Adult Cardiac Surgery National Database
of the
Society of Thoracic Surgeons

Software Specifications

Version 4.20.2

Current as of April 7, 2020

Note: Some portions of this document are highlighted in blue. Although it is critical for the success of the developer's software that all of the information in this document be understood and followed, the highlights are used to point out areas that have changed since previous versions or areas of extreme importance to the functionality of the software.

Purpose:

The purpose of this document is to describe the features that are required to exist in software certified by The Society of Thoracic Surgeons (STS) for the collection and submission of Adult Cardiac Surgery data. The STS is making an effort to set minimum standards for the software to be used by its members, while allowing enough flexibility so that developers can produce competitive features for the members' benefit.

The intended audience for this document is the software developers who are designing and maintaining the code used by participants to collect and submit data to the STS database. This information will be essential for developers working for vendors who will distribute their software to many members as well as developers working for an individual member designing a package to be used only by themselves (Participant Generated Software).

Note: All software used to collect data to be submitted to the STS Data Warehouse must go through a certification process before data will be accepted into the national database. Developers must also have a signed contract on file with the STS before the certification process can begin.

Since the functionality of the software will revolve around the data specifications, this document will start by providing some information about the specifications.

Data Specifications:

- Structural changes between versions 2.9 and 4.20.2.
  - There were no structural changes to the data specifications database between versions 2.9 and 4.20.2.

- Purpose of the Data Specifications

  The data specifications describe the data fields that are required to exist in certified software. It details the field names, definitions, dependencies, acceptable values, the harvest codes associated with those values, etc. Developers of certified software should use the data specifications to ensure their software:

  a. includes all core fields in the application (see description of Core fields below),
  b. uses the correct programmatic name (Short Name) for each field,
  c. follows the defined field dependency rules (see description of Parent / Child relationships below),
  d. accepts only the defined valid values appropriate to each field and ensures that the values are in the correct format,
  e. provides the user with appropriate field definitions, and

f. includes only the appropriate fields in the extracted data files the site will submit to the Data Warehouse.

- Data Version Numbers

  As medicine, technology and interest in research areas change, the data specifications have and will change to collect additional and more detailed information. A Data Version number is assigned by the STS to each official version of the data specifications. This number will play a key role in how the data is handled and processed (see Software Specifications below).

  Note the change in the format of the data version value between v2.9 and v4.20.2. The change was made to make the version number reflect the database and the year it was initially released. Version numbers will now have three levels. The first level (4) will indicate the Adult Cardiac Surgery Database. The second level (20) indicates the year of the mandatory start date for this version (in this case, 2020). The third level (2) indicates the release number of this version of the specifications. Although every effort is made not to make changes to the specifications once they have been released, in the event that minor changes are needed, the third level will be used to reflect that change and ensure the correct version of the documentation is being used. Note that a minor update has been released which is why the third level to the current version number is 2. All three levels should always be used when referencing a specific data version (such as the value placed in the DataVrsn field).

  STS members were required to start using certified software as of January 1, 2000. At that time, version 2.35 of the data specifications was put into effect and any data collected for procedures performed before January 1, 2000 were converted as closely as possible to the 2.35 format.

  Since that time, the data specifications have been upgraded seven times; first to version 2.41 and then to 2.52.1, 2.61, 2.73, 2.81, 2.9 and now 4.20.2. For the upgrades to versions 2.41, 2.52.1, and 2.61, there was a conversion period when the data could be recorded following either the version being replaced or the newer version. This allowed sites to continue entering their data into an old version of their software while they are waiting to have their software upgraded.

  Beginning with the upgrade to version 2.73, the data version of the record is determined by the date of surgery. When users indicate they want to create a new data record, the software must first prompt the user for the surgery date. This process will ensure that all records in the national database for procedures performed during a specific time period will follow the same data version, regardless of when the record was created.

  The following table defines which version of the data specifications will be accepted into the national database for procedures performed during the specified time periods:

Surgery date	Data Specifications
Any dates up to December 31, 1999	Data converted to 2.35 format
January 1, 2000 through December 31, 2001	2.35
January 1, 2002 through June 30, 2002	2.35 or 2.41
July 1, 2002 through December 31, 2003	2.41
January 1, 2004 through December 31, 2004	2.41 or 2.52.1
July 1, 2004 through June 31, 2007	2.52.1
July 1, 2007 through December 31, 2007	2.52.1 or 2.61
January 1, 2008 through June 30, 2011	2.61
July 1, 2011 through June 30, 2014	2.73
July 1, 2014 through June 30, 2017	2.81
July 1, 2017 through June 30, 2020	2.9
July 1, 2020 through current date	4.20.2

- Sequence Number

  The sequence number field (SeqNo) is provided in the data specifications solely for identifying fields and sorting fields within as specific version of the data specification database and documentation. They are not intended as a permanent identifier for individual fields and a number assigned to a field in one version of the data specifications might be assigned to a different field in another version. Because of this, it is highly recommended that developers should not use the SeqNo value as a field identifier in any of their programs. See Appendix F for a list of SeqNo values for each field for each of the most recent versions of the data specifications.

- Future Upgrades

  As the need arises, new versions of the data specifications will be distributed by the STS. In the interest of keeping major software upgrades and testing down to a minimum, the STS does not expect to upgrade the specifications more frequently than once every other year. Developers should anticipate these upgrades and design their software in such a way that the new versions can be incorporated with minimal software changes and that records created under different data versions will be handled properly as described below.

- Data Specifications field descriptions

  The data specifications are maintained in a table in an Access database to allow the information to be cut and pasted, sorted and reported on in a variety of ways and to make incorporating the information easier for the developer. The table for the 4.20.2 version of the specifications contains 20 fields which are described here:

Table name: tblAdultDataSpecPsV4.20.2

A. SeqNo – An arbitrary number (sequence number) used for ordering the fields within a specific version of the data specifications. The ordering of the numbers is set to loosely follow the order in which the fields appear in the DCF. As described above, the SeqNo value for one field can change from one version of the specifications to the next. The values, therefore, should never be used in any reports, queries or programs to refer to a specific field.
B. SectionName – The name of the section of the DCF where the field is located.
C. SectionSeqNo – The order number of the section of the DCF where the field is located.
D. LongName – The longer and more descriptive name of the field. In most cases, the LongName does not change from one version of the specifications to the next, but can change in some instances. Because of this, the LongName value should never be used to refer to a field in reports, queries or programs.
E. ShortName – The short, programmatic name assigned to the field. The ShortName value should be used in all reports, queries and programs to refer to a given field as this value will not change from one version of the specifications to another.
F. Core – This field contains a value of Yes or No to define whether or not the field should be available to the users for data entry. Whether or not the field is included in data files exported for submission to the STS database depends on what other data versions are being included in the data extract. (See the "Data export for harvest to the data warehouse" section of the Software Specifications below.) The values in this field have the following meanings:
    - Yes = Field must be available to the users for entering data for records following this version of the data specifications and the field must be included in the data files exported for submission to the STS database that contain records following this data version.
    - No = Field is not required to be available to the users for entering data for records following this version of the data specifications. Fields defined as Core=No are no longer collected in the current version and will not appear in subsequent versions.
G. Harvest – This field contains a value of Yes, No or Optional to define whether or not the data for this field is included in the export file to be submitted to the data warehouse. (See the "Data export for harvest to the data warehouse" section of the Software Specifications below for more details about the contents of the files submitted to the data warehouse.) The values for this field have the following meanings:

- Yes – Data from this field must be included in the data file for all records following this version of the data specifications.
- No – Data from this field must not be included in the data file for all records following this version of the data specifications.
- Optional – The individual users determine whether or not the data from this field is included in the data file. By default, the software should treat this as a Yes and include the data in the extract. The users must explicitly state that they do not want the data for this field included. This distinction is defined for fields the STS would prefer to have included in the harvest, but the site might have reasons (such as not being allowed by state laws) for not including the values in the harvest file.

H. Format – The format in which the values for the field should be collected. The options for this field are:

- Date - mm/dd/yyyy: Date values only with the month specified as a 2-digit numeric value, day specified as a 2-digit numeric value, and year specified as a 4-digit numeric value.
- Time - hh:mm (24-hour clock): Time values only with the hours specified as a 2-digit numeric value (in 24-hour format), and the minutes specified as a 2-digit numeric value.
- Date/Time - mm/dd/yyyy hh:mm : Date and time values in one field with the month specified as a 2-digit numeric value, day specified as a 2-digit numeric value, and year specified as a 4-digit numeric value, followed by a single space and then the hours specified as a 2-digit numeric value (in 24-hour format), and the minutes specified as a 2- digit numeric value.
- Integer: Numeric values with no decimal points.
- Real: Numeric values with at least one decimal point.
- Text: Value can contain any alphanumeric characters.
- Text (categorical values specified by STS): Values displayed to the user are the text descriptions defined in the data specifications harvest codes table. The values submitted to the Data Warehouse are the Harvest Codes defined in the data specifications.
- Multi-Select: This format is similar to the "Text (categorical values specified by STS)" format in that values displayed to the user are the text descriptions defined in the data specifications harvest codes table. However, for fields with a multi-select format, users can select more than one choice. The values submitted to the Data Warehouse are a comma-delimited list of the harvest codes associated with each choice indicated by the user. **(Please do not include any spaces between the choices).**

  For example, if the user enters 72 for Patient Age, selects "White", "Black/African American", and "Asian" for Race – Multi-Select, and enters "General Hospital" for Hospital Name, that portion of the submitted data record would look like this:

  …|Age|RaceMulti|HospName|…
  …|72|1,2,3|General Hospital|…

Developers should also be aware that multi-select fields can be the parent of other fields. The child field should be enabled for data entry if ANY of the choices selected in the multi-select parent field are in the ParentHarvestCodes list for the child field. The child field should be disabled if NONE of the choices selected in the multi-select parent field are in the ParentHarvestCodes list for the child field.

- Text (categorical values specified by user): Values displayed to the user and submitted to the Data Warehouse come from a list maintained by the user (see item "e" under the "3. Data Entry" section of the "Software Specification" below).

I. DataSource – This field defines how the data is entered into the field. The options for this field are as follows (note, in some cases, there is more than one option for data source, such as "User or Calculated"):

- User – The user enters the value, otherwise it is left missing (null).
- Automatic – The software automatically inserts a value for every record. This is usually assigned to administrative fields that must contain a value, such as the DataVrsn field.
- Calculated – The value is calculated by the software based on values in other fields (for example, the risk model fields). In v4.20.2 of the data specifications there are a total of 15 fields to be calculated:

ShortName	LongName
Age	Patient Age
CalculatedBMI	Calculated BMI
MELDScr	MELD Score
TotCircArrTm	Total Circulatory Arrest Time
TotalPOInitVentHr	Total Postoperative Initial Vent Hour
VentHrsTot	Total Postoperative Ventilation Hours
PredMort	Predicted Risk of Mortality
PredDeep	Predicted Deep Sternal Wound Infx
PredReop	Predicted Reoperation
PredStro	Predicted Permanent Stroke
PredVent	Predicted Prolonged Ventilation
PredRenF	Predicted Renal Failure
PredMM	Predicted Morbidity or Mortality
Pred6D	Predicted Short Length of Stay
Pred14D	Predicted Long Length of Stay

The Age field can be entered directly by the user or calculated by the software by finding the difference between the fields DOB and SurgDt (please take leap years into account when doing this calculation).

Note the calculation of BMI and Postoperative Initial Vent Hours is new to version 4.20.2.

The formulas used to calculate the BMI, Meld Score, Total Postoperative Initial Vent Hours, Total Postoperative Ventilation Hours, and the Total Circulatory Arrest Time are provided in Appendix A, Appendix B, Appendix C, Appendix D and Appendix E respectively below. The methods used to calculate the risk scores are provided in separate documentation (contact the Data Warehouse for this information).

- Lookup – The software automatically inserts a value after looking up the information kept in a table maintained by the user. For example, HospStat is filled in based on which HospName value is selected (see item "e" under the "3. Data Entry" section of the "Software Specification" below).

J. DataLength – The number of characters a text field should be able to hold. This value is only specified in cases where a specific length is required.
K. DBTableName – The name of the table in the export file in which the field should reside. For the Adult Cardiac Database, this value is null since the data structure is a flat file.
L. Definition – The official definition of the field.
M. LowValue – The lowest valid value that will be accepted for the specified field. This is used only in fields that accept numeric values. If field values are submitted to the Data Warehouse that are less than LowValue, the entire data record will be rejected.
N. HighValue – The highest valid value that will be accepted for the specified field. This is used only in fields that accept numeric values. If field values are submitted to the Data Warehouse that are greater than HighValue, the entire data record will be rejected.
O. UsualRangeLow - The lowest value that is likely to be entered by the user. If the user enters a value that is below this number, but still greater than or equal to the value defined in LowValue, the value should be accepted, but the user should be given a message that the value they entered is unusually low and that they should verify the value.
P. UsualRangeHigh - The highest value that is likely to be entered by the user. If the user enters a value that is above this number, but still less than or equal to the value defined in HighValue, the value should be accepted, but the user should be given a message that the value they entered is unusually high and that they should verify the value.
Q. ParentLongName – The "parent" field on which this field (the "child" field) is dependent. Software must be defined such that the parent field must contain a value that is specified in the ParentValue field before data can be entered into this field, otherwise the field is disabled or unavailable.
R. ParentShortName – The programmatic "ShortName" of the parent field.
S. ParentValue – The list of values the parent field can have before this field can be available for data entry.
T. ParentHarvestCodes – A bar-delimited list of the harvest codes associated with the values identified in the ParentValue field.
U. FieldStatus – The status of this field in this data version compared to the most recent data version. The options for this field are as follows:

- New – This field did not exist in the previous version of the data specifications and was added to this version.
- Dropped – This field was a core field in the previous version of the data specifications, but is no longer a core field in this version.
- Continued – This fields was a core field in the previous version of the data specifications and continues to be a core field in this version. Note that a field defined as Continued may or may not have had some details changed between the previous and current version of the data specifications.

Table name: tblAdultDataSpecsV4_20_1_HarvestCodes

A. ShortName – The short programmatic name assigned to the field.
B. HarvestCode– The code that is assigned to each choice in the valid data. These are the values that are used in the exported data file that is submitted to the Data Warehouse.
C. Description – The text description of the choice. This is the value the user sees while doing data entry.
D. DisplayOrder – The order in which the choices are displayed to the user for this field.
E. Definition – The official definition of the specified choice for this field. Note that not all choices will have a definition.

Software specifications:

It is not the intention of the STS to regulate the algorithms and methodologies the developers use to produce their software. However, there are specific features and functionalities that are needed in the software to allow data to be collected and submitted in a uniform format and to enable the warehouse to communicate with the members about individual records and data items. The purpose of this section is to describe those features and functions.

1. General features

   The certified software must have the following minimum features:

   a. Provide a user-friendly interface that can be used on a current personal computer operating system.
   b. Allow users to be able to view and select the actual data values for each field. If the data is coded internally, user should, by default, view the non-coded values.
   c. Ensure all date values are year 2000 compliant having a 4-digit year format.
   d. Software must accept and integrate data previously collected and maintained in other software products or data versions. (See "Data Import", below).
   e. The user's data must be accessible for ad hoc queries either through the software package or by common third party software (e.g. Microsoft Access, Crystal Reports, etc.) If the data is not directly accessible, then the software must provide the ability for the user to export the data in a standard file format which can be queried using common third party query software. (See "Data Export for Analysis by Users", below). When users are querying their data, grouping records that were created under multiple data version numbers must be invisible to the user. For example, if a user wants to analyze a risk factor in their data for a time period of two years, the fact that their data was recorded under two different version numbers during that period must not require any additional steps for the user to build the query. We strongly recommend ensuring this by keeping all data in one database regardless of the version number. This requirement is the result of feedback from many frustrated users.
   f. Users must be able to select specific records in their database via key fields including patient's name and the record identification field (RecordID). The search mechanism must label the RecordID field with the text "RecordID".
   g. Software must include a utility that allows users to check the completeness of any or all of their data fields. This utility must allow the user to select which fields are included in the data check and have the option of including all fields or just specified fields. (See "Data quality and completeness checks" below).
   h. Software must execute a specified list of data quality checks when a user attempts to save a record and not allow the user to save the record if any of the conditions are true. See "Data Quality And Completeness Checks" below.

   Note that starting with version 4.20.2, the "on-demand updates" for the valid values and harvest codes for valve and VAD device lists are no longer being used. The valid values for these fields are defined in the data specifications and will not change without a full specification upgrade.

2. Record management

Each record in the database describes one surgical case (i.e., one admission to the hospital). On each record, there are four key fields used for record management:

a. Participant identification number (ParticID): Each group of surgeons collecting and entering data into a database for submission to the STS is assigned a 5-digit ParticID by the STS. In most cases, all data being entered into a database will be for one participating group, in which case all records will have the same value in this field. In these situations, the developer can have the software enter the value into the record automatically for the user.

In some situations however, more than one participating group will be entering their data into a single database. In these situations, the user should select the appropriate ParticID value from a drop down list (see "Categorical values specified by user" under the Data Source description in the "Explanation of Data Specification Terms", below).

A value for ParticID is required and the software should ensure one exists on every record.

b. Record identification number (RecordID): The RecordID field contains a unique numeric value that identifies the record in the database. This is an arbitrary number and must not be a value that could identify the patient, such as Social Security Number, Medical Record Number, etc. Once attached to a specific record, the value can never be changed, nor can it be reused if the record is deleted. The data warehouse uses the RecordID field to communicate record-specific data quality issues to the participants. Because of this, users must be able to select cases from their database for review using this field and the field must be labeled "RecordID" on the data entry screen. See also the special considerations necessary for this field when importing data from another database in the "Data Import" section, below.

Beginning with version 2.73 of the data specifications, the values generated by the software for the RecordID field must be a combination of three parts:

- The letter "V" to indicate vendor software
- A two-digit code assigned by the STS to uniquely identify the vendor
- An alphanumeric value that makes the identifier unique (such as a record counter).

For example, the software will generate a RecordID value of V01000001 for the first record and V01000002 for the second record. 'V' indicating vendor software, '01' indicating a specific vendor, and the '000001' or '000002' to indicate the specific record within that specific site's software.

The purpose of this feature is to allow sites to move their data from one version of a

software package to another, or from one vendor package to another, and maintain the referential integrity of their data records.

Together, the ParticID and the RecordID will affect a composite key, which is unique to each record throughout the national STS database.

c. Data Version Number (DataVrsn): The DataVrsn field contains the data specifications version number under which the record is created. The value is automatically entered into the record by the software at the time the record is created. The value then can never be changed, even if the software is upgraded to a newer version of the specifications.

Once a record is created and a data version has been assigned to it, that record will always follow the rules defined by that version of the data specifications. When a user selects a record for editing that has an older data version number, the software must follow the older data specification rules for editing that record. This includes controlling which fields are available to the user, which values are available for each field and the appropriate parent/child dependencies.

d. Patient identification number (PatID): The PatID field contains a unique, arbitrary number to uniquely identify the patient in the database. If one patient has multiple admissions to the hospital, the records for each admission will contain the same PatID value. The number, once assigned to a patient, cannot be edited or reused if the patient records are ever deleted. In order to avoid issues of patient confidentiality in transferring records, the PatID value should not be any known identifier such as Social Security Number or Medical Record Number. A PatID value is required on every record regardless of the structure of the software's database.

Beginning with version 2.73 of the data specifications, the values generated by the software for the PatID field must be a combination of three parts:

- The letter "V" to indicate vendor software
- A two-digit code assigned by the STS to uniquely identify the vendor
- An alphanumeric value that makes the identifier unique (such as a record counter).

For example, the software will generate a PatID value of V01000001 for the first record and V01000002 for the second record. 'V' indicating vendor software, '01' indicating a specific vendor, and the '000001' or '000002' to indicate the specific record within that specific site's software.

The purpose of this feature is to allow sites to move their data from one version of a software package to another, or from one vendor package to another, and maintain the referential integrity of their data records.

3. Data entry

The software must have the following features to control the data being entered by the users:

a. For export of data to the warehouse, most data fields have a default value, usually null or blank, which indicates that the data is "Missing" (see data specifications). For data entry purposes the site and vendor may choose to institute internal codes for "Missing" values. As the site drives the need for this feature, the STS data specifications do not define standard codes for "Missing" values during data entry. If a site applies data entry "Missing" codes, the harvest process must include a step that maps the missing code to the STS specification for "Missing" values (null or blank). Note: zero must never be used to indicate missing data.

b. The user should always be able to delete entered data and return the field's value to the null or "Missing" value.

c. For any field having specific values or a range of acceptable values defined, the software must restrict data entries to this set of values. For categorical variables this is expressed as a set of harvest codes and descriptions and the user must select from a pick list of these values. For numerical variables, this is expressed as a valid numeric range defined as a LowValue and HighValue, and the user must enter a value on or between the specified limits. If the user enters a value that is not one of the harvest codes or is outside of the defined range, the user must be given an error. The message should tell the user that the value is invalid and the invalid value will not be stored in the database.

d. Where a numeric variable has a UsualRangeLow and UsualRangeHigh specified, if the user attempts to enter a value that is outside of that range but still inside the LowValue/HighValue range, the software must warn the user that they are entering an unusual value and ask if the entry is correct. If the user confirms that the value is correct, then it should be accepted into the field.

e. Some categorical text fields are designed to have data values controlled by the user. This applies primarily to a few site-specific fields such as hospital name and surgeon name. These fields are indicated in the Data Specifications by their Format specifying "Text (categorical values specified by User)". The user should be able to maintain the pick list of valid data for these fields including the ability to add, change, or delete list elements. During data entry, the user should be able to enter only values that are in this pick list.

   The process of maintaining the list should be separate from the data entry process. In other words, users must purposely add a value to the list to make it available for selection during data entry. If a user enters a value that is not on the list, it should be rejected and not automatically added to the list. The idea here is to avoid the possibility of users entering "free text" which causes unacceptable data quality issues at the warehouse.

   It is important that the vendor support the site's ability to control these fields. Items in

the user list should not have more than one choice for the same entity. For example, the hospital names "General Memorial Hospital" and "GMH" should not represent select choices for the same hospital.

f. Documentation including data definitions and help should be easily accessible to the user, preferably on-line.

4.Importing data from other data sources

Although the data many participants are entering into their STS certified software may be gathered from another electronic data system at their site (such as an EMR), it is strictly against STS policy for vendors to provide the users with the means to import this data automatically. It is not practical for the STS to certify the mapping of data from each site's EMR to the STS data specifications, which would be required to ensure the integrity of the overall STS database.

There are only two exceptions to this policy:

a. Unique Device Identification (UDI) numbers can be imported from devices such as barcode readers. This applies to the following fields:

First Valve Explant Unique Device Identifier (UDI) [ValExpUDI]
Second Valve Explant Device Unique Device Identifier (UDI) [ValExpDevUDI]
Third Valve Explant Device Unique Device Identifier (UDI) [ValExpDev3UDI]
VS-Aortic Proc-Imp - Unique Device Identifier (UDI) [VSAoImUDI]
VS-Mitral Proc-Imp-Unique Device Identifier (UDI) [VSMiImUDI]
VS-Tricuspid Proc-Imp-Unique Device Identifier (UDI) [VSTrImUDI]
VS-Pulmonic Proc-Imp-Unique Device Identifier [VSPuImUDI]
Previous VAD Unique Device Identifier (UDI) [PrevVADUDI]
VAD-Implant Unique Device Identifier (UDI) [VImpUDI]
VAD-Implant Unique Device Identifier (UDI) #2 [VImpUDI2]
VAD-Implant Unique Device Identifier (UDI) #3 [VImpUDI3]
Other Card- Epicardial Occlusion Device UDI [OCarAAUDI]
Aortic Valve or Aortic Valve Composite Graft Implanted - Unique Device Identifier [AVAVCompGrImplUDIAo]
Aorta Device - Unique Device Identifier #01 [ADevUDI01]
Aorta Device - Unique Device Identifier #02 [ADevUDI02]
Aorta Device - Unique Device Identifier #03 [ADevUDI03]
Aorta Device - Unique Device Identifier #04 [ADevUDI04]
Aorta Device - Unique Device Identifier #05 [ADevUDI05]
Aorta Device - Unique Device Identifier #06 [ADevUDI06]
Aorta Device - Unique Device Identifier #07 [ADevUDI07]
Aorta Device - Unique Device Identifier #08 [ADevUDI08]
Aorta Device - Unique Device Identifier #09 [ADevUDI09]
Aorta Device - Unique Device Identifier #10 [ADevUDI10]
Aorta Device - Unique Device Identifier #11 [ADevUDI11]
Aorta Device - Unique Device Identifier #12 [ADevUDI12]

Aorta Device - Unique Device Identifier #13 [ADevUDI13]
Aorta Device - Unique Device Identifier #14 [ADevUDI14]
Aorta Device - Unique Device Identifier #15 [ADevUDI15]

b. The following data fields can be imported from an Admission/Discharge/Transfer (ADT) system:

LongName	ShortName
Patient Last Name	PatLName
Patient First Name	PatFName
Patient Middle Name	PatMName
Date of Birth	DOB
Patient Age	Age
Sex	Gender
National Identification (Social Security Number) Known	SSNKnown
National ID Number	SSN
Medical Record Number	MedRecN
Patient's Permanent Street Address	PatAddr
Patient's Permanent City	PatCity
Patient's Permanent Region	PatRegion
ZIP Code	PatZIP
Country	PatientCountry
Race Documented (Note, race can only be imported if the original data allows for selecting more than one race)	RaceDocumented
Race – Multi-Select	RaceMulti
Hispanic or Latino or Spanish Ethnicity	Ethnicity
Date of admission	AdmitDt
OR Entry Date and Time	OREntryDT
OR Exit Date and Time	ORExitDT
Date of Discharge	DischDt
Mort-Date	MtDate

5. Field dependencies

Field dependencies exist where one field (the "parent" field) controls whether or not one or more other fields (the "child" fields) can contain data. Child fields are indicated in the specifications by having their immediate parent field named in the "Parent Field" section of their specification. For example, "Cerebrovascular Disease" is a parent field to its child "Prior CVA". The following guidelines must be followed to handle dependent fields:

a. If the data value of a parent field indicates that no data should be in its dependent fields, then those dependent fields should be unavailable on the data entry screen. In the example above, only if "Cerebrovascular Disease" = "Yes" should "Prior CVA" be available for data entry.

b. If a parent field indicates that no data should be in its dependent field, vendors must set all child fields to Null. **Note that in prior versions of the Software Specifications, vendors had the option of setting child field values to "No" provided those fields were set to Null during data extract. This has caused parent/child issues to appear in site data, so this practice is no longer acceptable.**

c. If a parent field is originally set to "Yes", then values can be entered into its child fields. If the record is subsequently edited by the user and the parent value is changed to "No", **the values in the child fields must be automatically changed to Null.**

d. Reporting on missing data values needs to be handled differently in dependent (child) fields, since its meaning depends upon the data value of the parent field. See "Data quality and completeness checks" below for a full description of how this should be handled.

6. Data quality and completeness checks

The software must provide the users with a utility for checking the accuracy and completeness of their data that includes the following features:

Data quality checks can be run during data entry and/or on demand for groups of records as specified by the user. This utility produces a data quality report indicating which records and fields failed the data checks. This report is used by the site data manager to review and potentially repair the data.

a. Certified software must contain a utility for checking and reporting on data completeness. This utility must include the following features:

i) The user must be able to identify in a list the fields that they want to have

checked for completeness. The user should be able to select just one field, all fields, or any number of fields desired (by default, the utility should report on ALL fields). It is recommended that user should be able to save the selected list so as not to have to go through the selection process again the next time data quality is being checked.

ii) The utility should report on individual records or groups of records (recommend grouping by surgery date range) as specified by the user.

iii) The utility must take into consideration dependent fields when checking for completeness. For fields defined as "child" fields of a "parent" field, the child is considered missing only if the parent is answered to indicate that data should be in its dependent fields and the child field contains no data. Following this guideline will restrict reporting missing data to only those situations where data is clinically expected.

iv) In some cases, specific fields can be group together to be examined for completeness and reported as one group instead of reporting on each individual field. This can be done in cases where the group of fields are clinically related to each other and the user is likely to enter values for only one of the fields. The following table defines the field groupings for data version 4.20.2:

Report this Group missing:	When this condition is met:
Intraoperative TEE Results	InOpTEE = Yes AND PRepAR is missing AND PRepAGradM is missing AND PRepAPVL is missing AND PRepMR is missing AND PRepMGradM is missing AND PRepMPVL is missing AND PRepTR is missing AND PRepTGradM is missing AND PRepTPVL is missing AND PPEFMeas is missing

Prior Aortic Repair Location	(PriorAorta = Yes) AND (PriorRepRoot = No or is missing) AND (PriorRepAsc = No or is missing) AND (PriorRepArch = No or is missing) AND (PriorRepDesc = No or is missing) AND (PriorRepSupraAb = No or is missing) AND (PriorRepInfraAb = No or is missing)
Prior Aortic Repair Type	PriorAorta = Yes AND PriorRepTyRoot is missing AND PriorRepTyAsc is missing AND PriorRepTyArch is missing AND PriorRepTyDesc is missing AND PriorRepTySupraAb is missing AND PriorRepTyInfraAb is missing
Prior Aortic Repair Failure	PriorAorta = Yes AND PriorFailRoot is missing AND PriorFailAsc is missing AND PriorFailArch is missing AND PriorFailDesc is missing AND PriorFailSupraAb is missing AND PriorFailInfraAb is missing
Prior Aortic disease Progression	PriorAorta = Yes AND PriorProgRoot is missing AND PriorProgAsc is missing AND PriorProgArch is missing AND PriorProgDesc is missing AND PriorProgSupraAb is missing AND PriorProgInfraAb is missing
Endoleak Type	Endoleak = Yes AND EndoleakTypeI is missing AND EndoleakTypeII is missing AND EndoleakTypeIII is missing AND EndoleakTypeIV is missing AND EndoleakTypeV is missing
Post Op Echo Results	POpTTEch = Yes AND POpTTAR is missing AND POpAortParaLk is missing AND POpTTMR is missing AND POpMitParaLk is missing AND POpTTTR is missing AND POpTTPu is missing

Aortic Complication	AorticComp = Yes AND CVaAoDis is missing AND CVaAoDisTy is missing AND COtAortEndo is missing AND COtAortSide is missing AND COtAortTear is missing

b. Certified software must run quality control checks at the time the user attempts to save a new or modified record. The quality checks to be run are defined in the associated document "STS Adult Cardiac On-Save Quality Checks". If any of the checks are met (i.e., return a value of True) the user must be presented with the appropriate error message and the record should not be saved. The user should not be able to leave the record until the issue has been corrected or all changes have been voided.

7. Data Import

a. Software must be able to import data in standard file formats from third party applications. At a minimum, this must include delimited, ASCII text files. Other common formats (e.g. Excel or MS Access) are also recommended. This functionality is to only be used on STS-approved basis for data migration. Any other use requires STS approval. This utility should only be used when a user first purchases a new certified software package and wants to import the data they had been collecting up to that time in a different package. Once the old data has been imported into the new package, all future data should be entered directly into the new package via the data entry screens and no additional data should be imported. Using the import feature to regularly import data so that it can be exported in the STS format for submission to the Data Warehouse (i.e., importing data from an EHR system) is strictly against the STS policies.

b. Data that is imported will require controlled conversion to an acceptable STS data version. The conversion process must include reviewing the data for consistency with the STS data (i.e. mapping the categorical values in the imported data to the appropriate STS values). The site data manager and software vendor hold responsibility for the accuracy (both clinical definition and harvest format) of all imported data harvested to the warehouse. The software will assign to each imported record the STS data version number to which the data is converted. The data version to which the data is converted must be appropriate for the date of surgery for that record. The warehouse will handle data according to the STS data version number on each observation in a harvest file regardless of whether it was created in the software's data entry utility or imported from another source.

c. Special consideration is needed for the values in the RecordID field when importing data. This is especially true when importing data that was previously submitted to the data warehouse (i.e. data from another certified software package). RecordID values

must never change once they are assigned to a record. The software developers and data managers must ensure that the values in the imported data do not change in the conversion process, and that they do not cause duplication of values with any existing records. Developers must also ensure that new records created after the data has been imported are not assigned RecordID values that already exist in the data. If data is to be imported that would cause a conflict in this manner, the software developer must contact the Data Warehouse to determine what steps need to be taken.

8. Record subsets and queries

   Software must allow users to search for Individual records selected by RecordID or by patient identifiers including patient name and surgery date. Users should also be able to construct more general queries including field selection, record selection, sorting, and summarizing. It is acceptable if this function is provided by a third party application (e.g. MS Access or Crystal Reports).

9. Reporting

   Software should provide the users with reporting abilities that can do the following:

   a. View and print a data completeness report listing the records having missing fields and which fields are missing from each record.

   b. Build, save, copy, and modify more general reports with capability to select fields, record subsets, sorting, and summary statistics. (It is acceptable if this function is provided by a third party application, such as MS Access or Crystal Reports).

   c. Data harvest procedure provides the site with a report documenting the following:
      1. whether or not the extract completed successfully
      2. number of records extracted
      3. time frame of the data extract (by date of surgery)
      4. date the data extraction was performed
      5. name of the person who performed the data extraction

10. Data export for analysis by users

    The software must allow users to export their data for their own use in the following manner:

    a. Software must be able to export data in standard file formats suitable for transfer into third party applications. This must include at a minimum bar-delimited, ASCII text, and optionally other common formats such as Excel and Access. Developers should keep in mind that sites may need to export

their data for reasons other than the STS data harvests.

b. User should be able to choose whether an export includes all data or selected records and fields. Users must be able to select any field in their database including custom fields and other non-STS fields.

c. If data is coded for internal storage (e.g. text string is stored as a number), the data must be able to be decoded when written to the export file so that actual values (e.g. full text strings) are contained in export file. The user can decide which format should be used for each export file.

d. Export files must identify the data fields using field names (i.e., the STS ShortName or LongName) that are familiar to the users.

e. User can control export file naming convention.

11. Data export for harvest to the data warehouse

As one of the key reasons for having certified software, the software must allow users to export their data for submission to the STS data warehouse following these exact guidelines:

a. The user must be able to specify the records to be exported for harvest by using range limits for the surgery date.

b. Note that users must not be able to select individual records for exporting (for example, by RecordID value). It is acceptable for users to extract data for one specific day by specifying the same date value for the beginning and ending dates of the requested export time period. If there is only one record with that surgery date, then it is acceptable that the export file would contain only that one record. However, users must not be able to pick only one record for export as this would cause other records at the Data Warehouse for that date to be deleted from the database.

c. The Data Harvest file exported must adhere to this specific format:
    1. File is an ASCII text file with vertical bar delimiters
    2. The first row is a "header" record containing the STS short field names in the same sequence as the data fields in subsequent rows
    3. Each subsequent row represents one data record describing one surgical case

c. Only a single harvest file for each participant can be submitted to the warehouse for processing. Participants may submit repeatedly during a harvest, but each submission is only one file.

d. The extracted file must contain data for only one participant ID (ParticID) value. If the site's database contains data for more than one participant, all of which is to be submitted to the warehouse, the software must extract the data for each ParticID into separate data files each with an appropriate file name (see below).

e. The harvest file must include all fields, and only those fields, defined in the data specifications with Core = "Yes" and Harvest = "Yes" or "Optional" for all STS data versions within the harvest file. In other words, a file containing v2.9 and v4.20.2 records would contain all fields where Core is "Yes" and Harvest is "Yes" or "Optional" for either version of the specifications (more information on submitting data from multiple data versions is given below). Fields with Core="No" or Harvest="No" and site-specific or custom fields must not be included in the export file.

f. Fields that are defined as Core = Yes and Harvest = Optional must be included in the data file. What is "optional" is whether or not the field contains data. By default, the software should include all data for optional fields. If the user specifies that an optional field should not be included, the data file will include the field but every record will contain a blank (null) in that field. This is necessary for the warehouse to be able to tell the difference between a field being left out by mistake and a site opting not to include that data.

g. The values in the harvest file must be the "Harvest Coding" of the data values and not the full text strings.

h. A harvest report should be produced whenever a data harvest is performed (see "Reporting", above).

i. **Note that starting with data version 4.20.2, the naming convention to be used for extract files has changed.** The software must create the exported data file using the file naming convention of XXXXXadt_YYYYMMDDhhmm.dat where:

- XXXXX is the 5-digit ParticID for the data in the file
- YYYY is year portion of the date on which the extract was created
- MM is the 2-digit numeric month portion of the date on which the extract was created (with leading zeros as needed)
- DD is the 2-digit numeric day portion of the date on which the extract was created (with leading zeros as needed)
- hh is the 2-digit numeric hour portion of the date on which the extract was created (using a 24-hour clock with leading zeros as needed)
- mm is the 2-digit numeric minute portion of the date on which the extract was created (using a 24-hour clock with leading zeros as needed)

For example, if participant 12345 creates an export file on September 6, 2020 at 3:05 pm (local time), the extract file must be named "12345adt_202009061505.dat".

The user must not specify the file naming convention. Files not using this naming convention will not be accepted by the automated process at the Data Warehouse.

When records from more than one data version are being exported for an STS data harvest, the file must adhere to the following format:

a. The first record of the file must be the one and only "header" record containing the STS short field names in the same sequence as the data fields in subsequent rows.

b. Every data record in the file must contain the same fields which will consist of a superset of the Core, Harvested fields from all included data versions.

c. On each data record, the fields that are Core and Harvested for the data version specified in the DataVrsn field will contain data values as available and appropriate. The fields that are not Core or not Harvested for that data version will contain nulls (blanks). When the data is being processed by the warehouse, only the fields appropriate for the data version specified on the record will be included.

For an example of a data file containing more than one data version, consider a data file being submitted with records having data versions 2.9 and 4.20.2. The software will produce one data file with one header record that will identify all of the Core / Harvested fields for both versions, including "Patient Age" (Age), "Race - Other" (RaceOther), and "Race – Multi-Select" (RaceMulti). The Age field is Core to both 2.9 and 4.20.2. RaceOther is Core for 2.9 but is not Core in 4.20.2. RaceMulti didn't exist in 2.9 but is a Core field in 4.20.2. A data record in the extracted file that has a DataVrsn value of 2.9 should contain a value in Age and RaceOther, but would contain a null in RaceMulti. A data record that has a DataVrsn value of 4.20.2 should contain a value in Age and RaceMulti, but would contain a null in RaceOther.

12. Customization

It is up to the developer's discretion as to whether or not the users will have the ability to add customized fields to their software and database. If the user will have this ability, the following items must be considered:

a. In no case can the field names, short field names, or categorical data values specified by the STS be customized or modified by the users. (Please note however in the STS specifications that users can build the categorical data values for certain fields such as Hospital Name, see "Data entry", above.)

b. Fields added by users must not be included in the data file exported for submission to the STS data warehouse.

c. Developers should make clear to the potential users whether users can add custom fields themselves, or if they will require contracted work by the developer.

d. It should be possible for users of customizable software to import custom fields that they might have created in a previous database or software package.

e. Most importantly, developers who allow users to add customized fields must keep in mind that software upgrades will be necessary from time to time as new versions of the data specifications become available. These changes include adding new fields, discontinuing fields, and moving fields to a new location. It is the developer's responsibility to handle how a user's customization is incorporated when their software is being upgraded.

13. Combining collection of STS and non-STS database fields

Developers who design their software to collect data for more than just the STS Adult Cardiac database must not combine fields from other databases with the STS fields unless it is explicitly stated by the STS that the fields are the same in definition and coding. Contact the STS to determine what, if any non-STS fields can be mapped in this manner.

14. On-demand updates

Starting with the v4.20.2, the STS is no longer using this feature.

Appendix A: Body Mass Index (BMI):

Starting with version 4.20.2, software must be able to calculate the Body Mass Index (BMI) score for each patient. The results from this calculation are entered by the software into the field "System calculated BMI" (CalculatedBMI). The value of this score is calculated using the values entered by the user into the fields "Weight (kg)" (WeightKg) and "Height (cm)" (HeightCm) using the following formula:

$$\text{CalculatedBMI} = \text{WeightKg} / ((\text{HeightCm}/100))^2$$

Appendix B: Calculation of MELD scores

Starting with version 2.73, software must be able to calculate the MELD score for each patient. The results from this calculation are entered by the software into the field "MELD Score" (MELDScr). The value of this score is calculated using the values entered by the user into the three fields "Total Bilirubin" (TotBlrbn), "INR" (INR), and "Last Creatinine Level" (CreatLst). The patient's dialysis status "RF-Renal Fail-Dialysis" (Dialysis) is also considered in the calculation.

The calculation can be made by creating a "factor" for each of the three variables involved in the score. The value of the variable is used to determine the value of the factor. The factors are then used in a formula to determine the MELD score. The algorithm for determining the value of each factor is as follows:

If Total Bilirubin is >0 and <=1 then bilirubin_factor = 1
otherwise, if Total Bilirubin is >1, then bilirubin_factor = the specified Total Bilirubin value.

If INR is >0 and <=1 then inr_factor = 1
otherwise, if INR is > 1, then inr_factor = the specified INR value.

if RF-Renal Fail-Dialysis=Yes, then creatinine_factor = 4
otherwise, if Last Creatinine Level is >0 and <=1 then creatinine_factor = 1
otherwise, if Last Creatinine Level is >1 and <=4, then creatinine_factor = the Last Creatinine Level value
otherwise, if Last Creatinine Level is >4, then creatinine_factor = 4

After determining the three factors, the calculation is done using the formula:

MELDScr = (3.8 x Ln([bilirubin_factor])) + (11.2 x Ln([inr_factor])) + (9.6 x Ln([creatinine_factor])) + 6.4

Note that "Ln" refers to the mathematical "natural log" function.

No score should be calculated if any of the following conditions are true:
- Total Bilirubin is missing
- INR is missing
- Last Creatinine Level is missing and RF-Renal Fail-Dialysis = No or is missing

Appendix C: Calculation of Total Postoperative Initial Ventilation Hours

Starting with v4.20.2, software must be able to calculate the Total Postoperative Initial Ventilation Hours. The results of this calculation are entered by the software into the field "Total Postoperative Initial Ventilation Hour" (TotalPOInitVentHr). The value of this field is calculated by finding the number of **hours between "OR Exit Date and Time" (ORExitDT) and "Initial Extubation Date And Time" (ExtubateDT).** ~~Value should be stored in decimal format with at least two decimal places. This value is zero for patients extubated in OR or not intubated for procedure (ExtubOR = Yes or N/A (not intubated)).~~

- If either ORExitDT or ExtubateDT are missing, TotalPOInitVentHr is left missing.
- The difference between ORExitDT and ExtubateDT must not be rounded.
- If ExtubOR="Yes" or "N/A", TotalPOInitVentHr must be set to zero.
- Final calculation should include at least two decimal places.

Appendix D: Calculation of Total Postoperative Ventilation Hours

Please note that with the upgrade to v4.20.2, the method used to calculate Total Postoperative Ventilation Hours has changed.

Software must be able to calculate the value for the field "Total Postoperative Ventilation Hours" (VentHrsTot). This calculation uses the following fields:

- OR Exit Date And Time (ORExitDT)
- Extubated In OR (ExtubOR)
- Initial Extubation Date and Time (ExtubateDT)
- Additional Hours Ventilated (VentHrsA)

The calculation for the total ventilation hours is performed by calculating the number of hours between ORExitDT and ExtubateDT and adding the number of additional hours specified in VentHrsA. The equation for calculating Total Postoperative Ventilation Hours must take the following into consideration:

- If either ORExitDT or ExtubateDT are missing, VentHrsTot is left missing (regardless of whether or not there is a value in VentHrsA).
- The difference between ORExitDT and ExtubateDT must not be rounded.
- If VentHrsA has no value, then VentHrsTot must be just the difference between ORExitDT and ExtubateDT.
- If ExtubOR=Yes then zero should be used for this part of the calculation and added to any additional hours (VentHrsA) to generate the total postoperative hours.
- If ExtubOR = N/A (i.e., the patient was not intubated for the operation, but may have been intubated after leaving the OR), then zero should be used for this part of the calculation and added to any additional hours (VentHrsA) to generate the total postoperative hours.
- Final calculation should include at least two decimal places.

Appendix E: Calculation of Total Circulatory Arrest Time

Starting with v2.81, software must be able to calculate the value for the field "Total Circulatory Arrest Time" (TotCircArrTm). This calculation uses the following fields:

- Circulatory Arrest Time Without Cerebral Perfusion (DHCATm)
- Cerebral Perfusion Time (CPerfTime)

The calculation for the total circulatory arrest time is performed by adding DHCATm and CPerfTime. The equation for calculating Total Circulatory Arrest Time must take the following into consideration:

- If DHCATm has no value, TotCircArrTm is set to missing, regardless of whether there is a value in CPerfTime.
- CPerfTime might not have a value because the field Circulatory Arrest With Cerebral Perfsuion (CPerfUtil) is No. CPerfTime might also not have a value, even if (CPerfUtil) is Yes. In either of these cases, TotCircArrTm would be set to the value in DHCATm.

Appendix F: Field ShortName and SeqNo by DataVrsn.

The following table lists all fields that have been collected in the STS Adult CV Database since 1999. The sequence number (SeqNo) of each field for a given version of the specifications is specified under the version number. If no sequence number is specified, the field was not a Core field for that version of the specifications.

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
AbxDisc				1347	2730	2290	2290	2290
AbxSelect				1345	2710	2280	2280	2280
AbxTiming				1346	2720	2285	2285	2285
AddIntraopPAnti						2295	2295	
ADevDelMeth01							5455	5455
ADevDelMeth02							5480	5480
ADevDelMeth03							5505	5505
ADevDelMeth04							5530	5530
ADevDelMeth05							5555	5555
ADevDelMeth06							5580	5580
ADevDelMeth07							5605	5605
ADevDelMeth08							5630	5630
ADevDelMeth09							5655	5655
ADevDelMeth10							5680	5680
ADevDelMeth11							5705	5705
ADevDelMeth12							5730	5730
ADevDelMeth13							5755	5755
ADevDelMeth14							5780	5780
ADevDelMeth15							5805	5805
ADevIns							5440	5440
ADevLoc01							5450	5450
ADevLoc02							5475	5475
ADevLoc03							5500	5500
ADevLoc04							5525	5525
ADevLoc05							5550	5550
ADevLoc06							5575	5575
ADevLoc07							5600	5600
ADevLoc08							5625	5625
ADevLoc09							5650	5650
ADevLoc10							5675	5675
ADevLoc11							5700	5700
ADevLoc12							5725	5725

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
ADevLoc13							5750	5750
ADevLoc14							5775	5775
ADevLoc15							5800	5800
ADevModel01							5465	5465
ADevModel02							5490	5490
ADevModel03							5515	5515
ADevModel04							5540	5540
ADevModel05							5565	5565
ADevModel06							5590	5590
ADevModel07							5615	5615
ADevModel08							5640	5640
ADevModel09							5665	5665
ADevModel10							5690	5690
ADevModel11							5715	5715
ADevModel12							5740	5740
ADevModel13							5765	5765
ADevModel14							5790	5790
ADevModel15							5815	5815
ADevOut01							5460	5460
ADevOut02							5485	5485
ADevOut03							5510	5510
ADevOut04							5535	5535
ADevOut05							5560	5560
ADevOut06							5585	5585
ADevOut07							5610	5610
ADevOut08							5635	5635
ADevOut09							5660	5660
ADevOut10							5685	5685
ADevOut11							5710	5710
ADevOut12							5735	5735
ADevOut13							5760	5760
ADevOut14							5785	5785
ADevOut15							5810	5810
ADevUDI01							5470	5470
ADevUDI02							5495	5495
ADevUDI03							5520	5520
ADevUDI04							5545	5545
ADevUDI05							5570	5570
ADevUDI06							5595	5595

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
ADevUDI07							5620	5620
ADevUDI08							5645	5645
ADevUDI09							5670	5670
ADevUDI10							5695	5695
ADevUDI11							5720	5720
ADevUDI12							5745	5745
ADevUDI13							5770	5770
ADevUDI14							5795	5795
ADevUDI15							5820	5820
AdmitDt	320	320	260	260	570	305	305	305
AdmitSrc					580	320	320	320
AFibLeftAtrialLes								4242
AFibLeftAtrialLesMeth								4244
AFibLes1						4250	4250	
AFibLes10						4300	4300	
AFibLes11						4305	4305	
AFibLes12						4310	4310	
AFibLes13						4315	4315	
AFibLes14						4320	4320	
AFibLes15a						4325	4325	
AFibLes15b						4330	4330	
AFibLes16						4335		
AFibLes2						4255	4255	
AFibLes3a						4260	4260	
AFibLes3b						4265	4265	
AFibLes4						4270	4270	
AFibLes5						4275	4275	
AFibLes6						4280	4280	
AFibLes7						4285	4285	
AFibLes8						4290	4290	
AFibLes9						4295	4295	
AFibLesMeth								4201
AFibProc						2145	2145	2145
AFibProcSurgInput							2146	2146
AFibRtAtrialLes								4246
AFibRtAtrialLesMeth								4248
AFitLesCSL							4336	
Age	120	120	140	140	140	70	70	70
AnasDev			1550	1550				

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
AnasDevU			1540	1540				
AnesEndDT						2275	2275	
AnEtilogy							4720	4720
AnLoc							4740	4740
AnlrEnl			1670	1670	4310	3460	3460	3460
AnlrEnlAo								4960
AnlrEnlTech							3461	3461
AnlrEnlTechAo								4961
AnRupt							4730	4730
AnRuptCon							4735	4735
AnType							4725	4725
AoDisAc					5516			
AoDisTyp					5517			
AortaDisZone							5035	5035
AortaInterReimp							5030	5030
AortaViscCel							5050	5050
AortaVisceral							5045	5045
AortaViscRenL							5065	5065
AortaViscRenR							5060	5060
AortaViscSup							5055	5055
AorticImplant						3470	3472	3472
AorticImplantTy						3475		
AorticTraumaLoc								4676
AortOccl	3880	3880	1400	1400	2870	2430	2430	2430
AortPresNeuroDef								4711
AortProc						2150	2128	2123
AortProcAsc						4345		
AortProcCoil						4400		
AortProcDesDist						4370		
AortProcDesMid						4365		
AortProcDesProx						4360		
AortProcHemi						4350		
AortProcOther						4410		
AortProcRoot						4340		
AortProcSurgInput							2129	2124
AortProcTEVAR						4405		
AortProcThora						4375		
AortProcTotArch						4355		
AoTrTyp					5518			

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
ApproachCon						2105	2105	2105
ArchAbLtSub							4885	
ArchAbRtSub							4884	
ArchAnom								4881
ArchAnomTy								4882
ArchBovine							4887	
ArchBranInnom							5000	
ArchBranLComm							5005	
ArchBranLSub							5010	
ArchBranLVert							5011	
ArchBranOth							5012	
ArchBranRComm							5002	
ArchBranReimp							4995	4995
ArchBranReimpLoc								4996
ArchBranRSub							5001	
ArchDiscSite							4985	4985
ArchDisExt							4990	4990
ArchDisTech							4980	4980
ArchKom							4886	
ArchPatIMA							4889	4889
ArchProc							4975	4975
ArchProxLoc								4976
ArchType							4882	
ArchVarVertOr							4888	
ArrivalDt					550			
ArrivalTm					560			
ArtCannInsertSite								2336
AscAsymDil							4891	4891
AscProxGr							4892	4892
AsmtAoDx					3020	2500	2500	
AsmtAoDxMeth							2497	
AsmtAPln					3030	2505	2505	
AsmtAscAA					3010	2495	2495	
AVAortaProcPerf								2132
AVAVCompGraftImplAo								5441
AVAVCompGrImplModelAo								5442
AVAVCompGrImplSizeAo								5443
AVAVCompGrImplUDIAo								5444
AVProcRepType								3424

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
AVProcRepTypeAo								4958
AVReplNonCorSin								3471
AVReplNonCorSinAo								4962
AVSurgProsthValInt								3425
AVSurgProsthValIntAo								4959
CAB02					3440	2770	2770	2770
CAB03					3530	2830	2830	2830
CAB04					3620	2890	2890	2890
CAB05					3710	2950	2950	2950
CAB06					3800	3010	3010	3010
CAB07					3890	3070	3070	3070
CAB08					3980	3130	3130	3130
CAB09					4070	3190	3190	3190
CAB10					4160	3250	3250	3250
CABConduit01					3380	2750	2750	2750
CABConduit02					3470	2810	2810	2810
CABConduit03					3560	2870	2870	2870
CABConduit04					3650	2930	2930	2930
CABConduit05					3740	2990	2990	2990
CABConduit06					3830	3050	3050	3050
CABConduit07					3920	3110	3110	3110
CABConduit08					4010	3170	3170	3170
CABConduit09					4100	3230	3230	3230
CABConduit10					4190	3290	3290	3290
CABDisLoc01					3355			
CABDisLoc02					3445			
CABDisLoc03					3535			
CABDisLoc04					3625			
CABDisLoc05					3715			
CABDisLoc06					3805			
CABDisLoc07					3895			
CABDisLoc08					3985			
CABDisLoc09					4075			
CABDisLoc10					4165			
CABDistPos01					3410	2755	2755	2755
CABDistPos02					3500	2815	2815	2815
CABDistPos03					3590	2875	2875	2875
CABDistPos04					3680	2935	2935	2935
CABDistPos05					3770	2995	2995	2995

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
CABDistPos06					3860	3055	3055	3055
CABDistPos07					3950	3115	3115	3115
CABDistPos08					4040	3175	3175	3175
CABDistPos09					4130	3235	3235	3235
CABDistPos10					4220	3295	3295	3295
CABDistSite01					3390	2730	2730	2740
CABDistSite02					3480	2790	2790	2800
CABDistSite03					3570	2850	2850	2860
CABDistSite04					3660	2910	2910	2920
CABDistSite05					3750	2970	2970	2980
CABDistSite06					3840	3030	3030	3040
CABDistSite07					3930	3090	3090	3100
CABDistSite08					4020	3150	3150	3160
CABDistSite09					4110	3210	3210	3220
CABDistSite10					4200	3270	3270	3280
CABDistTech01					3400			
CABDistTech02					3490			
CABDistTech03					3580			
CABDistTech04					3670			
CABDistTech05					3760			
CABDistTech06					3850			
CABDistTech07					3940			
CABDistTech08					4030			
CABDistTech09					4120			
CABDistTech10					4210			
CABEndArt01					3420	2760	2760	2760
CABEndArt02					3510	2820	2820	2820
CABEndArt03					3600	2880	2880	2880
CABEndArt04					3690	2940	2940	2940
CABEndArt05					3780	3000	3000	3000
CABEndArt06					3870	3060	3060	3060
CABEndArt07					3960	3120	3120	3120
CABEndArt08					4050	3180	3180	3180
CABEndArt09					4140	3240	3240	3240
CABEndArt10					4230	3300	3300	3300
CABHybrPCI					3165			
CABHyPCI01					3430			
CABHyPCI02					3520			
CABHyPCI03					3610			

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
CABHyPCI04					3700			
CABHyPCI05					3790			
CABHyPCI06					3880			
CABHyPCI07					3970			
CABHyPCI08					4060			
CABHyPCI09					4150			
CABHyPCI10					4240			
CABPctSten01					3356			
CABPctSten02					3446			
CABPctSten03					3536			
CABPctSten04					3626			
CABPctSten05					3716			
CABPctSten06					3806			
CABPctSten07					3896			
CABPctSten08					3986			
CABPctSten09					4076			
CABPctSten10					4166			
CABPrevCon01					3357			
CABPrevCon02					3447			
CABPrevCon03					3537			
CABPrevCon04					3627			
CABPrevCon05					3717			
CABPrevCon06					3807			
CABPrevCon07					3897			
CABPrevCon08					3987			
CABPrevCon09					4077			
CABPrevCon10					4167			
CABProximalSite01					3360	2740	2740	2730
CABProximalSite02					3450	2800	2800	2790
CABProximalSite03					3540	2860	2860	2850
CABProximalSite04					3630	2920	2920	2910
CABProximalSite05					3720	2980	2980	2970
CABProximalSite06					3810	3040	3040	3030
CABProximalSite07					3900	3100	3100	3090
CABProximalSite08					3990	3160	3160	3150
CABProximalSite09					4080	3220	3220	3210
CABProximalSite10					4170	3280	3280	3270
CABProxTech01					3370			
CABProxTech02					3460			

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CABProxTech03					3550			
CABProxTech04					3640			
CABProxTech05					3730			
CABProxTech06					3820			
CABProxTech07					3910			
CABProxTech08					4000			
CABProxTech09					4090			
CABProxTech10					4180			
CABUnpln	2550	2550						
CABVeinPatAng01							2765	
CABVeinPatAng02							2825	
CABVeinPatAng03							2885	
CABVeinPatAng04							2945	
CABVeinPatAng05							3005	
CABVeinPatAng06							3065	
CABVeinPatAng07							3125	
CABVeinPatAng08							3185	
CABVeinPatAng09							3245	
CABVeinPatAng10							3305	
CalculatedBMI								336
CanAortAtr				1393				
CanAortFem				1391				
CanArtStAort					2851	2340	2340	
CanArtStAx					2853	2350	2350	
CanArtStFem					2852	2345	2345	
CanArtStInn						2355	2355	
CanArtStOth					2854	2360	2360	
CanFemAtr				1394				
CanFemFem				1392				
Cannulat	3760	3760	1390					
CanOther				1395				
CanVenStBi					2862	2390	2390	
CanVenStFem					2856	2365	2365	
CanVenStJug					2857	2370	2370	
CanVenStLfA					2859	2380	2380	
CanVenStOth					2863	2395	2395	
CanVenStPulm					2861	2385	2385	
CanVenStRtA					2858	2375	2375	
CathBasAssist					4660	3745	3745	3786

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CathBasAssistDev					4670			
CathBasAssistInd					4700	3765	3765	
CathBasAssistRemDt					4710			
CathBasAssistTy						3755	3755	3788
CathBasAssistWhen					4690	3760	3760	3789
CCancCase					2424	2050	2050	
CCancCaseCAB					2427	2065	2065	
CCancCaseMech					2429	2075	2075	
CCancCaseOC					2430	2095	2095	
CCancCaseONC					2431	2080	2080	
CCancCaseRsn					2426	2060	2060	
CCancCaseTmg					2425	2055	2055	
CCancCaseVal					2428			
CCancCaseValSur						2085	2085	
CCancCaseValTrans						2090	2090	
Celiac							5220	5220
CeliacAortaCeli							5225	
CeliacExtraAnatByp								5221
CeliacIliacCeliac							5245	
CeliacOther							5265	
CerOxUsed					2930	2450	2450	2450
CircArr				1381	2865	2405	2405	2405
ClinTrial						45	45	45
ClinTrialPatID						46	46	46
CnvIndic	3520	3520						
CnvStdIn	3510	3510						
COFirstInd				1426	2980			
CombCardPCI						2585		
CombProcs						2590		
CombProcsPCI						2600		
CombProcsStatus						2595		
CombProcsStentTy						2605		
ComMngMedPlnPrim								292
ComMngMedPlnSec								299
CompMAD						4010		
CompMAD1						4015		
CompMAD2						4020		
CompMAD3						4025		
ConCalc					3005	2490	2490	

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ConvCPB		3479						
ConvToOpen							5404	5404
ConvToOpenRes							5405	5405
CoolingTimePriorCircArr								2427
CorShunt	3930	3930						
CostLink		52	60	60	60	35	35	
CPBCmb			1360	1360	2750	2330	2330	2330
CPBCmbR			1370	1370	2760	2335	2335	2335
CPBUsed	3750	3478						
CPBUtil			1350	1350	2740	2325	2325	2325
CPerfTime					2868	2420	2420	2420
CPerfTyp					2869	2425	2425	2425
CPerfUtil					2867	2415	2415	2415
Cplegia	4380	4380	1420	1420				
CplegiaDeliv					2900	2440	2440	2440
CplegiaType					2901	2445	2445	2445
CPT1Code1				1321	2510	2195	2195	2195
CPT1Code10				1330	2600	2240	2240	2240
CPT1Code2				1322	2520	2200	2200	2200
CPT1Code3				1323	2530	2205	2205	2205
CPT1Code4				1324	2540	2210	2210	2210
CPT1Code5				1325	2550	2215	2215	2215
CPT1Code6				1326	2560	2220	2220	2220
CPT1Code7				1327	2570	2225	2225	2225
CPT1Code8				1328	2580	2230	2230	2230
CPT1Code9				1329	2590	2235	2235	2235
CumulSatLft				1424	2960			
CumulSatRt				1425	2970			
DataVrsn	30	30	30	30	30	15	15	15
DescAortaLoc							5020	5020
DescAortaProc							5015	5015
DHCATm				1382	2866	2410	2410	2410
Diam3DAnnulus							4900	
Diam3DDistalAsc							4920	
Diam3DMidAsc							4915	
Diam3DSinotubular							4910	
Diam3DSinus							4905	
Diam3DZone1							4925	
Diam3DZone10							4946	

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Diam3DZone11							4947	
Diam3DZone2							4930	
Diam3DZone3							4935	
Diam3DZone4							4940	
Diam3DZone5							4941	
Diam3DZone6							4942	
Diam3DZone7							4943	
Diam3DZone8							4944	
Diam3DZone9							4945	
Diameter3DMeas							4895	
DiamLgstAnnulus							4948	
DiamLgstDistalAsc							4952	
DiamLgstMidAsc							4951	
DiamLgstSinotubular							4950	
DiamLgstSinus							4949	
DiamLgstZone1							4953	
DiamLgstZone10							4962	
DiamLgstZone11							4963	
DiamLgstZone2							4954	
DiamLgstZone3							4955	
DiamLgstZone4							4956	
DiamLgstZone5							4957	
DiamLgstZone6							4958	
DiamLgstZone7							4959	
DiamLgstZone8							4960	
DiamLgstZone9							4961	
DisLowMotFun							4836	4836
DisLowSenDef							4837	4837
DisMal							4785	4785
DisMalCel							4810	
DisMalComL							4800	
DisMalCor							4790	
DisMalIlio							4830	
DisMalRenL							4820	
DisMalRenR							4825	
DisMalRtComCar							4792	
DisMalRtSubclav							4791	
DisMalSpin							4835	
DisMalSubL							4805	

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DisMalSup							4815	
DisMalType								4786
DisOnsetDt							4747	4747
DisOnsetDtKnown							4746	4746
DisPosTEVAR							4770	4782
DisProxTearCov							5401	5401
DisRetExt							4760	4760
DisRetLoc							4765	4765
DisRupt							4840	4840
DisRuptCon							4845	4845
DisRuptLoc							4850	4850
DisSecLoc							4755	
DistalExt							4775	4775
DistalExtLoc							4780	4780
DistAnastArtCond								2630
DistArt	2570	2570	1520	1520	3190	2625		
DisTearLoc							4750	4750
DisTiming							4745	4745
DistTreatZoneAvail								4933
DistTreatZoneAvailLoc								4934
DistTreatZoneAvailMeas								4935
DistTreatZoneAvailMeth								4936
DistVein	2580	2580	1530	1530	3200	2630	2638	2638
DistVeinHTech				1531	3205	2635	2639	
DOB	110	110	130	130	130	65	65	65
ECMO					4730	3775	3775	3776
ECMOInd					4750	3785	3785	
ECMOWhen					4740	3780	3780	3780
EmergRsn	2320	2320	1260	1260	2410			
EndoBalFenDisFlap								5439
EndoDistalZone							5080	5080
EndoEndProc							5402	5402
EndoEndProcTy							5403	5403
Endoleak							4620	4620
EndoleakTyILoc							4630	4630
EndoleakType							4650	4650
EndoleakTypeI							4625	4625
EndoleakTypeII							4635	4635
EndoleakTypeIII							4645	4645

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
EndoleakTypeIV							4655	4655
EndoleakTypeV							4660	4660
EndoleakVessNum							4640	4640
EndoProc					5520			
EndoProcDeb					5521			
EndoProxZone							5070	5070
EndovasAccess							5067	5067
EndovasPercAcc							5068	5068
EndovasProc							5066	5066
EndovasTAVR							5090	
EndovasTEVAR							5095	5095
ErrFlag	-30	-30	-30	-30	-30			
Ethnicity				199	350	185	185	185
ExpiredInOR								6546
ExtubateDT				1338	2680	2260	2260	6586
FamHistAorta							4500	4500
FlowPtcy	4080	4080						
GenAnes							2251	2251
Gender	130	130	150	150	150	75	75	75
HeightCm	420	420	360	360	640	330	330	330
HICNMBI								294
HICNMBIKnown								293
HICNMBIKnownSec								300
HICNMBINumberSec								301
HICNumber				171	440			
HighIntraGlu						2320	2320	2320
HospCMSCert							221	221
HospName	280	280	220	220	380	205	205	205
HospNPI				241	410	220	220	220
HospStat	284	284	240	240	400	215	215	215
HospZIP	282	282	230	230	390	210	210	210
HPVCI			1980	1980				
HPVCVP			1960	1960				
HPVPCWP			1950	1950				
HPVPVO2			2020					
HPVPVO2M			2010					
HPVPVR			1970					
HPVRVEF			1990	1990				
HPVRVMth			2000					

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Hrvstnum	-40	-40	-40	-40	-40			
HybrProc					3180			
HybrStat					3170			
IABP	4480	4480	1430	1430	4610	3725	3725	3725
IABPInd	4500	4500	1450	1450	4630	3735	3735	
IABPRemDt					4640			
IABPWhen	4490	4490	1440	1440	4620	3730	3730	3730
IAntifibMed								2557
IAntifibMedGiven								2556
IBdCryoU			1490	1490	3080	2535	2535	2535
IBdFactorVII					3091			
IBdFFPU			1480	1480	3070	2525	2525	2525
IBdPlatDosePk								2521
IBdPlatU			1500	1500	3090	2530	2530	
IBdRBCU			1470	1470	3060	2520	2520	2520
IBldProd			1460	1460	3040	2515	2515	2515
IBldProdRef				1461	3050	2510	2510	
IMAArtUs	2590	2590	1560	1560	3210	2655		
IMATechn	4070	4070	1570	1570	3240	2670		
IMAUsed							2626	2626
IMedAprot				1509				
IMedAprotD				1510				
IMedDesmo				1512				
IMedEACA				1511	3120	2550	2550	
IMedTran				1513	3140	2555	2555	
InAortaCarotid							5110	
InAortaInnom							5105	
InAortaSubclav							5115	
InCaroSubclav							5125	
Incidenc			560	1230	2380	1970	1970	1970
IndMnInv	3480	3480						
InExtraAnatBypLoc								5101
Infection							4665	4665
InfecType							4670	4670
Innominate							5100	5100
InOpTEE					3157	2560	2560	2560
InOther							5135	
IntDisExten							5406	5406
IntIliacPres							5396	5386

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IntPVAD			1940	1940				
IntraClotFact						2545	2545	2545
IntraOpAng							5436	5436
IntraOpAngFlTm							5438	5438
IntraOpAngVol							5437	5437
IntraOpEEG							5432	5432
IntraOpEEGAb							5433	5433
IntraOpIVUS							5434	5434
IntraopProComCon							2546	2546
Intubate							2253	2253
IntubateDT				1337	2670	2255	2255	
IschTCFX	3970							
IschTLAD	3950							
IschTRCA	3960							
LeftCarotid							5140	5140
LeftCarotidExtraAnatByp								5141
LeftIliac							5393	5382
LeftIliacExtraAnatByp								5383
LeftIMA							2629	2627
LeftRenal							5370	5360
LeftRenalExtraAnatByp								5361
LeftSubclavExtraAnatByp								5181
LeftSubclavian							5180	5180
LIMAHarvTech							2630	
LowestHematocritCPB								2406
LTCaroAortaCaro							5150	
LTCaroCarotid							5170	
LTCaroInnomCaro							5160	
LTCaroOther							5175	
LtIliacFemFem							5394	
LtIliacOther							5395	
LtRenAortaLtRe							5375	
LtRenIliacLtRen							5380	
LtRenOther							5385	
LTSubAortaSub							5195	
LTSubCarotidSub							5205	
LTSubOther							5213	
LVADInf			2110	2032				
LVADinf2				2131				

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LVADInf3				2211				
LwstHct					2790	2315	2315	2315
LwstIntraHemo						2310	2310	2310
LwstTemp					2780	2300	2300	2300
LwstTempSrc						2305	2305	2305
MCADECMO								3766
MechVentAssistDevice								2137
MedRecN				170	170	85	85	85
MitralImplant						3615	3615	3615
MitralImplantTy						3620	3620	3620
MitralIntent				1641	4410	3600	3600	3600
MitralLeafletClipNum								3621
MotorEvoke							5425	5425
MotorEvokeAb							5426	5426
NoIMARsn					3220	2660	2627	2629
NumArtArtComp							2652	
NumArtVenComp							2650	
NumGEPDA	2700	2700	1610	1610				
NumIMADA	2660	2660	1580	1580	3230	2665	2628	
NumIncis	3500	3500						
NumOArtD			1620	1620	3300	2705	2641	
NumRadArtUs					3260	2675		
NumRadDA	2680	2680	1600	1600	3270	2680	2634	2634
NumVenArtComp							2651	
OCAoProcType					5471			
OCarAAMeth							4051	4139
OCarAAModel							4052	
OCarAAppAmp								4142
OCarAAProc						4080	4050	
OCarAAUDI							4053	4141
OCarACD			2450	2450	5400	4085	4055	4055
OCarACDL			2460	2460				
OCarACDLE					5430	4120	4065	4065
OCarACDLI					5410			
OCarAcqVSD								4131
OCarAFES			2480					
OCarAFib			2470	2470				
OCarAFibAProc					5465			
OCarAFibEpLes						4070	4045	

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OCarAFibIntraLes						4105	4040	
OCarAFibLesLoc						4191	4191	4191
OCarAFibMethCAS					5460	4210	4210	
OCarAFibMethCryo					5457	4215	4215	
OCarAFibMethLas					5459			
OCarAFibMethMicro					5458			
OCarAFibMethRad					5455	4200	4200	
OCarAFibMethRadBi						4205	4205	4205
OCarAFibMethUltra					5456			
OCarAFibSur					5450			
OCarAFibSurLAA					5452			
OCarAFibSurLoc					5451			
OCarAICD	4240	4240						
OCarASD	4170	4170	2380	2380	5240			
OCarASDPFO						4075	4030	
OCarASDSec						4110	4035	
OCarASDTy					5241			
OCarBati	4180	4180	2390	2390				
OCarCong	4190	4190	2410	2410	5300	4162	4070	2150
OCarCongDiag1					5310	4500	6500	6500
OCarCongDiag2					5320	4505	6505	6505
OCarCongDiag3					5330	4510	6510	6510
OCarCongProc1					5340	4515	6515	6515
OCarCongProc2					5350	4520	6520	6520
OCarCongProc3					5360	4525	6525	6525
OCarCrTx	4220	4220	2440	2440	5390	4152	4120	4120
OCardASDRep								4136
OCardASDRepTyp								4137
OCardPFORep								4138
OCarLasr	4200	4200	2420	2420	5370	4100	4110	4110
OCarLeadInsert						4090	4060	4060
OCarLesDoc						4195	4240	4240
OCarLVA	4150	4150	2360	2360	5220	4125	4075	4054
OCarOthr	4250	4250	2560	2560	5550	4160	4135	4135
OCarPace	4230	4230						
OCarStemCell						4095	4080	4053
OCarSubaStenRes						4135	4090	
OCarSubaStenResTy						4140	4100	4051
OCarSVR		4185	2400	2400	5290	4145	4105	

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
OCarTrma	4210	4210	2430	2430	5380	4153	4125	4125
OCarVSD	4160	4160	2370	2370	5230	4155	4130	
OCPulThromDis					5540	4130	4085	4052
OCTumor					5530	4150	4115	4115
ONCAoAn	4260	4260	2510	2510				
ONCAoGraft					5474			
ONCAoRt					5473			
ONCArch			2530	2530	5490			
ONCArchRepExt					5491			
ONCAsc			2520	2520	5480			
ONCCarEn	4320	4320	2570	2570	5560	4530	6530	6530
ONCDesc			2540	2540	5500			
ONCOther			2600	2600	5590	4545	6545	6545
ONCOThor	4340	4340	2590	2590	5580	4540	6540	6540
ONCOVasc	4330	4330	2580	2580	5570	4535	6535	6535
ONCThAbd			2550	2550	5510			
ONCThAbdExtent					5514			
ONCThAbdGraft					5511			
ONCThAbdInterVes					5512			
ONCThAbdLumCSF					5513			
OnDemandVrsn					31	20	20	
OpAortic	2350	2350	1630	1630				
OPApp					2435	2100	2100	2100
OpCAB	2340	2340	1280	1280	2437	2120	2120	2120
OpMinInv	2500							
OpMitral	2360	2360	1640	1640				
OpOCard	2510	2510	1310	1310	2490	2140	2140	2140
OpONCard	2520	2520	1320	1320	2500	2155	2155	2155
OpPulm	2380	2380	1660	1660	4560	3690	3690	3690
OpTricus	2370	2370	1650	1650	4500	3645		
OpTricusAnTy					4510	3655	3648	3638
OpValSurgInput							2126	2136
OpValve			1290	1290	2440	2125	2125	2129
OREntryDT				1335	2610	2245	2245	2245
ORExitDT				1336	2620	2250	2250	2250
OthArchVes							5214	
OthHosCS					590	325	325	325
OthInnomCaro							5215	
OthInnomSub							5216	

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OthOther							5218	
OthSubSub							5217	
OthVisAortOth							5398	
OthVisIliacOth							5399	
OthVisOther							5400	
OthVisVes							5397	5387
OthVisVesExtraAnatBypLoc								5388
ParticID	40	40	40	40	40	25	25	25
PatAddr					180	90	90	90
PatCity					190	95	95	95
PatCountry					220			
PatFName				110	100	55	55	55
PatGenHist							4505	4505
PatID	60	60	80	80	80	40	40	40
PatientCountry						115	115	115
PatLName				100	90	50	50	50
PatMInit				120				
PatMName					120	60	60	60
PatPermAddr					240			
PatPermCity					250			
PatPermCountry					280			
PatPermRegion					260			
PatPermZIP					270			
PatRegion					200	100	100	100
PatZIP	190	190	180	180	210	105	105	105
PayorCom				254	510	275		
PayorGov				247	420	225		
PayorGovCor					500	265		
PayorGovIHS				252	490	260		
PayorGovMcaid				249	460	245		
PayorGovMcare				248	430	230		
PayorGovMcareFFS					450	240		
PayorGovMil				250	470	250		
PayorGovOth						270		
PayorGovState				251	480	255		
PayorHMO				255	520	280		
PayorNonUS				256	530	285		
PayorNS				257	540	290		
PayorPrim							291	291

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PayorSecond							293	298
PCancCase					2415	1995	1995	
PCancCaseCAB					2419	2015	2015	
PCancCaseDt					2416	2000	2000	
PCancCaseMech					2421	2020	2020	
PCancCaseOC					2422	2040	2040	
PCancCaseONC					2423	2025	2025	
PCancCaseRsn					2418	2010	2010	
PCancCaseTmg					2417	2005	2005	
PCancCaseVal					2420			
PCancCaseValSur						2030	2030	
PCancCaseValTrans						2035	2035	
PeakPostCreat48Hrs								6550
PerfusTm	4360	4360	1380	1380	2770	2400	2400	2400
PermAddr					230	120	120	
PlanStagHybrid							4970	5400
PPEF							2582	2582
PPEFMeas							2581	2581
PPPlanedPCI							2606	2606
Pred14D		5690	3330	3330	6670	5210	7210	7210
Pred6D		5680	3320	3320	6660	5205	7205	7205
PredCoefVrsn				3249				
PredDeep		5620	3260	3260	6600	5175	7175	7175
PredMM		5670	3310	3310	6650	5200	7200	7200
PredMort	2530	5610	3250	3250	6590	5170	7170	7170
PredRenF		5660	3300	3300	6640	5195	7195	7195
PredReop		5630	3270	3270	6610	5180	7180	7180
PredStro		5640	3280	3280	6620	5185	7185	7185
PredVent		5650	3290	3290	6630	5190	7190	7190
PRepAGradM							2566	2566
PRepAPVL							2567	2567
PRepAR					3158	2565	2565	2565
PRepEF						2580		
PRepMGradM							2571	2571
PRepMPVL							2572	2572
PRepMR					3159	2570	2570	2570
PRepTGradM							2576	2576
PRepTPVL							2577	2577
PRepTR					3161	2575	2575	2575

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PreRSO2Lft				1422	2940			
PreRSO2Rt				1423	2950			
Presentation							4710	4710
PrevVAD			1920	1920	4760	3790	3790	3790
PrevVADD					4771	3800	3800	3800
PrevVADDevice					4774	3815	3815	3815
PrevVADExp						3825	3825	3825
PrevVADExpDt						3835	3835	
PrevVADExpRsn						3830	3830	
PrevVADF				1921	4770	3795	3795	
PrevVADIn					4772	3805	3805	
PrevVADTy					4773	3810	3810	
PrevVADUDI						3820	3820	3820
PrimInc	3490	3490						
PrimIndic							4715	4712
PrimIndicOther								4851
PrimMCareFFS							292	295
PriorAorta							4510	4510
PriorFailArch							4532	4532
PriorFailAsc							4527	4527
PriorFailDesc							4537	4537
PriorFailInfraAb							4547	4547
PriorFailRoot							4522	4522
PriorFailSupraAb							4542	4542
PriorProgArch							4533	4533
PriorProgAsc							4528	4528
PriorProgDesc							4538	4538
PriorProgInfraAb							4548	4548
PriorProgRoot							4523	4523
PriorProgSupraAb							4543	4543
PriorRepArch							4530	4530
PriorRepAsc							4525	4525
PriorRepDesc							4535	4535
PriorRepInfraAb							4545	4545
PriorRepRoot							4520	4520
PriorRepSupraAb							4540	4540
PriorRepTyArch							4531	4531
PriorRepTyAsc							4526	4526
PriorRepTyDesc							4536	4536

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PriorRepTyInfraAb							4546	4546
PriorRepTyRoot							4521	4521
PriorRepTySupraAb							4541	4541
ProcID	-10	-10	-10	-10	-10			
ProcSed							2252	2252
ProxTech						2710	2710	2710
ProxTreatZoneAvail								4929
ProxTreatZoneAvailLoc								4930
ProxTreatZoneAvailMeas								4931
ProxTreatZoneAvailMeth								4932
PtLess30PostOthCath								4784
PtLess30PostTAVR								4783
PulmonicImplant						3700	3700	3700
PulmonicImplantTy						3705	3705	3705
PVCmpBld			2290	2290	5140			
PVCmpBO				2341	5200			
PVCmpDCI			2310	2310	5160			
PVCmpEnd			2330	2330	5180			
PVCmpESt			2300	2300	5150			
PVCmpHem					5191			
PVCmpMal			2340	2340	5190			
PVCmpPPI			2320	2320	5170			
Race	210	210	190					
RaceAsian				193	310	165	165	
RaceBlack				192	300	160	160	
RaceCaucasian				191	290	155	155	
RaceDocumented						150	150	150
RaceMulti								151
RaceNativeAm				194	320	170	170	
RaceOther				196	340	180	180	
RacNativePacific				195	330	175	175	
RadArtUs	2670	2670	1590	1590				
RadHarvPrepTm						2700	2636	2636
RadHrvstT				1602	3285			
RadHTech				1601	3280	2685	2635	
RadialArtUsed							2633	2633
RadPrepT					3286			
RcrdNum	-50	-50	-50	-50	-50			
RecComp	70							

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RecordID	50	50	50	50	50	30	30	30
ResectSubA					4311			
RightIliac							5390	5378
RightIliacExtraAnatByp								5379
RightIMA							2631	2628
RightRenal							5320	5320
RightRenalExtraAnatByp								5321
RIMAHarvTech							2632	
RiskDiscussed							1966	1966
Robotic			1270	1270	2436	2110	2110	2110
RobotTim						2115	2115	2115
RootAAnnEctasia							4855	4855
RootDilaAsym							4870	4870
RootSinus							4880	4878
RootSinusLoc							4881	
RootSinusLocMult								4880
RoottDilaAsym							4875	4875
RtIliacFemFem							5391	
RtIliacOther							5392	
RtRenAortaRtRe							5335	
RtRenIliacRtRen							5355	
RtRenOther							5365	
RVADInf			2120	2033				
RVADinf2				2132				
RVADInf3				2212				
SameDay	350	350						
SaphHarPrepTm						2650	2640	2640
SaphHrvstT				1532	3206			
SaphPrepT					3207			
SCRSO2Lft				1427	2990			
SCRSO2Rt				1428	3000			
SecondMCareFFS							294	302
SIStartDT				1341	2690	2265	2265	2265
SIStartT		4347	1330					
SIStopDT				1342	2700	2270	2270	2270
SIStopT		4348	1340					
SoftVrsn	20	20	20	20	20	10	10	
SomatEvoke							5430	5430
SomatEvokeAb							5431	5431

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SpinalDrain							5420	5420
SSN				160	160	80	80	80
SSNKnown							76	76
StanfordClass								4781
Status	2300	2300	1240	1240	2390	1975	1975	1975
STSCustNum1				3400	6680			
STSCustNum2				3410	6690			
STSCustNum3				3420	6700			
STSCustNum4				3430	6710			
STSCustNum5				3440	6720			
STSCustTxt1				3450	6730			
STSCustTxt2				3460	6740			
STSCustTxt3				3470	6750			
STSCustTxt4				3480	6760			
STSCustTxt5				3490	6770			
STSTLink		54	70	70				
SupMesAortaSuMe							5280	
SupMesenteric							5270	5270
SupMesExtraAnatByp								5271
SupMesIliacSupMe							5300	
SupMesOther							5315	
SurgDt	330	330	270	270	610	310	310	310
Surgeon	2230	2230	1210	1210	2350	1955	1955	1955
SurgGrp	2235	2235						
SurgID			1220					
SurgNPI				1221	2360	1960	1960	1960
SurgProsValInt								3612
SurgYear	-20	-20	-20	-20	-20			
SutrTech	4040	4040						
SynthGft						4380		
SynthGftCSF						4390		
SynthGftEleph						4395		
SynthGftInter						4385		
TempAssistDevPos								3787
TempCode						5230	7230	7230
TempDt						5225	7225	7225
TempMeas							2296	2296
TempText						5235	7235	7235
TempYN1						5215	7215	7215

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TempYN2						5220	7220	7220
TIN				1222	2370	1965	1965	1965
TotalNoDistAnastArtCond								2631
TotCircArrTm						2426	2426	2426
TotHrICU		357	340	340				
TransDoppler							5435	5435
Trauma							4675	4675
TraumaAbdom							4705	
TraumaArch							4690	
TraumaAsc							4685	
TraumacRoot							4680	
TraumaDesc							4695	
TraumaThorac							4700	
TricusImplantTy						3665	3665	3665
TricuspidImplant						3660	3660	3660
TrtZnLrgDiam								4926
TrtZnLrgDiamMeas								4927
TrtZnLrgDiamMeasMeth								4928
UnintRup							5407	5407
UnintRupLoc							5408	5408
UnplAo					2505			
UnplAV					2503			
UnplCABG					2502			
UnplMV					2504			
UnplOth					2507			
UnplProc					2501			
UnplVAD					2506			
UrgEmergRsn						1990	1990	1990
UrgntRsn	2310	2310	1250	1250	2400			
VAD	4550	4550	1300	1300				
VADDiscS			2350	2350	5210			
VADImp						3840	3840	3840
VADImpTmg						3845	3845	3845
VADImpTmg2						3900	3900	3900
VADImpTmg3						3955	3955	3955
VADInd			1930	1930	4790	3850	3850	3850
VADInd2						3905	3905	3905
VADInd3						3960	3960	3960
VADListVrsn				1922				

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VADProc					2480	2130		
ValExp					2450	3310	3310	2130
ValExp2					2463	3350	3350	3350
ValExp2ImplantYr								3382
ValExp2YrImplantKn								3381
ValExp3								3385
ValExp3ImplantYr								3393
ValExp3YrImplantKn								3392
ValExpDev					2462	3335	3335	3335
ValExpDev2					2467	3375	3375	3375
ValExpDev3								3390
ValExpDev3UDI								3391
ValExpDevKnown						3330	3330	3330
ValExpDevKnown2						3370	3370	3370
ValExpDevKnown3								3389
ValExpDevUDI						3380	3380	3380
ValExpEt						3325	3325	3325
ValExpEt2						3365	3365	3365
ValExpEt3								3388
ValExpMan					2461			
ValExpMan2					2466			
ValExpPos					2451	3315	3315	3315
ValExpPos2					2464	3355	3355	3355
ValExpPos3								3386
ValExpTyp					2460	3320	3320	3320
ValExpTyp2					2465	3360	3360	3360
ValExpTyp3								3387
ValExpUDI						3340	3340	3340
ValExpYr								3342
ValExpYrKn								3341
ValveVrsn				1881				
VCardTx			2090					
VCardTx2			2190					
VCardTx3			2270					
VenCannInsertSite								2361
VendorID	10	10	10	10	10	5	5	5
VenousCondUsed							2637	2637
VExp			2060	2060	4900	3875	3875	3875
VExp2			2160	2160	5000	3930	3930	3930

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VExp3			2240	2240	5100	3985	3985	3985
VExpDt			2070	2070	4910	3885	3885	3885
VExpDt2			2170	2170	5010	3940	3940	3940
VExpDt3			2250	2250	5110	3995	3995	3995
VExpRsn			2080	2080	4920	3880	3880	3880
VExpRsn2			2180	2180	5020	3935	3935	3935
VExpRsn3			2260	2260	5120	3990	3990	3990
VImp2				2129	4940	3895	3895	3895
VImp3				2209	5040	3950	3950	3950
VImpDt			2050	2050	4890	3865	3865	3865
VImpDt2			2150	2150	4990	3920	3920	3920
VImpDt3			2230	2230	5090	3975	3975	3975
VImpTy			2030	2030	4850	3855	3855	3855
VImpTy2			2130	2130	4950	3910	3910	3910
VImpTy3			2210	2210	5050	3965	3965	3965
VImpUDI						3870	3870	3870
VImpUDI2						3925	3925	3925
VImpUDI3						3980	3980	3980
VProdTy			2040	2040	4880	3860	3860	3860
VProdTy2			2140	2140	4980	3915	3915	3915
VProdTy3			2220	2220	5080	3970	3970	3970
VSAoEx	3280	3280						
VSAoExSz	3290	3290						
VSAoExTy	3270	3270						
VSAoIm	3250	3250	1690	1690	4330	3480	3480	3480
VSAoImSz	3260	3260	1700	1700	4340	3485	3485	3485
VSAoImTy	3240	3240	1680	1680				
VSAoImUDI						3490	3490	3490
VSAV					4270	3390	3390	2131
VSAVAo								4951
VSAVCorReimp								4969
VSAVPat							3469	
VSAVPatTy							3470	
VSAVPr					4280	3395	3395	3395
VSAVPrAo								4952
VSAVRComA					4282	3410	3410	
VSAVRComRS					4288	3425	3425	
VSAVRDeb					4289	3450	3450	
VSAVRepBioTy							3465	4967

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VSAVRExSutAn							3411	
VSAVRLeafShav							3441	
VSAVRLPlic					4284	3415	3415	
VSAVRLPPatch					4287	3445	3445	
VSAVRLResect					4285	3440	3440	
VSAVRNodRel							3416	
VSAVRoot							3462	4963
VSAVRootOReimp							3463	4964
VSAVRootOReimpTy							3464	4966
VSAVRootOReimpType								4965
VSAVRootRecon							3468	4970
VSAVRPeriLeak						3455	3455	
VSAVRPTFE					4286	3420	3420	
VSAVRRaphe					4290	3430	3430	
VSAVRRingA					4283	3435	3435	
VSAVRRingATy							3436	
VSAVSparRt							3466	
VSAVSparRtOp							3467	4968
VSAVSurgBioT							3409	3404
VSAVSurgBioTAo								4957
VSAVSurgRep							3407	3402
VSAVSurgRepAo								4955
VSAVSurgType							3408	3403
VSAVSurgTypeAo								4956
VSChordalTransLoc								3512
VSChorLfAnt							3551	
VSChorLfAntA1							3553	
VSChorLfAntA2							3554	
VSChorLfAntA3							3555	
VSChorLfAntLocD							3552	
VSChorLfCom							3561	
VSChorLfComLoc							3562	
VSChorLfPost							3556	
VSChorLfPostLocD							3557	
VSChorLfPostP1							3558	
VSChorLfPostP2							3559	
VSChorLfPostP3							3560	
VSChorPres					4450	3605	3605	3605
VSLeafAntRes							3517	

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VSLeafAntResA1							3519	
VSLeafAntResA2							3520	
VSLeafAntResA3							3521	
VSLeafAntResLocD							3518	
VSLeafComRes							3527	
VSLeafComResLoc							3528	
VSLeafPostRes							3522	
VSLeafPostResLocD							3523	
VSLeafPostResP1							3524	
VSLeafPostResP2							3525	
VSLeafPostResP3							3526	
VSLeafRepLoc					4390	3520		
VSLeafResTyp					4380	3515	3515	
VSLeafResTypMult								3510
VslStblz	4050	4050						
VSMiEx	3340	3340						
VSMiExSz	3350	3350						
VSMiExTy	3330	3330						
VSMiIm	3310	3310	1750	1750	4430	3625	3625	3625
VSMiImSz	3320	3320	1760	1760	4440	3630	3630	3630
VSMiImTy	3300	3300	1740	1740				
VSMiImUDI						3635	3635	3634
VSMitParaprosLeak							3591	
VSMitRADecalc					4393	3545	3567	
VSMitRAnnulo					4361	3505	3505	
VSMitRChord					4401	3560	3550	
VSMitREdge					4403	3570	3570	
VSMitRFold						3535	3565	
VSMitRLeafDeb						3530		
VSMitRLeafERP					4402	3565	3568	
VSMitRLeafERPLoc							3569	3513
VSMitRLeafPlic						3525		
VSMitRLeafRes					4362	3510	3510	
VSMitRMitCleft						3590	3590	
VSMitRMitComm					4404	3580	3580	
VSMitRMitCplasty						3585	3585	
VSMitRMitOth						3595		
VSMitRMLeafClip						3575		
VSMitRPTFE					4394	3550	3532	

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
VSMitRSlidP					4391	3540	3566	
VSMV					4351	3495	3495	2133
VSMVPr					4352	3500	3500	3500
VSMVRepApp							3501	3501
VSMVRepAppSurg								3502
VSMVResLoc								3503
VSNeoAnt							3534	
VSNeoAntA1							3536	
VSNeoAntA2							3537	
VSNeoAntA3							3538	
VSNeoAntLocD							3535	
VSNeoChNum					4400	3555		
VSNeochordLoc								3511
VSNeoCom							3544	
VSNeoComLoc							3545	
VSNeoPost							3539	
VSNeoPostLocD							3540	
VSNeoPostP1							3541	
VSNeoPostP2							3542	
VSNeoPostP3							3543	
VSPuEx	3460	3460						
VSPuExSz	3470	3470						
VSPuExTy	3450	3450						
VSPuIm	3430	3430	1870	1870	4580	3710	3710	3710
VSPuImpMat							3702	3702
VSPuImSz	3440	3440	1880	1880	4590	3715	3715	3715
VSPuImTy	3420	3420	1860	1860				
VSPuImUDI						3720	3720	3720
VSPuTypeImp							3701	3701
VSPV						3685	3685	2135
VSTCV					4295	3400	3400	3400
VSTCVAo								4953
VSTCVMit						3610	3610	3610
VSTCVPu						3695	3695	3695
VSTCVR					4300	3405	3405	3401
VSTCVRAo								4954
VSTCVTri						3650	3652	3652
VSTrEx	3400	3400						
VSTrExSz	3410	3410						

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
VSTrExTy	3390	3390						
VSTrIm	3370	3370	1810	1810	4540	3670	3670	3670
VSTrImSz	3380	3380	1820	1820	4550	3675	3675	3675
VSTrImTy	3360	3360	1800	1800				
VSTrImUDI						3680	3680	3680
VSTrLeafRes							3649	
VSTrPr								3636
VSTrRepair							3646	
VSTrRepAnnulo							3647	
VSTrReplace							3650	
VSTrValvec							3653	3683
VSTSRepairType								3637
VSTV						3640	3640	2134
VSTVSurgProsthValIntType								3653
VTxDt			2100	2100	4930			
VTxDt2			2200	2200	5030			
VTxDt3			2280	2280	5130			
WeightKg	400	400	350	350	630	335	335	335
XClampTm	4350	4350	1410	1410	2880	2435	2435	2435
A1cLvl				412	740	600	600	590
ABG					900	435	435	435
ABGMgmtDurCool								7576
ABGMgmtDurRewarm								7577
ADEt1						1940		
ADEt2						1945		
ADEt3						1950		
ADLesTAneur						1895		
ADLesTCoarcNar						1900		
ADLesTDis						1925		
ADLesTDisTmg						1930		
ADLesTDisTy						1935		
ADLesTIntraHema						1920		
ADLesTPenUlcer						1915		
ADLesTPseudo						1910		
ADLesTRup						1905		
ADLocArch						1880		
ADLocAsc						1875		
ADLocDesThor						1885		
ADLocRoot						1870		

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
ADLocThora						1890		
ADPres						1865		
AFibRecOREntry								972
AlbAnesth25Pct								7454
AlbAnesth5Pct								7452
Alcohol					1131	480	480	480
AnesCareTeamMod							7320	7320
AnesCareTeamModAARatio								7322
AnesCareTeamModCRNARatio								7321
AnesthTot25PctAlb								7455
AnesthTot5PctAlb								7453
Angina	1380	1380	780					
AnginalClass					1570	905		
AngType	1390	1390	790					
AngUnstT	1400	1400						
ANH								7456
ANHVol								7457
AnticoagBleedEvntType								6930
AnticoagPriorCPBArg								7353
AnticoagPriorCPBBival								7352
AntithromDose							7351	7351
AntithromPriorCPB								7348
AoArcVis							7560	7560
AoHemoDatAvail						1605	1605	1605
AortaDisease						1860		
AorticComp								6907
AorticValveRegurg								1585
ArcAthMo							7570	7570
ArrhyAfib				853	1700			
ArrhyAfibTy					1701			
Arrhyth	1450	1450	840	840				
ArrhythAFib						980	962	971
ArrhythAFibDur						985		
ArrhythAFlutter						960	960	960
ArrhythAtrFib							961	961
ArrhyTHB				852	1690			
Arrhythmia						945	945	945
ArrhythPPaced						975	947	947
ArrhythSecond						965	965	965

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
ArrhythSSS						955	955	955
ArrhythThird						970	970	970
ArrhythVV						950	950	950
ArrhythWhen					1650			
ArrhyTyp	1460	1460	850					
ArrhyVtach				851	1660			
ArrhyVtachHrtBlk					1670			
ArrhyVtachSicSinSyn					1680			
ArtOutTempMeas								7578
AsAthMo							7555	7555
AscAoAssessed							7540	7540
AVStenosis								1601
BdCryoU			2640	2640	5650	4575	6575	6575
BdFFPU			2630	2630	5640	4570	6570	6570
BdPlatDosePk								6581
BdPlatU			2650	2650	5660	4580	6580	
BdRBCU			2620	2620	5630	4565	6565	6565
BDTx					940	455	455	455
BldProd	4630	4630	2610	2610	5620	4560	6560	6560
BNP						620	620	595
Cancer					1160	500	500	500
CanSite						4720	6720	6720
CAortReint							6774	6774
CAortReintTy							6775	6775
CarCathDt					1920	1150	1150	1150
CarCathPer					1910	1145	1145	1145
CardPres				791	1610			
CardRef			3200	3200	6530	5050	7010	7015
CardSympTimeOfAdm						895	895	895
CardSympTimeOfSurg						900	900	
CarShock	1420	1420	810	810	1620	930	930	930
CarShTyp	1430	1430	820					
CellSavVol							7335	7612
ChestWallDef							521	
CHF	1370	1370	770	770	1580	910		
ChrLungD	660	660	510	510	860	405	405	405
ChrLungDType						410	410	410
CIArm				2801				
CigSmoker				385	650			

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
CigSmokerCurr					660			
CILeg	4940	4940	2800	2800	5940			
CircDistSten								1186
CircDistStenCurRev								1189
CircDistStenCurRevLocK								1188
CircDistStenPercent								1187
CISeptic	4960	4960	2810	2810				
CIStDeep	4920	4920	2780	2780	5860			
CIThor	4930	4930	2790	2790	5930	4710	6710	
CIThor30								6711
CIUTI	4970	4970						
ClassCCS	1530	1530						
ClassNYH	1540	1540	870	775	1585	915	915	915
CMAD							6892	6892
CMADCanIns							6893	
CMADEvents								6893
CMADHem							6894	
CMADHemolytic							6896	
CMADInf							6897	
CMADOther							6898	
CMADThromEm							6895	
CNComa	5030	5030	2850	2850			6822	
CNComaEnceph					6070	4820		
CNEnceph							6821	6821
CNParal				2851	6110	4825	6825	6825
CNParalTy				2852	6120	4830	6826	
CNParesis							6829	6829
CNParesisTy							6830	
CNStrokP	5000	5000	2830	2830	6030	4810	6810	6810
CNStrokT	5010	5010	2840					
CNStrokTRIND				2842				
CNStrokTTIA				2841	6040	4815	6815	
Complics	4760	4760	2710	2710	5759	4750	6750	6750
ConduitHarv						4715	6715	6715
COpPerMI	4890	4890	2770	2770				
COpPlndDelay					5811	4785	6785	6785
COpReBld	4840	4840	2720	2720	5760	4755	6755	6755
COpReBldTim					5770	4760	6760	6760
COpReGft	4860	4860	2740	2740	5790	4770		

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
COpReNon	4880	4880	2760	2760	5810	4780	6780	6780
COpReOth	4870	4870	2750	2750	5800	4775	6778	6778
COpReVlv	4850	4850	2730	2730	5780	4765	6765	6765
CorAnatDisKnown						1155	1155	1155
CoreTempMax							7440	7440
CoreTempSrc							7435	7435
COtAFib	5320	5320	2990	2990	6330	4930	6930	6945
COtAortEndo							6906	6921
COtAortEndoTy							6907	6922
COtAortRupt							6908	
COtAortSide							6911	6926
COtAortTear							6912	6927
COtArrst	5270	5270	2940	2940	6280	4905	6905	6905
COtCoag	5280	5280	2950	2950	6290	4910	6914	6929
COtGI	5300	5300	2970	2970	6310	4920	6920	6935
COtHtBlk	5260	5260	2930	2930				
COtLiver							6921	
COtMSF	5310	5310	2980	2980	6320	4925	6925	
COtOther			3010	3010	6350	4950	6950	
COtTamp	5290	5290	2960	2960	6300	4915	6915	6933
CPBUsed							7575	7575
CPlEff					6190	4860	6860	6860
CPPneum	5100	5100	2880	2880	6150	4840	6840	6840
CPPulEmb	5070	5070	2870	2870				
CPVntLng	5050	5050	2860	2860	6130	4835	6835	6835
CPVntLngTrachReq								6838
CreatLst	550	525	430	430	750	585	585	605
CReintMI							6771	6771
CReintMIIntTy							6773	6773
CReintMIVes							6772	6772
CRenDial		5130	2900	2900	6210	4875	6875	6875
CRenFail	5120	5120	2890	2890	6200	4870	6870	6870
CRhythmDis					6270	4900	6900	
CrystGivenAnesth								7448
CrystGivenAnesthTy								7451
CrystPerfTy								7586
CSepsis					6010	4800	6800	6800
CSepsisPBC					6020	4805	6805	
CSternal					5830	4790	6790	

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
CSternalDehis					5840	4795	6795	
CSternalMedia					5870			
CSternalMediaDtDiag					5880			
CSternalMediaSPMuscle					5910			
CSternalMediaSPOmental					5920			
CSternalMediaSPOpen					5890			
CSternalMediaSPWVac					5900			
CSternalSupInf					5850	4695	6695	6695
CUltraFil					6230	4885	6885	
CVA	590	590	470	552	1020	530	530	530
CVaAoDis	5220	5220	3000	3000	6340	4935	6909	6909
CVaAoDisTy							6910	
CVaIlFem	5230	5230	2910	2910	6240	4890	6890	6888
CVaLbIsc	5240	5240	2920	2920	6250	4895	6891	6889
CVAWhen	600	600	480	553	1030	535	535	535
CVD	690	690	540	540	1010	525	525	525
CVDCarSten					1070	545	545	545
CVDComa				551				
CVDNInvas				556				
CVDPCarSurg				557	1080	560	560	560
CVDRIND				554				
CVDStenLft					1072	555	555	555
CVDStenRt					1071	550	550	550
CVDTIA				555	1050	540	540	540
CVDType	700	700	550					
CVTE					6160	4845	6845	
DCAArhy			3100	3100	6440			
DCAArMN			3110	3110				
DCACE		5332	3130	3130	6470	5100	7100	7100
DCADP			3090	3090	6430	5070	7070	7070
DCAmiodarone						5110	7103	7103
DCAntPlt		5335						
DCASA		5331	3120	3120	6460	5060	7060	7060
DCBeta		5333	3140	3140	6480	5105	7105	7105
DCCoum			3180	3180	6510	5085	7085	7085
DCDirOralAnticoag								7081
DCDirThromIn					6511	5080	7080	
DCFactorXa						5090	7090	
DCLipid		5334	3150	3150	6490			

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
DCLipLowNonStat						5120	7120	7120
DCLipLowStat						5115	7115	7115
DCLipMT			3160	3160	6500			
DCNovOrAnti							7091	
DCOthAnticoag						5095	7095	7095
DCOthAntiplat						5075	7075	7075
DCP2Y12						5065		
DeepSternalInf90								6749
DeepSternInf						4700	6700	6700
DeepSternInfDt						4705	6705	6705
Depression						475	475	
DexIntra							7390	
DexPost							7710	
DiabCtrl	490	490	410	410	790	365	365	365
Diabetes	480	480	400	400	780	360	360	360
DialDur					6220	4880	6880	6880
DialStat							6881	
Dialysis	560	560	450	450	810	375	375	375
DimAvail						1555	1555	1555
DischDt	340	340	280	280	620	315	7008	7006
DischMortStat							7005	7007
DischMtPtAcuteHospStill								7005
DischMtPtTrnfAcuteHosp								7003
DischMtPtTrnfAcuteHospDt								7004
DisLExtCareTCURehabTy								7011
DisLoctn		5336	3190	3190	6520	5045	7009	7010
DLCO					892	425	425	425
DLCOPred					893	430	430	430
Dominance						1160	1160	
DrugUse30D								472
DVT					6180	4855	6855	6891
Dyslip				421	800	370	370	
ExtubOR			2660	2660	5670	4585	6585	6585
FEV1					890	420	420	420
FFPPriorCPB								7346
FFPPriorCPBUnits								7347
FFRAM						1470	1470	
FFRCircflx						1350	1350	
FFRDiag1						1290	1290	

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
FFRDiag2						1310	1310	
FFRDiag3						1330	1330	
FFRDistLAD						1270	1270	
FFRLMain						1210	1210	
FFRMidLAD						1250	1250	
FFROM1						1370	1370	
FFROM2						1390	1390	
FFROM3						1410	1410	
FFRPDA						1490	1490	
FFRPerf						1190	1190	
FFRPLB						1510	1510	
FFRProxLAD						1230	1230	
FFRRamus						1430	1430	
FFRRCA						1450	1450	
FHCAD	470	470	390	390	670	355	355	355
FiveMWalk1					1170	650	650	650
FiveMWalk2					1180	655	655	655
FiveMWalk3					1190	660	660	660
FiveMWalkTest					1161	645	645	645
GDF15						640		
GIEventType								6936
GlucTroughIntraop							7470	7465
GraftsPrsnt						1180	1180	
GrftStenAM						1460	1460	
GrftStenCircflx						1340	1340	
GrftStenDiag1						1280	1280	
GrftStenDiag2						1300	1300	
GrftStenDiag3						1320	1320	
GrftStenDistLAD						1260	1260	
GrftStenLMain						1200	1200	
GrftStenMidLAD						1240	1240	
GrftStenOM1						1360	1360	
GrftStenOM2						1380	1380	
GrftStenOM3						1400	1400	
GrftStenPDA						1480	1480	
GrftStenPLB						1500	1500	
GrftStenProxLAD						1220	1220	
GrftStenRamus						1420	1420	
GrftStenRCA						1440	1440	

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
Hct				391	680	575	575	575
HDEF	1860	1860	1080	1080	1960	1545	1545	1545
HDEFD		1858	1070	1070	1950	1540	1540	1540
HDEFMeth	1870	1870	1090	1090	1970			
HDPAD		1915	1100	1100				
HDPAMean	1940	1940	1110	1110				
HeartFail							911	911
HeartFailTmg							912	912
HeartFailType							913	913
HemofilPerf							7600	7600
HepMgmt							7345	7345
HepPriorCPB								7335
HighArtOutTemp								7579
HIT								6931
HITAnti					711	605	605	620
HITT								6932
HmO2					930	450	450	450
hsCRP						635		
hsTnT						630		
Hypertn	570	570	460	460	820	380	380	380
Hyprchol	510	510	420					
ICUAdHrs		356	330	330	5730	4620	6620	6620
ICUInHrs		354	310	310	5710	4610	6610	6610
ICUReadm		355	320	320	5720	4615	6615	6615
ICUVisit			300	300	5700	4605	6605	6605
IFRAM							1472	
IFRCircflx							1352	
IFRDiag1							1292	
IFRDiag2							1312	
IFRDiag3							1332	
IFRDistLAD							1272	
IFRLMain							1212	
IFRMidLAD							1252	
IFROM1							1372	
IFROM2							1392	
IFROM3							1412	
IFRPDA							1492	
IFRPerf							1191	
IFRPLB							1512	

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
IFRProxLAD							1232	
IFRRamus							1432	
IFRRCA							1452	
ImmSupp	670	670	520	520	970	490	490	492
IndReop					1340			
InfEndCult					850	395	395	395
InfEndo	610	610	490	490	830	385	385	385
InfEndTy	620	620	500	500	840	390	390	390
InhalVaso								7462
InHospDthLoc							7123	
InotropWeanCPB							7605	7605
INR					710	610	610	615
IntraCardArr							7641	
IntraFent								7402
IntraFentDose								7404
IntraInsul								7473
IntraopGlucTrough								7464
IntraopMidaz								7398
IntraOpPostTEE							7615	7615
IntraOpPreTEE							7480	7480
IntraopRemifent								7410
IntraopRemifentDose								7412
IntraopSufent								7406
IntraopSufentDose								7408
IntraProcEEG							7476	7476
IntraViscoTest							7360	7360
IVDrugAb					1130	470	470	470
IVDrugUse1Yr								471
LADDistSten								1178
LADDistStenCurRev								1181
LADDistStenCurRevLocK								1180
LADDistStenPercent								1179
LFUDate							7000	
LiverChildPugh							486	488
LiverCirrhosis								486
LiverDis					960	485	485	485
LiverStatusPost							488	
LiverTransList							487	
LMainDis	1830	1830	1060	1060	1940			

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
LtAtrMedLatSz								7493
LtAtrSupInfSz								7492
LtAtrSz								7491
LVEDD					1990	1565	1565	1565
LVSD					1980	1560	1560	1560
MedAArrhy					1770			
MedACEI		1670	900	900				
MedACEI48					1730	1020	1020	1020
MedACMN			940	940	1760	1045	1080	1080
MedACoag	1720	1720	930	930	1750	1040	1075	1075
MedADP5Days				1021	1850	1025	1060	1060
MedADPI			1020					
MedADPIDis				1022	1860	1030	1065	1065
MedAmiodarone						1035	1025	1025
MedAPlt		1710						
MedAplt5Days				1023	1870	1050		
MedASA	1760	1760	990	990	1820	1055	1070	1070
MedASADis							1071	1071
MedASAOnce							1072	1072
MedBeta	1650	1650	890	890	1710	1060	1030	1030
MedBetaTher						1065	1035	1035
MedCChanTher						1070	1040	1040
MedCoum			950	950	1780	1075		
MedCoum5Days							1091	1091
MedCoum5Dis							1092	1092
MedDig	1640	1640						
MedDiur	1730	1730						
MedDOAC								1093
MedDOAC5Dis								1094
MedGP			1030	1030	1880	1085	1073	1073
MedGPMN			1040	1040	1890	1090		
MediastRad					1150	495	495	495
MedInotr	1740	1740	970	970	1790	1095	1130	1130
MedLipid			1000	1000	1830	1100	1135	1135
MedLipMN			1010	1010	1840	1105		
MedLipType							1141	1141
MedLongActNit						1110	1045	1045
MedNitIV	1690	1690	910	910	1740	1115	1050	1050
MedNOAC5Days							1111	

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
MedNOACDisc							1112	
MedOthAntiang						1120	1055	1055
MedSter	1750	1750	980	980	1800	1130	1143	1143
MedThrom					1900	1140	1125	1125
MedThrombinIn						1135		
MedThromIn5Days							1121	
MedThromInDisc							1122	
MedXa5Days							1101	
MedXa5DDis							1102	
MedXaInhibitors						1080		
MELDScr					815	615	615	625
MI	1340	1340	750					
MidazIntra							7400	7400
MiHemoDatAvail						1695	1695	1695
MIWhen	1360	1360	760	760	1550	890	890	890
Mortalty		5337	3020	3020	6360	5005		
Mt30Stat	5350	5350	3040	3040	6380	5015	7001	7001
Mt30StatMeth					6381	5020	7002	
MtCause	5380	5380	3080	3080	6420	5040	7122	7126
MtDate	5360	5360	3060	3060	6400	5030	7121	7121
MtDCStat	5340	5340	3030	3030	6370	5010		
MtLocatn	5370	5370	3070	3070	6410	5035		
MtOpD	5400	5355	3050	3050	6390	5025	7124	7124
MultimodAnalges								7414
MultimodAnalgesGiven								7413
MVRegurg								1679
MVStenDeg								1691
MxArcAth							7565	7565
MxAscAo							7545	7545
MxAscAoThick							7550	7550
NewRhythmDis								6901
NitricOxIntraop							7445	
NonInfSurgWndDeh								6748
NonStVDys					1350			
NTproBNP						625		
NumDisV	1820	1820	1050	1050	1930	1170	1170	1170
ORDeath							7645	7645
OrgPartAdAnesthSect								7300
OthTobUse					661			

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
PACIntra							7430	7329
PainScoreDisch							7735	7735
PainScorePOD3							7730	7730
PainScorePre							7325	7325
ParticID	425	352	289	298	648			
PASYS					2030	1575	1575	1575
PASYSMeas					2020	1570	1570	1570
PCO2					920	440	440	440
PctStenAM						1455	1455	
PctStenCircflx						1335	1335	
PctStenDiag1						1275	1275	
PctStenDiag2						1295	1295	
PctStenDiag3						1315	1315	
PctStenDistLAD						1255	1255	
PctStenKnown						1175	1175	
PctStenLMain						1195	1195	
PctStenMidLAD						1235	1235	
PctStenOM1						1355	1355	
PctStenOM2						1375	1375	
PctStenOM3						1395	1395	
PctStenPDA						1475	1475	
PctStenPLB						1495	1495	
PctStenProxLAD						1215	1215	
PctStenRamus						1415	1415	
PctStenRCA						1435	1435	
PFT					880	415	415	415
PhrenNrvInj					6342	4945	6832	
Platelets					700	580	580	580
Pneumonia					1140	465	465	465
PO2					910	445	445	445
POArr					1445			
POC						805	805	805
POCInt1						810	810	810
POCInt2						815	815	815
POCInt3						820	820	820
POCInt4						825	825	825
POCInt5						830	830	830
POCInt6						835	835	835
POCInt7						840	840	840

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
POCO				671	1530			
POCPaceT			650					
POCPCI			660	660	1480	775	775	775
POCPCIIn			670	670	1520	800	800	800
POCPCIndSurg					1490	785	785	785
POCPCISt				661	1500	790	790	790
POCPCIStTy				663	1510	795	795	
POCPCIWhen					1481	780	780	780
POpAortParaLk							6631	6631
POpEF					5749	4655	6655	6655
POpEFD					5748	4650	6650	6650
POpEKG					5754	4680	6680	
POpEnzDrawn					5750	4660	6660	
POpImagStdy					5755	4685		
POpMitParaLk							6636	6636
POpPkCKMB					5751	4665	6665	
POpPkTrI					5752	4670	6670	
POpPkTrT					5753	4675	6675	
POpTTAR					5745	4630	6630	6630
POpTTEch					5744	4625	6625	6625
POpTTMR					5746	4635	6635	6635
POpTTPu						4645	6645	6645
POpTTTR					5747	4640	6640	6640
PostCoreTemp							7655	7655
PostCreat				2605	5610	4555	6555	6555
PostDisDthLoc							7125	7125
PostFibrin							7697	7697
PostFibrinMeas							7696	7696
PostHCT							7695	7695
PostHCTMeas							7690	7690
PostHem								7687
PostHemMeas								7686
PostHITAnti							7725	
PostINR							7665	7665
PostINRMeas							7660	7660
PostLact							7705	7705
PostLactMeas							7700	7700
PostLVEF							7635	7635
PostLVEFMeas							7630	7630

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
PostopDel							7720	7720
PostopHct							6557	6557
PostopHemoglobin							6556	6556
PostopIntub							6591	6591
PostOpPeakGlu						4550	6550	7708
PostOpPneumo						4865	6865	6865
PostOthSed								7716
PostPlt							7685	7685
PostPltMeas							7680	7680
PostRVFx							7640	7640
PostSAM							7620	7620
PostTempMeas							7650	7650
PostWBC							7675	7675
PostWBCMeas							7670	7670
PrCAB	760	760	600	600	1215	670	670	670
PrCBNum	740	740						
PrCNNum	750	750						
PrCVInt	710	710	570	570	1200	665	665	665
PreAnesthBPDia							7415	7327
PreAnesthBPMean							7420	
PreAnesthBPSys							7410	7326
PreAnesthHR							7425	7328
PreAR							7510	
PreAS							7515	
PreAVA							7525	
PreAVAAssessed							7520	
PreLVEF							7490	7490
PreLVEFMeas							7485	7485
PreMR							7500	7500
PreMS							7505	
PrePFO							7535	7535
PreRVFx							7495	7495
PreTR							7530	
PrevMI				751	1540	885	885	885
PrevProcAVBall					1285			
PrevProcAVRepair					1230			
PrevProcAVReplace					1220			
PrevProcMVBall					1290			
PrevProcMVRepair					1250			

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
PrevProcMVReplace					1240			
PrevProcPercVRepair					1310			
PrevProcPV					1280			
PrevProcTCVRep					1300			
PrevProcTVRepair					1270			
PrevProcTVReplace					1260			
PrimAnesName							7310	7310
PrimAnesNPI							7315	7315
PriorHF					1590	920		
PrNSBall	1280	1280						
PrNSStnt	1230	1230						
PrOCAICD			630	630	1460			
PrOCPace			640	640	1470			
PropIntra							7395	
PropPost							7715	7715
PrOthCar	940	940	620	620	1440			
PrOthCongen				621	1450			
ProxLAD					1941			
PrPTCA	1160	1160						
PrPTIntv	1190	1190						
PrValDtKnown					1410			
PrValve	770	770	610	610	1216	675	675	675
PrValveDate					1420			
PrValveMonths					1430			
PrValveProc1						695	695	695
PrValveProc2						700	700	700
PrValveProc3						705	705	705
PrValveProc4						710	710	710
PrValveProc5						715	715	715
PuHemoDatAvail						1845	1845	1824
PulmEmb					6170	4850	6850	6850
PulmonicValveRegurg								1812
PulmValveSten								1823
PVD	680	680	530	530	980	505	505	505
RamusSten								1182
RamusStenCurRev								1185
RamusStenCurRevLocK								1184
RamusStenPercent								1183
RCADistSten								1190

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
RCADistStenCurRev								1193
RCADistStenCurRevLocK								1192
RCADistStenPercent								1191
RcrdNum	-50	-50	-50	-50	-50			
Readm30	5500	5500	3220	3220	6550			
ReadmAortIntInd							7167	7167
ReadmAortIntTy							7166	7166
Readmit						5140	7140	7140
ReadmitDt						5145	7145	7145
ReadmPro			3240	3240	6570	5165	7165	7165
ReadmRsn	5510	5510	3230	3230	6560	5160	7160	7160
RecLarynNrvInj					6341	4940	6833	6833
RecordID	430	353	369	299	649			
ReIntub		4678	2680	2680	5680	4590		
RenFail	530	530	440					
Resusc	1440	1440	830	830	1630	935	935	935
RetCPBEch							7625	7625
RetCPBRsn								7626
RetCPBRsnVentFailTy								7627
RetrAutolPrim							7580	7580
RFHemoglobin						570	570	570
RiskIschemia						1535		
RVEDD						1835	1835	
RVEDDKnown						1830	1830	
SixMWalkDist							662	
SixMWalkDone							661	
SlpApn					950	460	460	460
SmokCoun			3210	3210	6540	5055	7011	
SmokCurr	450	450	380					
Smoker	440	440	370					
Sodium								600
StenLeftMain								1174
StenLeftMainLctn								1177
StenLeftMainLctnKn								1176
StenSource						1165	1165	
StentPrsnt						1185	1185	
StntIntv		1235						
StntStenAM						1465	1465	
StntStenCircflx						1345	1345	

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
StntStenDiag1						1285	1285	
StntStenDiag2						1305	1305	
StntStenDiag3						1325	1325	
StntStenDistLAD						1265	1265	
StntStenLMain						1205	1205	
StntStenMidLAD						1245	1245	
StntStenOM1						1365	1365	
StntStenOM2						1385	1385	
StntStenOM3						1405	1405	
StntStenPDA						1485	1485	
StntStenPLB						1505	1505	
StntStenProxLAD						1225	1225	
StntStenRamus						1425	1425	
StntStenRCA						1445	1445	
StressTst						1525	1525	
StressTstRes						1530		
StrsTstRes							1531	
SubsUseScrnCounPerf								7016
SurSInf					5841	4690	6690	6690
Syncope					1001	515	515	515
SyntaxScr						1520	1520	
SyntaxScrKnown						1515	1515	
ThAoDisease						510	510	
ThrIntvl	1260	1260						
Thrmblys	1240	1240						
TobaccoUse						400	400	400
Tot25AlbumPerf								7596
TotAlbumAnesth							7460	
TotAlbumin					730	590	590	585
TotAlbumPerf							7595	7595
TotalPOInitVentHr								6587
TotBlrbn					720	595	595	610
TotColloidAnesth							7455	
TotColloidPerf							7590	
TotCrystAnesth							7450	7450
TotCrystPerf							7585	7585
TotHep							7340	7340
TotInsuIntra							7405	7474
TotProt							7350	7614

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
TransfAlg							7330	7330
TricuspidValveSten								1777
TricuspidVRegurg								1774
UnrespStat					1000	520	520	512
VasodilIntraop							7475	7463
VasopWeanCPB							7610	7610
VDAoEt					2090			
VDAoEt1						1625		
VDAoEt2						1630		
VDAoEt3						1635		
VDAoEt4						1640		
VDAoEt5						1645		
VDAoPrimEt							1646	1646
VDAort					2040	1595	1595	1617
VDAortTumor					2150			
VDAoSievers							1647	
VDAoVA					2153	1610	1610	1610
VDAVEccJet							1591	
VDCongenT					2120			
VDEndAB					2110			
VDGradA		2015	1130	1130	2154	1615	1615	1615
VDGradM					2260	1705	1705	1705
VDGradP						1850	1850	1825
VDInsufA	2050	2050	1170	1170	2155	1590	1590	1590
VDInsufM	2060	2060	1180	1180	2270	1680	1680	1680
VDInsufP	2080	2080	1200	1200	2340	1820	1820	1820
VDInsufT	2070	2070	1190	1190	2320	1775	1775	1775
VDLVOutOb					2140			
VDMiEt1						1720		
VDMiEt2						1725		
VDMiEt3						1730		
VDMiLes1						1735		
VDMiLes2						1740		
VDMiLes3						1745		
VDMiPrimEt							1731	
VDMiPrimLes							1746	
VDMit					2160	1685	1685	1710
VDMitAnDegDis					2190			
VDMitDegLoc					2180			

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
VDMitDis								1711
VDMitDisClsIIIATy								1715
VDMitDisClsIIIBTy								1716
VDMitDisClsIIMyo								1714
VDMitDisClsIITy								1713
VDMitDisClsITy								1712
VDMitDisMixedTy								1717
VDMitET					2170			
VDMitFC					2230	1715		
VDMitIsTy					2210			
VDMitPMR					2220			
VDMitTumor					2221			
VDMVA					2250	1700	1700	1700
VDMVEccJet							1681	
VDPrimAo					2130			
VDPuEt						1855	1855	1855
VDPulm					2321	1825	1825	1828
VDStenA	2010	2010	1120	1120	2152	1600	1600	1600
VDStenM	2020	2020	1140	1140	2240	1690	1690	1690
VDStenP	2040	2040	1160	1160	2330	1840	1840	1822
VDStenT	2030	2030	1150	1150	2300	1785	1785	1776
VDTr					2280	1780	1780	1778
VDTrAnnMeas						1790	1777	1779
VDTrAnnSize						1795	1778	1780
VDTrEt					2290			
VDTrEt1						1800		
VDTrEt2						1805		
VDTrEt3						1810		
VDTrPrimEt							1811	1811
VDVMax							1616	1616
VentHrs	4680	4680	2700					
VentHrsA		4679	2690	2690	5690	4595	6595	6595
VentHrsI		4676	2670					
VentHrsTot						4600	6600	6600
VolAgentDes							7368	
VolAgentIso							7366	
VolAgentOth							7369	
VolAgentSevo							7367	
VolAgentTimDur							7375	

ShortName	2.35	2.41	2.52.1	2.61	2.73	2.81	2.9	4.20.2
VolAgentTiming								7377
VolAgentTimMaint							7385	
VolAgentTimPost							7380	
VolAgentTimPre							7370	
VolAgentUsed							7365	7365
VolatileAgentUsedTy								7370
WBC				392	690	565	565	565
WndIntOpen					5960			
WndIntWVac					5970			
WoundInter						4725	6725	
WoundIntMuscle						4740	6740	
WoundIntOmental						4745	6745	
WoundIntOpen						4730	6730	
WoundIntVac						4735	6735	