that involves the muscles of the neck. These would usually be benign tumors such as a fibroma or a deep lipoma.
2970	Tumor of soft tissue of neck - Excision of subcutaneous tumor	Excision of a tumor in the skin/fat of the neck-typically a lipoma.
2980	Tumor of soft tissue of neck - Radical resection	A surgical procedure in which the fibrofatty contents of the neck are removed for the treatment of cervical lymphatic metastases. Neck dissection is most commonly used in the management of cancers of the upper aerodigestive tract. It is also used for malignancies of the skin of the head and neck area, the

thyroid, and the salivary glands.

2990	Pectus bar removal	Removal of a previously implanted chest wall bar
3000	Pectus bar repositioning	Repositioning of a previously implanted chest wall bar
3010	Pectus repair, Minimally invasive repair (Nuss), With thoracoscopy	Placement of a Nuss transverse chest wall bar to push the sternum forward to repair a pectus deformity, with thoracoscopy
3020	Pectus repair, Minimally invasive repair (Nuss), Without thoracoscopy	Placement of a Nuss transverse chest wall bar to push the sternum forward to repair a pectus deformity, without thoracoscopy
3030	Pectus repair, Open repair	Resection of several costal cartilages, a partial osteotomy of the sternum, and often placement of a temporary bar for stabilization of pectus chest wall deformity
3040	Division of scalenus anticus, With resection of a cervical rib	Repair of Thoracic Outlet Syndrome variant where the scalenus anticus muscle or a band from it impinges on the brachial plexus along with resection of the abnormal cervical rib
3050	Division of scalenus anticus, Without resection of a cervical rib	Repair of Thoracic Outlet Syndrome variant where the scalenus anticus muscle or a band from it impinges on the brachial plexus along without resection of the abnormal cervical rib
3060	Rib excision, Excision of cervical rib	Removal of the first rib or a cervical rib for treatment of Thoracic Outlet Syndrome
3070	Rib excision, Excision of cervical rib, With sympathectomy	Removal of the first rib or a cervical rib and sympathectomy for treatment of Thoracic Outlet Syndrome
3080	Rib excision, Excision of first rib	Removal of the first rib
3090	Rib excision, Excision of first rib, With sympathectomy	Removal of the first rib and sympathectomy
3100	Procedure on thorax	Unlisted procedure on thorax
1450	Pacemaker implantation, Permanent	Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc.).
1460	Pacemaker procedure	Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
2350	Explantation of pacing system	Removal of pacemaker generator and wires
1470	ICD (AICD) implantation	Implantation of an (automatic) implantable cardioverter defibrillator system.
1480	ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.

1490	Arrhythmia surgery - atrial, Surgical Ablation	Surgical ablation (any type) of any atrial arrhythmia.
1500	Arrhythmia surgery - ventricular, Surgical Ablation	Surgical ablation (any type) of any ventricular arrhythmia.
2500	Cardiovascular catheterization procedure, Diagnostic	Invasive diagnostic procedure involving the heart and great vessels
2520	Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	Invasive diagnostic procedure involving the heart and great vessels using angiography
2550	Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
2540	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	Invasive diagnostic procedure involving pressure or flow alteration in the cardiovascular system
2510	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	Invasive diagnostic procedure involving pressure and flow assessment of the heart and great vessels
2530	Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion	
2410	Cardiovascular catheterization procedure, Therapeutic	Invasive therapeutic procedure involving the heart and great vessels
2670	Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy	
1540	Cardiovascular catheterization procedure, Therapeutic, Balloon dilation	Invasive therapeutic procedure involving balloon dilation of a cardiovascular structure
2590	Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy	Invasive therapeutic procedure involving balloon dilation of a valve
1580	Cardiovascular catheterization procedure, Therapeutic, Coil implantation	Invasive therapeutic procedure involving implantation of a coil
1560	Cardiovascular catheterization procedure, Therapeutic, Device implantation	Invasive therapeutic procedure involving implantation of a device

3110	Cardiovascular catheterization procedure, Therapeutic, Device implantation attempted	Invasive therapeutic procedure involving attempted but unsuccessful implantation of a device
2690	Cardiovascular catheterization procedure, Therapeutic, Electrophysiological ablation.	Invasive therapeutic procedure involving Catheter based creation of lesions in the heart with radiofrequency energy, cryotherapy , or ultrasound energy to cure or control arrhythmias
3120	Cardiovascular catheterization procedure, Therapeutic, Intravascular foreign body removal	Invasive therapeutic procedure involving removal of an intravascular foreign body
2640	Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)	Invasive therapeutic procedure establishing interchamber and/or intervessel communication
2580	Cardiovascular catheterization procedure, Therapeutic, Septostomy	Invasive therapeutic procedure establishing an intracardiac septal communication
1550	Cardiovascular catheterization procedure, Therapeutic, Stent insertion	Invasive therapeutic procedure involving implantation of a stent
2630	Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation	Invasive therapeutic procedure involving dilation of a previously implanted stent
2650	Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion	
2660	Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve	Invasive therapeutic procedure involving deployment/ implantation of a valve
1590	Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
1600	Shunt, Systemic to pulmonary, Central (shunt from aorta)	A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
3130	Shunt, Systemic to pulmonary, Central (shunt from aorta), Central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta (i.e. Mee	Creation of a central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta

shunt)

1610	Shunt, Systemic to pulmonary, Other	Placement of any other systemic-to-pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
1630	Shunt, Ligation and takedown	Takedown of any shunt.
2095	Shunt, Reoperation	Revision or replacement of a previously created shunt
1640	PA banding (PAB)	Placement of a pulmonary artery band, any type.
1650	PA debanding	Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
1660	Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
1670	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
1680	Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
1690	Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
1700	HemiFontan	A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
2330	Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	

2130	Superior Cavopulmonary anastomosis(es) + PA reconstruction	
3140	Hepatic vein to azygous vein connection, Direct	
3150	Hepatic vein to azygous vein connection, Interposition graft	
3160	Kawashima operation (superior cavopulmonary connection in setting of interrupted IVC with azygous continuation)	
1710	Palliation, Other	Any other palliative procedure not specifically listed.
2360	ECMO cannulation	Insertion of cannulas for extracorporeal membrane oxygenation
2370	ECMO decannulation	Removal of cannulas for extracorporeal membrane oxygenation
1910	ECMO procedure	Any ECMO procedure (cannulation, decannulation, etc.).
1900	Intraaortic balloon pump (IABP) insertion	Insertion of intraaortic balloon pump by any technique.
1920	Right/left heart assist device procedure	Any right, left, or biventricular assist device procedure (placement, removal etc.).
2390	VAD explantation	Removal of ventricular assist device
2380	VAD implantation	Insertion of a ventricular assist device
3170	VAD change out	Removal of previously inserted ventricular assist device and insertion of a new device
2420	Echocardiography procedure, Sedated transesophageal echocardiogram	Procedural sedation for echocardiogram
2430	Echocardiography procedure, Sedated transthoracic echocardiogram	Procedural sedation for echocardiogram, transthoracic
2435	Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	Anesthesia provided by cardiac anesthesiologist for patient with congenital heart disease undergoing a non-cardiovascular, non-thoracic procedure
2440	Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	A patient with congenital heart disease undergoing cardiac CT scan
2450	Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	A patient with congenital heart disease undergoing cardiac MRI
2460	Radiology procedure on cardiac patient, Diagnostic	A patient with congenital heart disease undergoing a diagnostic radiology procedure

radiology

2470	Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	A patient with congenital heart disease undergoing a non-cardiac CT scan
2480	Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	A patient with congenital heart disease undergoing non-cardiac MRI
2490	Radiology procedure on cardiac patient, Therapeutic radiology	A patient with congenital heart disease undergoing a therapeutic radiology procedure
1720	Aneurysm, Ventricular, Right, Repair	Repair of right ventricular aneurysm, any technique.
1730	Aneurysm, Ventricular, Left, Repair	Repair of left ventricular aneurysm, any technique.
1740	Aneurysm, Pulmonary artery, Repair	Repair of pulmonary artery aneurysm, any technique.
1760	Cardiac tumor resection	Resection of cardiac tumor, any type.
1780	Pulmonary AV fistula repair/occlusion	Repair or occlusion of a pulmonary arteriovenous fistula.
1790	Ligation, Pulmonary artery	Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
1802	Pulmonary embolectomy, Acute pulmonary embolus	Acute pulmonary embolism (clot) removal, through catheter or surgery.
1804	Pulmonary embolectomy, Chronic pulmonary embolus	Chronic pulmonary embolism (clot) removal, through catheter or surgery.
1810	Pleural drainage procedure	Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
1820	Pleural procedure, Other	Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
1830	Ligation, Thoracic duct	Ligation of the thoracic duct; most commonly for persistent chylothorax.
1840	Decortication	Decortication of the lung by any technique.
1850	Esophageal procedure	Any procedure performed on the esophagus.
1860	Mediastinal procedure	Any non-cardiovascular mediastinal procedure not otherwise listed.
1870	Bronchoscopy	Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
1880	Diaphragm plication	Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
1890	Diaphragm procedure, Other	Any diaphragm procedure not specifically listed.
1930	VATS (video-assisted thoracoscopic surgery)	Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure

code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).

1940	Minimally invasive procedure	Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
1950	Bypass for noncardiac lesion	Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
1960	Delayed sternal closure	Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
1970	Mediastinal exploration	Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
1980	Sternotomy wound drainage	Drainage of the sternotomy wound.
3180	Intravascular stent removal	Removal of a previously placed intravascular stent
1990	Thoracotomy, Other	Any procedure performed through a thoracotomy incision not otherwise listed.
2000	Cardiotomy, Other	Any procedure involving an incision in the heart that is not otherwise listed.
2010	Cardiac procedure, Other	Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
2020	Thoracic and/or mediastinal procedure, Other	Any thoracic and/or mediastinal procedure not otherwise listed.
2030	Peripheral vascular procedure, Other	Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
2040	Miscellaneous procedure, Other	Any miscellaneous procedure not otherwise listed.
2050	Organ procurement	Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
7777	Other procedure	Any procedure on any organ system not otherwise listed.
7800	Operation canceled before skin incision	Surgical procedure canceled after patient enters the operating room but prior to skin incision
7810	Operation aborted after skin incision	Surgical procedure canceled after skin incision made

Long Name:	Other Non Card-Caro Endart	*SeqNo:*	4530
Short Name:	**ONCCarEn**	*Core:*	Yes
Section Name:	Other Non-Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient underwent surgical removal of stenotic atheromatous plaque or percutaneous/surgical placement of carotid stent in conjunction with the primary surgical procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Non Card	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpONCard	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

3   Yes, planned

4   Yes, unplanned due to surgical complication

5   Yes, unplanned due to unsuspected disease or anatomy

2   No

Long Name:	Other Non Card-Other Vasc	*SeqNo:*	4535
Short Name:	**ONCOVasc**	*Core:*	Yes
Section Name:	Other Non-Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether patient had procedures treating peripheral vascular disease or condition in conjunction with the primary surgical procedure.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Other Non Card	*Format:*	Text (categorical values specified by STS)
ParentShortName: OpONCard	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

3   Yes, planned

4   Yes, unplanned due to surgical complication

 5   Yes, unplanned due to
     unsuspected disease or
     anatomy

 2   No

Long Name: Other Non Card-Other Thor   *SeqNo:*   4540

Short Name: **ONCOThor**   *Core:*   Yes

Section Name: Other Non-Cardiac Procedures   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether patient underwent procedures involving Thorax/Pleura in conjunction with the
               primary surgical procedure. This includes but is not limited to open lung biopsy, lung resection,
               mediastinal mass and/or lung dissection.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Other Non Card   *Format:*   Text (categorical values specified by STS)

ParentShortName: OpONCard   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

   Harvest Codes:

           Code: Value:
            3   Yes, planned
            4   Yes, unplanned due to
                surgical complication
            5   Yes, unplanned due to
                unsuspected disease or
                anatomy
            2   No

Long Name:	Other Non Card-Other	*SeqNo:*	4545
Short Name:	**ONCOther**	*Core:*	Yes
Section Name:	Other Non-Cardiac Procedures	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had any other non-cardiac procedure performed in conjunction with the primary surgical procedure that is not included within this section.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	

Parent Long Name:	Other Non Card	*Format:*	Text (categorical values specified by STS)
ParentShortName:	OpONCard	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
3	Yes, planned
4	Yes, unplanned due to surgical complication
5	Yes, unplanned due to unsuspected disease or anatomy
2	No

Long Name:	Postoperative Peak Glucose	*SeqNo:*	4550
Short Name:	**PostOpPeakGlu**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the postoperative peak glucose measured within 18-24 hours of anesthesia end time.

LowValue: 30	*UsualRangeLow:*	
HighValue: 1500	*UsualRangeHigh:*	

Parent Long Name:		*Format:*	Integer
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Long Name:	Postoperative Creatinine Level	*SeqNo:*	4555
Short Name:	**PostCreat**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the postoperative Creatinine level. If more than one level is obtained, code the highest level.

LowValue:	0.1	*UsualRangeLow:*	0.1
HighValue:	30.0	*UsualRangeHigh:*	9.0
Parent Long Name:		*Format:*	Real
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	Blood Prod	*SeqNo:*	4560
Short Name:	**BldProd**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether blood products were transfused any time postoperatively. Postoperatively is defined as any blood started after the initial surgery. Include blood transfused after the initial surgery, including any blood transfused during a reoperative surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Blood Prod - RBC Units	*SeqNo:*	4565
Short Name:	**BdRBCU**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the number of units of packed red blood cells that were transfused any time postoperatively.

Do not include autologous, cell-saver or chest tube recirculated blood.

LowValue:	0	*UsualRangeLow:*	0
HighValue:	99	*UsualRangeHigh:*	10

Parent Long Name:	Blood Prod	*Format:*	Integer
ParentShortName:	BldProd	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Blood Prod - FFP Units	*SeqNo:*	4570
Short Name:	**BdFFPU**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the number of units of fresh frozen plasma that were transfused any time postoperatively.

LowValue:	0	*UsualRangeLow:*	0
HighValue:	99	*UsualRangeHigh:*	10

Parent Long Name:	Blood Prod	*Format:*	Integer
ParentShortName:	BldProd	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Blood Prod - Cryo Units	*SeqNo:*	4575
Short Name:	**BdCryoU**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the number of units of cryoprecipitate that were transfused postoperatively. One bag of cryo = one unit.
The number of units is not volume dependent.

LowValue:	0	*UsualRangeLow:*	0
HighValue:	99	*UsualRangeHigh:*	10
Parent Long Name:	Blood Prod	*Format:*	Integer
ParentShortName:	BldProd	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Blood Prod - Platelet Units	*SeqNo:*	4580
Short Name:	**BdPlatU**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the number of units of platelets that were transfused postperatively. Count the dose pack as one unit. A dose pack may consist of 4, 6, 8, 10, or any number of donor platelets obtained. The number of units coded is not volume dependent.

LowValue:	0	*UsualRangeLow:*	
HighValue:	99	*UsualRangeHigh:*	
Parent Long Name:	Blood Prod	*Format:*	Integer
ParentShortName:	BldProd	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Extubated In OR	*SeqNo:*	4585
Short Name:	**ExtubOR**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient was extubated prior to leaving the operating room during the initial surgery.
If patient expires in the operating room during the initial surgery, answer "Yes".

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Re-intubated During Hospital Stay	*SeqNo:*	4590
Short Name:	**ReIntub**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient was reintubated during the hospital stay after the initial extubation. This may include patients who have been extubated in the OR and require intubation in the postoperative period.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Additional Hours Ventilated	*SeqNo:*	4595
Short Name:	**VentHrsA**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate how many additional hours the patient was on ventilator after initial extubation.

LowValue:	0.1	*UsualRangeLow:*	1.0
HighValue:	5000.0	*UsualRangeHigh:*	168.0

Parent Long Name:	Re-intubated During Hospital Stay	*Format:*	Real
ParentShortName:	ReIntub	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Total Postoperative Ventilation Hours	*SeqNo:*	4600
Short Name:	**VentHrsTot**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Calculated variable measuring OR exit time to extubation time plus any additional hours due to reintubation.

LowValue:	0	*UsualRangeLow:*	
HighValue:	6000	*UsualRangeHigh:*	

Parent Long Name:		*Format:*	Integer
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	Calculated
ParentHarvestCodes:			

Long Name:	ICU Visit		*SeqNo:*	4605
Short Name:	**ICUVisit**		*Core:*	Yes
Section Name:	Postoperative		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient received ICU level of care immediately following the initial surgery. Include ICU unit, post-anesthesia recovery, and other similar critical care environments.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Initial ICU hours		*SeqNo:*	4610
Short Name:	**ICUInHrs**		*Core:*	Yes
Section Name:	Postoperative		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the number of hours the patient received ICU level of care immediately following the initial surgery until the time of actual transfer out of ICU. Include ICU unit, post-anesthesia recovery, and other similar critical care environments.
For those sites providing postop ICU level of care in one single stay unit (admission to ICU to hospital discharge), document the number of hours immediately following the initial surgery until a physician order is written to change the level of care provided.

LowValue:	0.1	*UsualRangeLow:*	1.0	
HighValue:	5000.0	*UsualRangeHigh:*	100.0	
Parent Long Name:	ICU Visit	*Format:*	Real	
ParentShortName:	ICUVisit	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	
ParentHarvestCodes:	1			

Long Name:	Readmission to ICU	*SeqNo:*	4615
Short Name:	**ICUReadm**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient spent time in an ICU after having been transferred to a step-down unit (lower level care). Specific situations are described below:
OR -> ICU -> OR -> ICU = No
OR -> ICU -> STEP DOWN -> ICU = Yes
OR -> STEP DOWN -> ICU = Yes
Single care unit:
Code ICU readmission when the level of care increases and is noted in the physician order.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Additional ICU Hours	*SeqNo:*	4620
Short Name:	**ICUAdHrs**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the number of additional hours spent in the ICU, or at the equivalent higher level of care in single stay units.

LowValue:	0.1	*UsualRangeLow:*	1.0
HighValue:	5000.0	*UsualRangeHigh:*	100.0
Parent Long Name:	Readmission to ICU	*Format:*	Real
ParentShortName:	ICUReadm	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Postop Echo		*SeqNo:*	4625
Short Name:	**POpTTEch**		*Core:*	Yes
Section Name:	Postoperative		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether an echo was performed postoperatively to evaluate valvular function prior to discharge.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Postop Echo Aortic Insufficiency		*SeqNo:*	4630
Short Name:	**POpTTAR**		*Core:*	Yes
Section Name:	Postoperative		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the level of aortic insufficiency/regurgitation found on post op echo closest to discharge. Mild-to-moderate should be coded as moderate; moderate to severe should be coded as severe.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Postop Echo	*Format:*	Text (categorical values specified by STS)
ParentShortName:	POpTTEch	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Harvest Codes:

Code:	Value:
1	None
2	Trace/trivial
3	Mild
4	Moderate
5	Severe
6	Not reported

Long Name:	Postop Echo Mitral Insufficiency	*SeqNo:*	4635
Short Name:	**POpTTMR**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest level of mitral insufficiency/regurgitation found on post op echo closest to discharge. Mild-to-moderate should be coded as moderate; moderate to severe should be coded as severe.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Postop Echo	*Format:*	Text (categorical values specified by STS)
ParentShortName:	POpTTEch	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	None
2	Trace/trivial
3	Mild
4	Moderate
5	Severe
6	Not reported

Long Name:	Postop Echo Tricuspid Insufficiency	*SeqNo:*	4640
Short Name:	**POpTTTR**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the highest level of tricuspid insufficiency/ regurgitation found on post op echo closest to discharge. Mild-to-moderate should be coded as moderate; moderate to severe should be coded as severe.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	Postop Echo	*Format:*	Text (categorical values specified by STS)
ParentShortName:	POpTTEch	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	None
2	Trace/trivial

3	Mild
4	Moderate
5	Severe
6	Not reported

Long Name: Postop Echo Pulmonic Insufficiency   *SeqNo:* 4645

Short Name: **POpTTPu**   *Core:* Yes

Section Name: Postoperative   *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest level of pulmonic insufficiency/ regurgitation found on post op echo closest to discharge. Mild-to-moderate should be coded as moderate; moderate to severe should be coded as severe.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Postop Echo   *Format:*   Text (categorical values specified by STS)

ParentShortName: POpTTEch   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	None
2	Trace/trivial
3	Mild
4	Moderate
5	Severe
6	Not reported

Long Name:	Postop EF Done	*SeqNo:*	4650
Short Name:	**POpEFD**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the Ejection Fraction was measured postoperatively.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Postop EF	*SeqNo:*	4655
Short Name:	**POpEF**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the percentage of the blood emptied from the left ventricle at the end of the contraction measured postoperatively.
Enter a percentage in the range of 1 - 99. If a percentage range is reported, report a whole number using the "mean" (i.e., 50-55%, is reported as 53%).
Values reported as:
● Hyperdynamic: >70%
● Normal: 50%–70% (midpoint 60%)
● Mild dysfunction: 40%–49% (midpoint 45%)
● Moderate dysfunction: 30%–39% (midpoint 35%)
● Severe dysfunction: <30%

LowValue:	1.0	*UsualRangeLow:*	5.0
HighValue:	99.0	*UsualRangeHigh:*	99.0
Parent Long Name:	Postop EF Done	*Format:*	Real
ParentShortName:	POpEFD	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Postop Cardiac Enzymes Drawn		*SeqNo:*	4660
Short Name:	**POpEnzDrawn**		*Core:*	Yes
Section Name:	Postoperative		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether Cardiac Enzymes (biomarkers) were drawn post procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Postop Peak CKMB		*SeqNo:*	4665
Short Name:	**POpPkCKMB**		*Core:*	Yes
Section Name:	Postoperative		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the peak CKMB (highest level post procedure).

LowValue:	0.0	*UsualRangeLow:*	
HighValue:	5000.0	*UsualRangeHigh:*	
Parent Long Name:	Postop Cardiac Enzymes Drawn	*Format:*	Real
ParentShortName:	POpEnzDrawn	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Long Name:	Postop Peak Troponin I	*SeqNo:*	4670
Short Name:	**POpPkTrI**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the peak Troponin I (highest level post procedure).

LowValue:	0.0	*UsualRangeLow:*		
HighValue:	5000.0	*UsualRangeHigh:*		
Parent Long Name:	Postop Cardiac Enzymes Drawn	*Format:*	Real	
ParentShortName:	POpEnzDrawn	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Postop Peak Troponin T	*SeqNo:*	4675
Short Name:	**POpPkTrT**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the peak Troponin T (highest level post procedure).

LowValue:	0.0	*UsualRangeLow:*		
HighValue:	5000.0	*UsualRangeHigh:*		
Parent Long Name:	Postop Cardiac Enzymes Drawn	*Format:*	Real	
ParentShortName:	POpEnzDrawn	*DataLength:*		
ParentValue:	= "Yes"	*Data Source:*	User	

ParentHarvestCodes: 1

Long Name:	Postop 12 Lead EKG	*SeqNo:*	4680
Short Name:	**POpEKG**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the post procedure 12 lead EKG findings, if performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Not Performed
2	No ischemic changes
4	New ST changes
3	New Pathological Q-Wave or LBBB
5	New STEMI
6	Other
7	NA (no pre-op EKG for comparison, transplant)

Long Name:	Postop Imaging Study	*SeqNo:*	4685
Short Name:	**POpImagStdy**	*Core:*	Yes
Section Name:	Postoperative	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the post procedure imaging study findings, if performed.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Not performed
2	Angiographic evidence of

new thrombosis or occlusion
of graft or native coronary

3   Imaging evidence of new loss
of viable myocardium

4   No evidence of new
myocardial injury

5   Other

Long Name: Post-Op-Surgical Site Infection	*SeqNo:*	4690
Short Name: **SurSInf**	*Core:*	Yes
Section Name: Postoperative Events	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether a surgical site infection (SSI) was diagnosed within 30 days of the procedure or
any time during the hospitalization for surgery.
Refer to the most current CDC definition for SSI which can be found in the training manual.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Sternal-Superficial Wound Infection	*SeqNo:*	4695
Short Name:	**CSternalSupInf**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a superficial sternal wound infection was diagnosed within 30 days of the procedure or any time during the hospitalization for surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name: Post-Op-Surgical Site Infection   *Format:*   Text (categorical values specified by STS)

ParentShortName: SurSInf   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
3	Yes, within 30 days of procedure
4	Yes, >30 days after procedure but during hospitalization for surgery
2	No

Long Name:	Post-Op-Deep Sternal Infection / Mediastinitis	*SeqNo:*	4700
Short Name:	**DeepSternInf**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a deep sternal wound infection or mediastinitis was diagnosed within 30 days of the procedure or any time during the hospitalization for surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name: Post-Op-Surgical Site Infection   *Format:*   Text (categorical values specified by STS)

ParentShortName: SurSInf   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
3	Yes, within 30 days of procedure
4	Yes, >30 days after procedure but during hospitalization for surgery

2   No

Long Name:	Post-Op-Deep Sternal Infection / Mediastinitis - Date	*SeqNo:*	4705
Short Name:	**DeepSternInfDt**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the first date that deep sternal wound infection or mediastinitis was documented.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Deep Sternal Infection / Mediastinitis	*Format:*	Date mm/dd/yyyy
ParentShortName:	DeepSternInf	*DataLength:*	
ParentValue:	= "Yes, within 30 days of procedure" or "Yes, >30 days after procedure but during hospitalization for surgery"	*Data Source:*	User

ParentHarvestCodes: 3|4

Long Name:	Post-Op-Infect-Thoracotomy	*SeqNo:*	4710
Short Name:	**CIThor**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether a surgical site infection involving a thoracotomy or parasternal site was diagnosed within 30 days of the procedure or any time during the hospitalization for surgery.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Surgical Site Infection	*Format:*	Text (categorical values specified by STS)
ParentShortName:	SurSInf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
3	Yes, within 30 days of procedure
4	Yes, >30 days after procedure but during hospitalization for surgery
2	No

Long Name:	Post-Op-Conduit Harvest	*SeqNo:*	4715
Short Name:	**ConduitHarv**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a surgical site infection involving a conduit harvest site was diagnosed within 30 days of the procedure or any time during the hospitalization for surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Post-Op-Surgical Site Infection	*Format:*	Text (categorical values specified by STS)
ParentShortName: SurSInf	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
3	Yes, within 30 days of procedure
4	Yes, >30 days after procedure but during hospitalization for surgery
2	No

Long Name:	Post-Op-Cannulation Site	*SeqNo:*	4720
Short Name:	**CanSite**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a surgical site infection involving a cannulation site was diagnosed within 30 days of the procedure or any time during the hospitalization for surgery.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Post-Op-Surgical Site Infection	*Format:*	Text (categorical values specified by STS)
ParentShortName: SurSInf	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
3	Yes, within 30 days of procedure
4	Yes, >30 days after procedure but during hospitalization for surgery

2   No

Long Name: Post-Op-Wound Intervention / Procedure	*SeqNo:* 4725

Short Name: **WoundInter**   *Core:*   Yes

Section Name: Postoperative Events   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether a wound intervention or procedure was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Post-Op-Surgical Site Infection   *Format:*   Text (categorical values specified by STS)

ParentShortName: SurSInf   *DataLength:*

ParentValue: = "Yes"   *Data Source:*   User

ParentHarvestCodes: 1

  Harvest Codes:

      Code: Value:
        1   Yes
        2   No

Long Name: Post-Op-Wound Intervention - Open With Packing / Irrigation	*SeqNo:* 4730

Short Name: **WoundIntOpen**   *Core:*   Yes

Section Name: Postoperative Events   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether wound intervention(s) involved opening the wound and packing and/or irrigation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Post-Op-Wound Intervention /   *Format:*   Text (categorical values specified by STS)
                  Procedure

ParentShortName: WoundInter   *DataLength:*

ParentValue: = "Yes"   *Data Source:*   User

ParentHarvestCodes: 1

  Harvest Codes:

      Code: Value:
        1   Yes, primary incision
        2   Yes, secondary incision
        3   Both
        4   No

Long Name:	Post-Op-Wound Intervention - Wound Vac	*SeqNo:*	4735
Short Name:	**WoundIntVac**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether wound intervention(s) included application of a wound vac.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Wound Intervention / Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	WoundInter	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes, primary incision

2   Yes, secondary incision

3   Both

4   No

Long Name:	Post-Op-Wound Intervention - Secondary Procedure Muscle Flap	*SeqNo:*	4740
Short Name:	**WoundIntMuscle**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether wound intervention(s) included a secondary procedure involving a muscle flap.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Wound Intervention / Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	WoundInter	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes, primary incision

2   Yes, secondary incision

3   Both

4   No

Long Name:	Post-Op-Wound Intervention - Secondary Procedure Omental Flap	*SeqNo:*	4745
Short Name:	**WoundIntOmental**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether wound intervention(s) included a secondary procedure involving an Omental flap.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Post-Op-Wound Intervention / Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName: WoundInter	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	In Hospital Post-Op Events	*SeqNo:*	4750
Short Name:	**Complics**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a postoperative event occurred during the hospitalization for surgery. This includes the entire postoperative period up to discharge, even if over 30 days.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:* User	

ParentHarvestCodes:

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-ReOp Bleed	*SeqNo:*	4755
Short Name:	**COpReBld**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient was reexplored for mediastinal bleeding with or without tamponade either in the ICU or returned to the operating room.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-ReOp Bleed Timing	*SeqNo:*	4760
Short Name:	**COpReBldTim**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate when reoperation for bleeding took place.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Post-Op-ReOp Bleed	*Format:*	Text (categorical values specified by STS)
ParentShortName: COpReBld	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Acute	Within 24 hours of the end of the case
2	Late	more than 24 hours after case ends

Long Name:	Post-Op-ReOp Vlv Dys	*SeqNo:*	4765
Short Name:	**COpReVlv**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient returned to the operating room for prosthetic or native valve dysfunction. Dysfunction may be structural and/or non-structural failure. Dysfunction may be of prosthesis, a progressive native disease process, or an acute event process that disrupts valve function and creates either clinical compromising insufficiency/regurgitation or valve orifice narrowing.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: In Hospital Post-Op Events   *Format:*   Text (categorical values specified by STS)

ParentShortName: Complics   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

   Harvest Codes:

   Code: Value:

   3   Yes, surgical

   4   Yes, transcatheter

   2   No

Long Name:	Post-Op-Reintervention-Graft Occlusion	*SeqNo:*	4770
Short Name:	**COpReGft**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient returned to the operating room or the cath lab for intervention of coronary graft occlusion due to acute closure, thrombosis, technical or embolic origin.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: In Hospital Post-Op Events   *Format:*   Text (categorical values specified by STS)

ParentShortName: Complics   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

   Harvest Codes:

   Code: Value:

   3   Yes, surgical

   4   Yes, PCI

   2   No

Long Name: Post-Op-ReOp Other Card   *SeqNo:*   4775

Short Name: **COpReOth**   *Core:*   Yes

Section Name: Postoperative Events   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the patient returned to the operating room for other cardiac reasons.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: In Hospital Post-Op Events   *Format:*   Text (categorical values specified by STS)

ParentShortName: Complics   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

        Harvest Codes:

                Code: Value:

                  1   Yes

                  2   No

Long Name: Post-Op-ReOp Other Non Card   *SeqNo:*   4780

Short Name: **COpReNon**   *Core:*   Yes

Section Name: Postoperative Events   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the patient returned to the operating room for other non-cardiac reasons.
                 This includes procedures requiring a return to the operating room such as tracheostomy, general
                 surgery procedures.
                 This does not include procedures performed outside the operating room such as GI Lab for peg
                 tube, shunts for dialysis, etc.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: In Hospital Post-Op Events   *Format:*   Text (categorical values specified by STS)

ParentShortName: Complics   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

        Harvest Codes:

                Code: Value:

                  1   Yes

                  2   No

Long Name:	Post-Op-Open Chest With Planned Delayed Sternal Closure		*SeqNo:*	4785
Short Name:	**COpPlndDelay**		*Core:*	Yes
Section Name:	Postoperative Events		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the chest was left open with planned delayed sternal closure.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)	
ParentShortName: Complics	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Sternotomy Issue		*SeqNo:*	4790
Short Name:	**CSternal**		*Core:*	Yes
Section Name:	Postoperative Events		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate presence of a post-operative sternotomy issue.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)	
ParentShortName: Complics	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op Sternal instability/dehiscence (sterile)	*SeqNo:*	4795
Short Name:	**CSternalDehis**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: The code indicates sterile dehiscence of the sternal edges without evidence of infection but which requires surgical intervention. Skin and subcutaneous tissue may remain intact.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Sternotomy Issue	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CSternal	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Sepsis	*SeqNo:*	4800
Short Name:	**CSepsis**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Sepsis is defined as evidence of serious infection accompanied by a deleterious systemic response. In the time period of the first 48 postoperative or postprocedural hours, the diagnosis of sepsis requires the presence of a Systemic Inflammatory Response Syndrome (SIRS) resulting from a proven infection (such as bacteremia, fungemia or urinary tract infection). In the time period after the first 48 postoperative or postprocedural hours, sepsis may be diagnosed by the presence of a SIRS resulting from suspected or proven infection. During the first 48 hours, a SIRS may result from the stress associated with surgery and/or cardiopulmonary bypass. Thus, the clinical criteria for sepsis during this time period should be more stringent. A systemic inflammatory response syndrome (SIRS) is present when at least two of the following criteria are present: hypo- or hyperthermia (>38.5 or <36.0), tachycardia or bradycardia, tachypnea, leukocytosis or leukopenia, or thrombocytopenia.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName:	Complics	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes

2   No

Long Name:	Post-Op-Sepsis-Positive Blood Cultures		*SeqNo:*	4805

Short Name: **CSepsisPBC**   *Core:*   Yes

Section Name: Postoperative Events   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether a recognized pathogen is cultured from 1 or more blood cultures and is not related to an infection at another site.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Post-Op-Sepsis   *Format:*   Text (categorical values specified by STS)

ParentShortName: CSepsis   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Neuro-Stroke Perm		*SeqNo:*	4810

Short Name: **CNStrokP**   *Core:*   Yes

Section Name: Postoperative Events   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the patient has a postoperative stroke and the type of stroke (i.e., any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that did not resolve within 24 hours.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: In Hospital Post-Op Events   *Format:*   Text (categorical values specified by STS)

ParentShortName: Complics   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

3   Yes, hemorrhagic

4   Yes, embolic

5   Yes, undetermined type

2   No

Long Name:	Post-Op-Neuro-Transient Ischemic Attack - TIA	*SeqNo:* 4815
Short Name:	**CNStrokTTIA**	*Core:* Yes
Section Name:	Postoperative Events	*Harvest:* Yes

DBTableName   AdultData

Definition: Indicate whether the patient had a postoperative Transient Ischemic Attack (TIA): Loss of neurological function that was abrupt in onset but with complete return of function within 24 hours.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Neuro-Coma/Encephalopathy	*SeqNo:* 4820
Short Name:	**CNComaEnceph**	*Core:* Yes
Section Name:	Postoperative Events	*Harvest:* Yes

DBTableName   AdultData

Definition: Indicate whether the patient developed a postoperative coma and/or encephalopathy.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	None
2	Anoxic
3	Embolic
4	Drug
5	Metabolic
6	Intracranial Bleeding
7	Other
8	Unknown

Long Name: Post-Op-Neuro-Paralysis   *SeqNo:*   4825

Short Name: **CNParal**   *Core:*   Yes

Section Name: Postoperative Events   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the patient had a new postoperative paralysis, paraparesis, or paraplegia related to spinal cord ischemia and not related to a stroke.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: In Hospital Post-Op Events   *Format:*   Text (categorical values specified by STS)

ParentShortName: Complics   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: Post-Op-Neuro-Paralysis Type   *SeqNo:*   4830

Short Name: **CNParalTy**   *Core:*   Yes

Section Name: Postoperative Events   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the new postoperative paralysis, paraparesis, or paraplegia was transient or permanent.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Post-Op-Neuro-Paralysis   *Format:*   Text (categorical values specified by STS)

ParentShortName: CNParal   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Transient

2   Permanent

Long Name:	Post-Op-Pulm-Vent Prolonged	*SeqNo:*	4835
Short Name:	**CPVntLng**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had prolonged post-operative pulmonary ventilation > 24.0 hours. The hours of postoperative ventilation time include OR exit until extubation, plus any additional hours following reintubation.
Include (but not limited to) causes such as ARDS, pulmonary edema, and/or any patient requiring mechanical ventilation > 24 hours postoperatively.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Pulm-Pneumonia	*SeqNo:*	4840
Short Name:	**CPPneum**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had pneumonia according to the CDC definition.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Venous Thromboembolism-VTE	*SeqNo:*	4845
Short Name:	**CVTE**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient developed postoperative venous thrombosis or thromboembolic event.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: In Hospital Post-Op Events		*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Pulmonary Thromboembolism	*SeqNo:*	4850
Short Name:	**PulmEmb**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had a pulmonary thromboembolism diagnosed by radiologic study such as V/Q scan, angiogram, or spiral CT.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Post-Op-Venous Thromboembolism-VTE		*Format:*	Text (categorical values specified by STS)
ParentShortName: CVTE		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Deep Venous Thrombosis	*SeqNo:*	4855
Short Name:	**DVT**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether patient had thrombosis (clot formation) in a deep vein.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Post-Op-Venous Thromboembolism-VTE	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CVTE	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Pleural Effusion Requiring Drainage	*SeqNo:*	4860
Short Name:	**CPlEff**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a post-operative pleural effusion required drainage via thoracentesis or chest tube insertion.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName:	Complics	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Pneumothorax Requiring Intervention	*SeqNo:*	4865
Short Name:	**PostOpPneumo**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had a post-operative pneumothorax requiring intervention.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)	
ParentShortName: Complics	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Renal-Renal Failure	*SeqNo:*	4870
Short Name:	**CRenFail**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had acute renal failure or worsening renal function resulting in ONE
OR BOTH of the following:
1. Increase in serum creatinine level 3.0 x greater than baseline, or serum creatinine level ≥4 mg/dL
, Acute rise must be at least 0.5 mg/dl 2. A new requirement for dialysis postoperatively.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)	
ParentShortName: Complics	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Renal-Dialysis Req		*SeqNo:*	4875
Short Name:	**CRenDial**		*Core:*	Yes
Section Name:	Postoperative Events		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had a new requirement for dialysis postoperatively, which may include hemodialysis, peritoneal dialysis.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Post-Op-Renal-Renal Failure	*Format:*	Text (categorical values specified by STS)
ParentShortName: CRenFail	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Dialysis Duration		*SeqNo:*	4880
Short Name:	**DialDur**		*Core:*	Yes
Section Name:	Postoperative Events		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether dialysis was required after hospital discharge.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Post-Op-Renal-Dialysis Req	*Format:*	Text (categorical values specified by STS)
ParentShortName: CRenDial	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Ultra Filtration	*SeqNo:*	4885
Short Name:	**CUltraFil**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether patient required Ultra filtration.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Vasc-Iliac/Fem Dissect	*SeqNo:*	4890
Short Name:	**CVaIlFem**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had a dissection occurring in the iliac or femoral arteries.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Vasc-Acute Limb Isch

Short Name: **CVaLbIsc**

Section Name: Postoperative Events

SeqNo: 4895

Core: Yes

Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had any complication producing limb ischemia. This may include upper or lower limb ischemia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: In Hospital Post-Op Events   *Format:*   Text (categorical values specified by STS)

ParentShortName: Complics   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Post-Op-Rhythm Disturbance Requiring Perm Device

Short Name: **CRhythmDis**

Section Name: Postoperative Events

SeqNo: 4900

Core: Yes

Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient developed a new dysrhythmia requiring insertion of a permanent device. Do not code these device insertions in the reoperation section even if performed in the OR.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: In Hospital Post-Op Events   *Format:*   Text (categorical values specified by STS)

ParentShortName: Complics   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Pacemaker
2	ICD
3	Pacemaker/ICD
5	Other
4	None

Long Name:	Post-Op-Other-Card Arrest	*SeqNo:*	4905
Short Name:	**COtArrst**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had an acute cardiac arrest documented by one of the following:
a. Ventricular fibrillation
b. Rapid ventricular tachycardia with hemodynamic instability
c. Asystole
d. ICD shocks

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName:	Complics	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Other-Anticoag Event	*SeqNo:*	4910
Short Name:	**COtCoag**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had bleeding, hemorrhage, and/or embolic events related to anticoagulant therapy postoperatively.
This may include patients who experience Disseminated Intravascular Coagulopathy (DIC) or Heparin Induced Thrombocytopenia (HIT).

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName:	Complics	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Other-Tamponade Non-Surgical Intervention	*SeqNo:*	4915
Short Name:	**COtTamp**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had fluid in the pericardial space compromising cardiac filling, and requiring intervention other than returning to the operating room, such as pericardiocentesis. This should be documented by either:
1. Echo showing pericardial fluid and signs of tamponade such as right heart compromise, or
2. Systemic hypotension due to pericardial fluid compromising cardiac function

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name:	Post-Op-Other-GI Event	*SeqNo:*	4920
Short Name:	**COtGI**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had a postoperative occurrence of any GI event, including but not limited to:
a. GI bleeding requiring transfusion
b. Pancreatitis with abnormal amylase/lipase requiring nasogastric (NG) suction therapy
c. Cholecystitis requiring cholecystectomy or drainage
d. Mesenteric ischemia requiring exploration
e. Hepatic failure
f. Prolonged ileus
g. Clostridium difficile

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

Long Name: Post-Op-Other-Multi Sys Fail   *SeqNo:*   4925

Short Name: **COtMSF**   *Core:*   Yes

Section Name: Postoperative Events   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the patient had two or more major organ systems suffer compromised functions.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: In Hospital Post-Op Events   *Format:*   Text (categorical values specified by STS)

ParentShortName: Complics   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

        1   Yes

        2   No

Long Name: Post-Op-Other-A Fib   *SeqNo:*   4930

Short Name: **COtAFib**   *Core:*   Yes

Section Name: Postoperative Events   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether the patient experienced atrial fibrillation/flutter (AF) requiring treatment. Exclude patients who were in afib at the start of surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: In Hospital Post-Op Events   *Format:*   Text (categorical values specified by STS)

ParentShortName: Complics   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        Code: Value:

        1   Yes

        2   No

Long Name:	Post-Op-Ao Dissect	*SeqNo:*	4935
Short Name:	**CVaAoDis**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient had a dissection occurring in any part of the aorta.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Recurrent Laryngeal Nerve Injury	*SeqNo:*	4940
Short Name:	**RecLarynNrvInj**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether patient has symptoms of recurrent laryngeal nerve injury, (e.g., hoarseness, difficulty speaking, etc.).

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Phrenic Nerve Injury	*SeqNo:*	4945
Short Name:	**PhrenNrvInj**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether patient has symptoms of phrenic nerve injury, (e.g., immobility or elevation of the diaphragm, etc.).

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Other-Other	*SeqNo:*	4950
Short Name:	**COtOther**	*Core:*	Yes
Section Name:	Postoperative Events	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether a postoperative event occurred that is not identified in the categories above yet impacts hospital length of stay and/or outcome.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: In Hospital Post-Op Events	*Format:*	Text (categorical values specified by STS)
ParentShortName: Complics	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Infect-Deep Sternal Infection	*SeqNo:*	4955
Short Name:	**CIStDeep**	*Core:*	No
Section Name:	Postoperative Events	*Harvest:*	No

DBTableName　AdultData

Definition:　Indicate whether the patient, within 30 days postoperatively, had a deep sternal infection involving muscle, bone, and/or mediastinum REQUIRING OPERATIVE INTERVENTION.

Must have ALL of the following conditions:
1. Wound opened with excision of tissue (I&D) or re-exploration of mediastinum
2. Positive culture unless patient on antibiotics at time of culture or no culture obtained
3. Treatment with antibiotics beyond perioperative prophylaxis

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Surgical Site Infection	*Format:*	Text (categorical values specified by STS)
ParentShortName:	SurSInf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1　Yes
2　No

Long Name:	Post-Op-Sternal-Mediastinitis	*SeqNo:*	4960
Short Name:	**CSternalMedia**	*Core:*	No
Section Name:	Postoperative Events	*Harvest:*	No

DBTableName　AdultData

Definition:　Indicate whether the patient developed mediastinitis within 30 days of the surgical procedure.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Surgical Site Infection	*Format:*	Text (categorical values specified by STS)
ParentShortName:	SurSInf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:
1　Yes
2　No

Long Name:	Post-Op-Sternal-Mediastinitis - Date of Diagnosis	*SeqNo:*	4965
Short Name:	**CSternalMediaDtDiag**	*Core:*	No
Section Name:	Postoperative Events	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate the date one which the mediastinitis was diagnosed.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Post-Op-Sternal-Mediastinitis	*Format:*	Date mm/dd/yyyy	
ParentShortName: CSternalMedia	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Long Name:	Post-Op-Sternal-Mediastinitis - Secondary Procedure - Open With Packing/Irrigation	*SeqNo:*	4970
Short Name:	**CSternalMediaSPOpen**	*Core:*	No
Section Name:	Postoperative Events	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included leaving the incision open with packing/irrigation.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Post-Op-Sternal-Mediastinitis	*Format:*	Text (categorical values specified by STS)	
ParentShortName: CSternalMedia	*DataLength:*		
ParentValue: = "Yes"	*Data Source:* User		

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Sternal-Mediastinitis - Secondary Procedure - Wound Vac	*SeqNo:*	4975
Short Name:	**CSternalMediaSPWVac**	*Core:*	No
Section Name:	Postoperative Events	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included wound vac.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Sternal-Mediastinitis	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CSternalMedia	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Sternal-Mediastinitis - Secondary Procedure - Muscle Flap	*SeqNo:*	4980
Short Name:	**CSternalMediaSPMuscle**	*Core:*	No
Section Name:	Postoperative Events	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included muscle flap.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Sternal-Mediastinitis	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CSternalMedia	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Sternal-Mediastinitis - Secondary Procedure - Omental Flap	*SeqNo:*	4985
Short Name:	**CSternalMediaSPOmental**	*Core:*	No
Section Name:	Postoperative Events	*Harvest:*	No
DBTableName	AdultData		

Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included omental flap.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Sternal-Mediastinitis	*Format:*	Text (categorical values specified by STS)
ParentShortName:	CSternalMedia	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Infect-Conduit Harvest or Cannulation Site	*SeqNo:*	4990
Short Name:	**CILeg**	*Core:*	No
Section Name:	Postoperative Events	*Harvest:*	No
DBTableName	AdultData		

Definition: Indicate whether the patient had an infection involving a conduit harvest or cannulation site

Must have ALL of the following conditions:
1. Wound opened with excision of tissue (I&D)
2. Positive culture unless patient on antibiotics at time of culture or no culture obtained
3. Treatment with antibiotics beyond perioperative prophylaxis

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Surgical Site Infection	*Format:*	Text (categorical values specified by STS)
ParentShortName:	SurSInf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User
ParentHarvestCodes:	1		

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Wound Intervention - Open With Packing/Irrigation	*SeqNo:*	4995
Short Name:	**WndIntOpen**	*Core:*	No
Section Name:	Postoperative Events	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether wound intervention required within 30 days following procedure for wounds other than sternotomy included leaving the incision open with packing/irrigation.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Surgical Site Infection	*Format:*	Text (categorical values specified by STS)
ParentShortName:	SurSInf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Post-Op-Wound Intervention - Wound Vac	*SeqNo:*	5000
Short Name:	**WndIntWVac**	*Core:*	No
Section Name:	Postoperative Events	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether wound intervention required within 30 days following procedure for wounds other than sternotomy included wound vac.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Post-Op-Surgical Site Infection	*Format:*	Text (categorical values specified by STS)
ParentShortName:	SurSInf	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Mort-Mortality	*SeqNo:*	5005
Short Name:	**Mortalty**	*Core:*	Yes
Section Name:	Mortality	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient has been declared dead within this hospitalization (admission to acute care discharge even if transferred to another hospital) or any time after discharge from this hospitalization. This includes all causes of death, including those causes clearly unrelated to the operation.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Mort-DC Status	*SeqNo:*	5010
Short Name:	**MtDCStat**	*Core:*	Yes
Section Name:	Mortality	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient was alive or dead at discharge from the hospitalization in which surgery occurred. Include patients who died after transfer to another acute care hospital.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Alive
2	Dead

Long Name: Mort-30d Status   *SeqNo:*   5015

Short Name: **Mt30Stat**   *Core:*   Yes

Section Name: Mortality   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate whether the patient was alive or dead at 30 days post-surgery (whether in hospital or not).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

    Harvest Codes:

        Code: Value:

          1   Alive

          2   Dead

          3   Unknown

Long Name: Mort-Op Death-Method Of Verification   *SeqNo:*   5020

Short Name: **Mt30StatMeth**   *Core:*   Yes

Section Name: Mortality   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the primary method used to verify the patient's 30-day mortality status.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

    Harvest Codes:

        Code: Value:

          1   Phone call to patient or family

          2   Letter from medical provider

          3   Evidence of life in medical record (lab tests, cardiac rehab visits, etc.)

          4   Office visit to surgeon more than 30 days after procedure

          5   Social Security Death Master File / NDI

6   Other

Long Name:	Mort-Op Death		*SeqNo:*	5025
Short Name:	**MtOpD**		*Core:*	Yes
Section Name:	Mortality		*Harvest:*	Yes

DBTableName AdultData

Definition: Operative Mortality includes: (1) all deaths, regardless of cause, occurring during the hospitalization in which the operation was performed, even if after 30 days (including patients transferred to other acute care facilities); and (2) all deaths, regardless of cause, occurring after discharge from the hospital, but before the end of the thirtieth postoperative day.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name: Mort-Mortality		*Format:*	Text (categorical values specified by STS)
ParentShortName: Mortalty		*DataLength:*	
ParentValue:	= "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Mort-Date		*SeqNo:*	5030
Short Name:	**MtDate**		*Core:*	Yes
Section Name:	Mortality		*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the date the patient was declared dead.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name: Mort-Mortality		*Format:*	Date mm/dd/yyyy
ParentShortName: Mortalty		*DataLength:*	
ParentValue:	= "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Long Name: Mort-Location   *SeqNo:*   5035

Short Name: **MtLocatn**   *Core:*   Yes

Section Name: Mortality   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate the patient's location at time of death.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mort-Mortality   *Format:*   Text (categorical values specified by STS)

ParentShortName: Mortalty   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Operating Room (OR) During Initial Surgery
2	Hospital (Other Than Operating Room)
3	Home
7	Extended Care Facility
8	Hospice
9	Acute Rehabilitation
5	Operating Room (OR) During Reoperation
6	Unknown
10	Other

Long Name: Mort-Prim Cause   *SeqNo:*   5040

Short Name: **MtCause**   *Core:*   Yes

Section Name: Mortality   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the PRIMARY cause of death, i.e., the first significant abnormal event which ultimately led to death.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mort-Mortality   *Format:*   Text (categorical values specified by STS)

ParentShortName: Mortalty   *DataLength:*

ParentValue: = "Yes"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Cardiac
2	Neurologic
3	Renal
4	Vascular
5	Infection
6	Pulmonary
700	Unknown
777	Other

Long Name: Discharge Location   *SeqNo:*   5045

Short Name: **DisLoctn**   *Core:*   Yes

Section Name: Discharge   *Harvest:*   Yes

DBTableName AdultData

Definition: Indicate the location to where the patient was discharged.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mort-DC Status   *Format:*   Text (categorical values specified by STS)

ParentShortName: MtDCStat   *DataLength:*

ParentValue: = "Alive"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Home
2	Extended Care/Transitional

Care Unit/Rehab

    3   Other acute care hospital

    4   Nursing Home

    5   Hospice

    6   Left AMA

  777   Other

Long Name:	Cardiac Rehabilitation Referral	*SeqNo:*	5050
Short Name:	**CardRef**	*Core:*	Yes
Section Name:	Discharge	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether advice was given or discussion conducted with the patient (by physician, nurse, or other personnel) regarding the importance of joining a cardiac rehabilitation program, or an appointment made.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Mort-DC Status	*Format:*	Text (categorical values specified by STS)
ParentShortName:	MtDCStat	*DataLength:*	
ParentValue:	= "Alive"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

    Code: Value:

     1   Yes

     2   No

     3   Not Applicable

Long Name:	Smoking Cessation Counseling	*SeqNo:*	5055
Short Name:	**SmokCoun**	*Core:*	Yes
Section Name:	Discharge	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether, prior to discharge from the acute care facility, the patient received smoking cessation counseling. Please select "Not Applicable" for those patients with no prior history of smoking or remote (more than 1 year) history.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Mort-DC Status	*Format:*	Text (categorical values specified by STS)
ParentShortName: MtDCStat	*DataLength:*	
ParentValue: = "Alive"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Not Applicable

Long Name:	Aspirin - Discharge	*SeqNo:*	5060
Short Name:	**DCASA**	*Core:*	Yes
Section Name:	Discharge	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on Aspirin, or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Mort-DC Status	*Format:*	Text (categorical values specified by STS)
ParentShortName: MtDCStat	*DataLength:*	
ParentValue: = "Alive"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated

Long Name: P2Y12 - Discharge   *SeqNo:*   5065

Short Name: **DCP2Y12**   *Core:*   Yes

Section Name: Discharge   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether or not the patient was discharged from facility on a P2Y12 antagonist, or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mort-DC Status   *Format:*   Text (categorical values specified by STS)

ParentShortName: MtDCStat   *DataLength:*

ParentValue: = "Alive"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   Yes

          2   No

          3   Contraindicated

Long Name: ADP Inhibitors - Discharge   *SeqNo:*   5070

Short Name: **DCADP**   *Core:*   Yes

Section Name: Discharge   *Harvest:*   Yes

DBTableName   AdultData

Definition: Indicate whether or not the patient was discharged from facility on an ADP inhibitor, or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mort-DC Status   *Format:*   Text (categorical values specified by STS)

ParentShortName: MtDCStat   *DataLength:*

ParentValue: = "Alive"   *Data Source:* User

ParentHarvestCodes: 1

    Harvest Codes:

        <u>Code:</u> <u>Value:</u>

          1   Yes

          2   No

          3   Contraindicated

Long Name:	Other Antiplatelet - Discharge	*SeqNo:*	5075
Short Name:	**DCOthAntiplat**	*Core:*	Yes
Section Name:	Discharge	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on any other antiplatelet medication, or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mort-DC Status   *Format:*   Text (categorical values specified by STS)

ParentShortName: MtDCStat   *DataLength:*

ParentValue: = "Alive"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated

Long Name:	Direct Thrombin Inhibitors - Discharge	*SeqNo:*	5080
Short Name:	**DCDirThromIn**	*Core:*	Yes
Section Name:	Discharge	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on a direct thrombin inhibitor, or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mort-DC Status   *Format:*   Text (categorical values specified by STS)

ParentShortName: MtDCStat   *DataLength:*

ParentValue: = "Alive"   *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated

Long Name:	Warfarin (Coumadin) - Discharge	*SeqNo:*	5085
Short Name:	**DCCoum**	*Core:*	Yes
Section Name:	Discharge	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on Warfarin (Coumadin), or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Mort-DC Status	*Format:*	Text (categorical values specified by STS)
ParentShortName: MtDCStat	*DataLength:*	
ParentValue: = "Alive"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated

Long Name:	Factor Xa Inhibitors - Discharge	*SeqNo:*	5090
Short Name:	**DCFactorXa**	*Core:*	Yes
Section Name:	Discharge	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on a factor Xa inhibitor, or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Mort-DC Status	*Format:*	Text (categorical values specified by STS)
ParentShortName: MtDCStat	*DataLength:*	
ParentValue: = "Alive"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated

Long Name:	Other Anticoagulant - Discharge
Short Name:	**DCOthAnticoag**
Section Name:	Discharge

SeqNo: 5095
Core: Yes
Harvest: Yes

DBTableName   AdultData

Definition: Indicate whether or not the patient was discharged from facility on any other anticoagulant, or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: Mort-DC Status

ParentShortName: MtDCStat

ParentValue: = "Alive"

ParentHarvestCodes: 1

Format: Text (categorical values specified by STS)

DataLength:

Data Source: User

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated

Long Name:	ACE or ARB Inhibitors - Discharge
Short Name:	**DCACE**
Section Name:	Discharge

SeqNo: 5100
Core: Yes
Harvest: Yes

DBTableName   AdultData

Definition: Indicate whether or not the patient was discharged from facility on ACE or ARB Inhibitors, or if it was contraindicated or not indicated (no history of CHF or EF>40%). The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name: Mort-DC Status

ParentShortName: MtDCStat

ParentValue: = "Alive"

ParentHarvestCodes: 1

Format: Text (categorical values specified by STS)

DataLength:

Data Source: User

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated
6	Not indicated (no hx CHF or

EF>40%)

Long Name:	Beta Blockers - Discharge	*SeqNo:*	5105
Short Name:	**DCBeta**	*Core:*	Yes
Section Name:	Discharge	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether or not the patient was discharged on beta blockers, or if beta blocker was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Mort-DC Status		*Format:*	Text (categorical values specified by STS)
ParentShortName: MtDCStat		*DataLength:*	
ParentValue: = "Alive"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

3   Contraindicated

Long Name:	Amiodarone - Discharge	*SeqNo:*	5110
Short Name:	**DCAmiodarone**	*Core:*	Yes
Section Name:	Discharge	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate whether or not the patient was discharged from facility on Amiodarone, or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Mort-DC Status		*Format:*	Text (categorical values specified by STS)
ParentShortName: MtDCStat		*DataLength:*	
ParentValue: = "Alive"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1   Yes

2   No

3   Contraindicated

Long Name:	Lipid Lowering Statin - Discharge	*SeqNo:*	5115
Short Name:	**DCLipLowStat**	*Core:*	Yes
Section Name:	Discharge	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on a Statin, or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Mort-DC Status	*Format:*	Text (categorical values specified by STS)
ParentShortName:	MtDCStat	*DataLength:*	
ParentValue:	= "Alive"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1 Yes

2 No

3 Contraindicated

Long Name:	Lipid Lowering Non-Statin - Discharge	*SeqNo:*	5120
Short Name:	**DCLipLowNonStat**	*Core:*	Yes
Section Name:	Discharge	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on a Non-Statin, or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, pharmacist or physician assistant.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Mort-DC Status	*Format:*	Text (categorical values specified by STS)
ParentShortName:	MtDCStat	*DataLength:*	
ParentValue:	= "Alive"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code: Value:

1 Yes

2 No

3 Contraindicated

Long Name:	Antiarrhythmics - Discharge	*SeqNo:*	5125
Short Name:	**DCAArhy**	*Core:*	No
Section Name:	Discharge	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on antiarrhythmics.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Mort-DC Status	*Format:*	Text (categorical values specified by STS)
ParentShortName:	MtDCStat	*DataLength:*	
ParentValue:	= "Alive"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Lipid Lowering - Discharge	*SeqNo:*	5130
Short Name:	**DCLipid**	*Core:*	No
Section Name:	Discharge	*Harvest:*	No

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged on a statin or lipid lowering medication, or if it was contraindicated or not indicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, or physician assistant.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Mort-DC Status	*Format:*	Text (categorical values specified by STS)
ParentShortName:	MtDCStat	*DataLength:*	
ParentValue:	= "Alive"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Contraindicated

Long Name:	Lipid Lowering - Discharge - Medication Type	*SeqNo:*	5135
Short Name:	**DCLipMT**	*Core:*	No
Section Name:	Discharge	*Harvest:*	No

DBTableName AdultData

Definition: Indicate the type of Lipid Lowering medication the patient was on when discharged from the facility.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Lipid Lowering - Discharge		*Format:*	Text (categorical values specified by STS)
ParentShortName: DCLipid		*DataLength:*	
ParentValue: = "Yes"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Statin
2	Non statin
3	Both
4	Other

Long Name:	Readmission	*SeqNo:*	5140
Short Name:	**Readmit**	*Core:*	Yes
Section Name:	Readmission	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate whether the patient was readmitted to the hospital within 30 days of discharge from hospitalization for this surgery. Code yes for inpatient admission to an acute care facility. Do not capture ED or outpatient visits or admission to a skilled facility or nursing home.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name: Mort-DC Status		*Format:*	Text (categorical values specified by STS)
ParentShortName: MtDCStat		*DataLength:*	
ParentValue: = "Alive"		*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name:	Date of Readmission	*SeqNo:*	5145
Short Name:	**ReadmitDt**	*Core:*	Yes
Section Name:	Readmission	*Harvest:*	Yes

DBTableName   AdultData

Definition: Indicate the date the patient was readmitted.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Readmission	*Format:*	Date mm/dd/yyyy
ParentShortName:	Readmit	*DataLength:*	
ParentValue:	= "Yes"	*Data Source:*	User

ParentHarvestCodes: 1

Long Name:	Readmit <=30 Days from DOP	*SeqNo:*	5150
Short Name:	**Readm30**	*Core:*	No
Section Name:	Readmission	*Harvest:*	No

DBTableName   AdultData

Definition: Indicate whether the patient was readmitted to an acute care facility as an in-patient within 30 days from the date of initial surgery for ANY reason. This includes readmissions to acute care, primary care institutions only. Do not include readmissions to rehabilitation hospital, or nursing home.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:	Mort-DC Status	*Format:*	Text (categorical values specified by STS)
ParentShortName:	MtDCStat	*DataLength:*	
ParentValue:	= "Alive"	*Data Source:*	User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Readmit Reason	*SeqNo:*	5160
Short Name:	**ReadmRsn**	*Core:*	Yes
Section Name:	Readmission	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the primary reason that the patient was readmitted as an in-patient.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name: Readmission	*Format:*	Text (categorical values specified by STS)
ParentShortName: Readmit	*DataLength:*	
ParentValue: = "Yes"	*Data Source:* User	

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
21	Anticoagulation Complication - Pharmacological
20	Anticoagulation Complication - Valvular
2	Arrhythmia/Heart Block
3	Congestive Heart Failure
22	Coronary Artery / Graft Dysfunction
27	DVT
24	Endocarditis
23	Infection - Conduit Harvest Site
9	Infection - Deep Sternum / Mediastinitis
5	Myocardial Infarction and/or Recurrent Angina
28	PE
6	Pericardial Effusion and/or Tamponade
31	Pleural effusion requireing intervention
29	Pneumonia
14	Renal Failure
30	Respiratory complications, other
18	Stroke
15	TIA

26	Transplant Rejection
25	VAD Complication
8	Valve Dysfunction
19	Vascular Complication, acute
998	Other - Related Readmission
999	Other - Nonrelated Readmission
32	Other - Planned readmission
997	Unknown

Long Name: Readmit Reason - Primary Procedure

Short Name: **ReadmPro**

Section Name: Readmission

DBTableName   AdultData

Definition: Indicate the primary procedure that the patient received after being readmitted as an in-patient.

SeqNo: 5165

Core: Yes

Harvest: Yes

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Readmission   *Format:*   Text (categorical values specified by STS)

ParentShortName: Readmit   *DataLength:*

ParentValue: = "Yes"   *Data Source:*   User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
700	No Procedure Performed
100	Cath lab for valve intervention
30	Cath lab for coronary intervention (PCI)
80	Dialysis
10	OR for Bleeding
50	OR for Coronary Artery Intervention
70	OR for Sternal Debridement/Muscle Flap
60	OR for Valve Intervention
90	OR for Vascular Procedure
20	Pacemaker insertion/AICD
40	Pericardiotomy/Pericardiocentesis
110	Thoracentesis / chest tube

insertion

120	Wound vac
710	Other Procedure
720	Unknown

Long Name:	Predicted Risk of Mortality	*SeqNo:*	5170
Short Name:	**PredMort**	*Core:*	Yes
Section Name:	Risk Scores	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Mortality.

LowValue:	0.000	*UsualRangeLow:*	
HighValue:	100.000	*UsualRangeHigh:*	

Parent Long Name:	*Format:*	Real number, at least 0.3 digits (3 decimal places)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	Calculated
ParentHarvestCodes:		

Long Name:	Predicted Deep Sternal Wound Infx	*SeqNo:*	5175
Short Name:	**PredDeep**	*Core:*	Yes
Section Name:	Risk Scores	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Deep Sternal Wound Infection.

LowValue:	0.000	*UsualRangeLow:*	
HighValue:	100.000	*UsualRangeHigh:*	

Parent Long Name:	*Format:*	Real number, at least 0.3 digits (3 decimal places)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	Calculated
ParentHarvestCodes:		

Long Name: Predicted Reoperation

SeqNo: 5180

Short Name: **PredReop**

Core: Yes

Section Name: Risk Scores

Harvest: Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Reoperation.

LowValue: 0.000 *UsualRangeLow:*

HighValue: 100.000 *UsualRangeHigh:*

Parent Long Name:

Format: Real number, at least 0.3 digits (3 decimal places)

ParentShortName:

DataLength:

ParentValue:

Data Source: Calculated

ParentHarvestCodes:

Long Name: Predicted Permanent Stroke

SeqNo: 5185

Short Name: **PredStro**

Core: Yes

Section Name: Risk Scores

Harvest: Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Permanent Stroke.

LowValue: 0.000 *UsualRangeLow:*

HighValue: 100.000 *UsualRangeHigh:*

Parent Long Name:

Format: Real number, at least 0.3 digits (3 decimal places)

ParentShortName:

DataLength:

ParentValue:

Data Source: Calculated

ParentHarvestCodes:

Long Name:	Predicted Prolonged Ventilation	*SeqNo:*	5190
Short Name:	**PredVent**	*Core:*	Yes
Section Name:	Risk Scores	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Prolonged Ventilation.

LowValue: 0.000   *UsualRangeLow:*

HighValue: 100.000   *UsualRangeHigh:*

Parent Long Name:		*Format:*	Real number, at least 0.3 digits (3 decimal places)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	Calculated
ParentHarvestCodes:			

Long Name:	Predicted Renal Failure	*SeqNo:*	5195
Short Name:	**PredRenF**	*Core:*	Yes
Section Name:	Risk Scores	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Renal Failure.

LowValue: 0.000   *UsualRangeLow:*

HighValue: 100.000   *UsualRangeHigh:*

Parent Long Name:		*Format:*	Real number, at least 0.3 digits (3 decimal places)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	Calculated
ParentHarvestCodes:			

Long Name:	Predicted Morbidity or Mortality	*SeqNo:*	5200
Short Name:	**PredMM**	*Core:*	Yes
Section Name:	Risk Scores	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Morbidity or Mortality.

LowValue:	0.000	*UsualRangeLow:*	
HighValue:	100.000	*UsualRangeHigh:*	

Parent Long Name: *Format:*   Real number, at least 0.3 digits (3 decimal places)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Calculated

ParentHarvestCodes:

Long Name:	Predicted Short Length of Stay	*SeqNo:*	5205
Short Name:	**Pred6D**	*Core:*	Yes
Section Name:	Risk Scores	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Short Length of Stay.

LowValue:	0.000	*UsualRangeLow:*	
HighValue:	100.000	*UsualRangeHigh:*	

Parent Long Name: *Format:*   Real number, at least 0.3 digits (3 decimal places)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Calculated

ParentHarvestCodes:

Long Name:	Predicted Long Length of Stay	*SeqNo:*	5210
Short Name:	**Pred14D**	*Core:*	Yes
Section Name:	Risk Scores	*Harvest:*	Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Long Length of Stay.

LowValue:	0.000	*UsualRangeLow:*	
HighValue:	100.000	*UsualRangeHigh:*	

Parent Long Name:	*Format:*	Real number, at least 0.3 digits (3 decimal places)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	Calculated
ParentHarvestCodes:		

Long Name:	Temporary Yes/No Field #1	*SeqNo:*	5215
Short Name:	**TempYN1**	*Core:*	Yes
Section Name:	STS Temporary Fields	*Harvest:*	Yes

DBTableName AdultData

Definition: This is a temporary field that should not be used for data collection until expressly instructed to by the STS.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	

Parent Long Name:	*Format:*	Text (categorical values specified by STS)
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Temporary Yes/No Field #2	*SeqNo:*	5220
Short Name:	**TempYN2**	*Core:*	Yes
Section Name:	STS Temporary Fields	*Harvest:*	Yes

DBTableName AdultData

Definition: This is a temporary field that should not be used for data collection until expressly instructed to by the STS.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text (categorical values specified by STS)
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Temporary Date Field	*SeqNo:*	5225
Short Name:	**TempDt**	*Core:*	Yes
Section Name:	STS Temporary Fields	*Harvest:*	Yes

DBTableName AdultData

Definition: This is a temporary field that should not be used for data collection until expressly instructed to by the STS.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Date mm/dd/yyyy
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

| *Long Name:* | Temporary Coded Field | *SeqNo:* | 5230 |

Short Name: **TempCode**   *Core:*   Yes

Section Name: STS Temporary Fields   *Harvest:*   Yes

DBTableName   AdultData

Definition: This is a temporary field that should not be used for data collection until expressly instructed to by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:*   Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20

Long Name:	Temporary Text Field		*SeqNo:*	5235
Short Name:	**TempText**		*Core:*	Yes
Section Name:	STS Temporary Fields		*Harvest:*	Yes

DBTableName   AdultData

Definition: This is a temporary field that should not be used for data collection until expressly instructed to by the STS.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Text
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	STS Custom Numeric Field 1	*SeqNo:*	5240
Short Name:	**STSCustNum1**	*Core:*	No
Section Name:	STS Temporary Fields	*Harvest:*	No

DBTableName   AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Real
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	STS Custom Numeric Field 2	*SeqNo:*	5245
Short Name:	**STSCustNum2**	*Core:*	No
Section Name:	STS Temporary Fields	*Harvest:*	No

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Real
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	STS Custom Numeric Field 3	*SeqNo:*	5250
Short Name:	**STSCustNum3**	*Core:*	No
Section Name:	STS Temporary Fields	*Harvest:*	No

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue:		*UsualRangeLow:*	
HighValue:		*UsualRangeHigh:*	
Parent Long Name:		*Format:*	Real
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User
ParentHarvestCodes:			

Long Name:	STS Custom Numeric Field 4	*SeqNo:*	5255
Short Name:	**STSCustNum4**	*Core:*	No
Section Name:	STS Temporary Fields	*Harvest:*	No

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:		*Format:*	Real
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Long Name:	STS Custom Numeric Field 5	*SeqNo:*	5260
Short Name:	**STSCustNum5**	*Core:*	No
Section Name:	STS Temporary Fields	*Harvest:*	No

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:		*Format:*	Real
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Long Name:	STS Custom Text Field 1
Short Name:	**STSCustTxt1**
Section Name:	STS Temporary Fields

SeqNo:	5265
Core:	No
Harvest:	No

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text length 100
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Long Name:	STS Custom Text Field 2
Short Name:	**STSCustTxt2**
Section Name:	STS Temporary Fields

SeqNo:	5270
Core:	No
Harvest:	No

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:		*Format:*	Text length 100
ParentShortName:		*DataLength:*	
ParentValue:		*Data Source:*	User

ParentHarvestCodes:

Long Name:	STS Custom Text Field 3	*SeqNo:*	5275
Short Name:	**STSCustTxt3**	*Core:*	No
Section Name:	STS Temporary Fields	*Harvest:*	No

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:	*Format:*	Text length 100
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User

ParentHarvestCodes:

Long Name:	STS Custom Text Field 4	*SeqNo:*	5280
Short Name:	**STSCustTxt4**	*Core:*	No
Section Name:	STS Temporary Fields	*Harvest:*	No

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue:	*UsualRangeLow:*
HighValue:	*UsualRangeHigh:*

Parent Long Name:	*Format:*	Text length 100
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User

ParentHarvestCodes:

Long Name:	STS Custom Text Field 5	*SeqNo:*	5285
Short Name:	**STSCustTxt5**	*Core:*	No
Section Name:	STS Temporary Fields	*Harvest:*	No

DBTableName   AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue:	*UsualRangeLow:*	
HighValue:	*UsualRangeHigh:*	
Parent Long Name:	*Format:*	Text length 100
ParentShortName:	*DataLength:*	
ParentValue:	*Data Source:*	User
ParentHarvestCodes:		