



The Society of Thoracic Surgeons
Adult Cardiac Surgery Database
Data Collection Form Version 2.73
 January 14, 2011

A. Administrative			
Participant ID: <i>PatID (40)</i>	Record ID: (software generated) <i>RecordID (50)</i>	STS Cost Link: <i>CostLink (60)</i>	Patient ID: (software generated) <i>PatID (80)</i>

B. Demographics			
Patient Last Name: <i>PatLName (90)</i>		Patient First Name: <i>PatFName (100)</i>	Patient Middle Name: <i>PatMName (120)</i>
Date of Birth: ___/___/____ (mm/dd/yyyy) <i>DOB (130)</i>	Patient Age: _____ <i>Age (140)</i>	Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female <i>Gender (150)</i>	
Social Security Number: _____ <i>SSN (160)</i>		Medical Record Number: <i>MedRecN (170)</i>	
Patient's Address:			
Street Address: <i>PatAddr (180)</i>		City: <i>PatCity (190)</i>	
Region: <i>PatRegion (200)</i>	ZIP Code: <i>PatZIP (210)</i>	Country: <i>PatCountry (220)</i>	
Is This Patient's Permanent Address: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>PermAddr (230)</i>			
(If No →)	Patient's Permanent Address:		
	Street Address: <i>PatPermAddr (240)</i>	City: <i>PatPermCity (250)</i>	
	Region: <i>PatPermRegion (260)</i>	ZIP Code: <i>PatPermZIP (270)</i>	Country: <i>PatPermCountry (280)</i>
Race (Select all that apply):	White: <i>RaceCaucasian (290)</i> Asian: <i>RaceAsian (310)</i> Native Hawaiian/Pacific Islander: <i>RacNativePacific (330)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	Black/African American: <i>RaceBlack (300)</i> Am Indian/Alaskan Nat: <i>RaceNativeAm (320)</i> Other: <i>RaceOther (340)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
Hispanic, Latino or Spanish Ethnicity: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>Ethnicity (350)</i>			
Referring Cardiologist: <i>RefCard (360)</i>		Referring Physician: <i>RefPhys (370)</i>	

C. Hospitalization			
Hospital Name: _____ (If Not Missing →) <i>HospName (380)</i>	Hospital ZIP Code: <i>HospZIP (390)</i>	Hospital State: <i>HospStat (400)</i>	
Hospital National Provider Identifier: _____ <i>HospNPI (410)</i>			
Payor - (Select all that apply ↓)			
Government Health Insurance: <i>PayorGov (420)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	(If Yes, select all that apply ↓)	Health Insurance Claim Number: <i>HICNumber (440)</i>	
	Medicare: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes →) <i>PayorGovMcare (430)</i>	Medicare Fee For Service: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>PayorGovMcareFFS (450)</i>	
	Medicaid: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>PayorGovMcaid (460)</i>	Military Health Care: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>PayorGovMil(470)</i>	
	State-Specific Plan: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>PayorGovState (480)</i>	Indian Health Service: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>PayorGovIHS (490)</i>	
	Correctional Facility: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>PayorGovCor (500)</i>		
Commercial Health Insurance: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>PayorCom (510)</i>			
Health Maintenance Organization: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>PayorHMO (520)</i>			
Non-U.S. Insurance: <i>PayorNonUS (530)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No			
None / Self: <i>PayorNS (540)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No			
Arrival Date: ___/___/____ (mm/dd/yyyy)	Arrival Time: ____:____ (hh:mm 24-hour clock)	Admit Date: ___/___/____ (mm/dd/yyyy)	

ArrivalDt (550)	ArrivalTm (560)	AdmitDt (570)
Admit Source: <input type="checkbox"/> Elective Admission AdmitSrc (580) <input type="checkbox"/> Emergency Department <input type="checkbox"/> Transfer in from another acute care facility (If Transfer →) Other Hospital Performs Cardiac Surgery <input type="checkbox"/> Yes <input type="checkbox"/> No <div style="text-align: right;">OthHosCS (590)</div> <input type="checkbox"/> Other		
Surgery Date: ___/___/___(mm/dd/yyyy) SurgDt (610)		Discharge Date: ___/___/___(mm/dd/yyyy) DischDt (620)

D. Risk Factors			
Weight (kg): _____ WeightKg (630)		Height (cm): _____ HeightCm (640)	
Cigarette Smoker: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes →) CigSmoker (650)		Current Cigarette Smoker: <input type="checkbox"/> Yes <input type="checkbox"/> No CigSmokerCurr (660)	
Other Tobacco Use: <input type="checkbox"/> Yes <input type="checkbox"/> No OthTobUse (661)			
Family History of Premature Coronary Artery Disease: <input type="checkbox"/> Yes <input type="checkbox"/> No FHCAD (670)		Last Hematocrit: _____ Hct (680)	Last WBC Count: _____ WBC (690)
Platelet Count Prior to Surgery: _____ Platelets (700)		International Normalized Ratio prior to Surgery: _____ INR (710)	
HIT Antibodies <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable HITAnti (711)		Total Bilirubin Prior to Surgery: _____ TotBlrbn (720)	
Total Albumin Prior to Surgery: _____ TotAlbumin (730)		A1c Level prior to surgery: _____ A1cLvl (740)	Last Creatinine Level Prior to Surgery: _____ CreatLst (750)
Diabetes: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes →) Diabetes (780)			
Diabetes-Control: <input type="checkbox"/> None <input type="checkbox"/> Diet <input type="checkbox"/> Oral <input type="checkbox"/> Insulin <input type="checkbox"/> Other DiabCtrl (790)			
Dyslipidemia: <input type="checkbox"/> Yes <input type="checkbox"/> No Dyslip (800)		Dialysis: <input type="checkbox"/> Yes <input type="checkbox"/> No Dialysis (810)	MELD Score: _____ (System Calculation) MELDScr (815)
Hypertension: <input type="checkbox"/> Yes <input type="checkbox"/> No Hypertn (820)			
Infectious Endocarditis: <input type="checkbox"/> Yes <input type="checkbox"/> No InfEndo (830)			
(If Yes →) Infectious Endocarditis Type: <input type="checkbox"/> Treated <input type="checkbox"/> Active InfEndTy (840)			
Infectious Endocarditis Culture: InfEndCult (850)			
<input type="checkbox"/> Culture negative <input type="checkbox"/> Staphylococcus aureus <input type="checkbox"/> Streptococcus species			
<input type="checkbox"/> Coagulase negative staphylococcus <input type="checkbox"/> Enterococcus species <input type="checkbox"/> Fungal <input type="checkbox"/> Other			
Chronic Lung Disease: <input type="checkbox"/> No <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe ChrLungD (860)			
Pulmonary Function Test Done: <input type="checkbox"/> Yes <input type="checkbox"/> No PFT (880)			
(If Yes →) FEV1 % Predicted: _____ FEV1 (890)			
DLCO Test Performed: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes →) DLCO % Predicted: _____ DLCO (892) DLCOPred (893)			
Arterial Blood Gas Performed: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes →) ABG (900)		Oxygen Level : _____ PO2 (910)	Carbon Dioxide Level: _____ PCO2 (920)
Home Oxygen: <input type="checkbox"/> Yes <input type="checkbox"/> No HmO2 (930)		Inhaled Medication or Oral Bronchodilator Therapy: <input type="checkbox"/> Yes <input type="checkbox"/> No BDTx (940)	
Sleep Apnea: <input type="checkbox"/> Yes <input type="checkbox"/> No SlpApn (950)		Liver Disease: <input type="checkbox"/> Yes <input type="checkbox"/> No LiverDis (960)	
Immunocompromise Present: <input type="checkbox"/> Yes <input type="checkbox"/> No ImmSupp (970)		Peripheral Artery Disease: <input type="checkbox"/> Yes <input type="checkbox"/> No PVD (980)	
Unresponsive Neurologic State: <input type="checkbox"/> Yes <input type="checkbox"/> No UnrespStat (1000)		Syncope: <input type="checkbox"/> Yes <input type="checkbox"/> No Syncope (1001)	
Cerebrovascular Disease: <input type="checkbox"/> Yes <input type="checkbox"/> No CVD (1010)			
(If Yes →) Prior CVA: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes →) Prior CVA-When: <input type="checkbox"/> Recent (<=2 wk.) <input type="checkbox"/> Remote (>2 wk.) CVA (1020) CVAWhen (1030)			
CVD TIA: <input type="checkbox"/> Yes <input type="checkbox"/> No CVDTIA (1050)			
CVD Carotid stenosis: <input type="checkbox"/> None <input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Both CVDCarSten (1070)			
(If "Right" or "Both" →) Severity of stenosis on the right carotid artery: <input type="checkbox"/> 80 - 99% <input type="checkbox"/> 100% CVDStenRt (1071)			
(If "Left" or "Both" →) Severity of stenosis on the left carotid artery: <input type="checkbox"/> 80 - 99% <input type="checkbox"/> 100% CVDStenLt (1072)			
History of previous carotid artery surgery and/or stenting: <input type="checkbox"/> Yes <input type="checkbox"/> No CVDPCarSurg (1080)			
Illicit Drug Use: <input type="checkbox"/> Yes <input type="checkbox"/> No IVDrugAb (1130)		Alcohol Use: <input type="checkbox"/> <=1 drink/week <input type="checkbox"/> 2-7 drinks/week <input type="checkbox"/> >=8 drinks/week Alcohol (1131)	
Pneumonia: <input type="checkbox"/> No <input type="checkbox"/> Recent <input type="checkbox"/> Remote Pneumonia (1140)		Mediastinal Radiation: <input type="checkbox"/> Yes <input type="checkbox"/> No MediastRad (1150)	Cancer Within 5 Years : <input type="checkbox"/> Yes <input type="checkbox"/> No Cancer (1160)
Five Meter Walk Test Done: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes →) Time 1: _____ (secs) FiveMWalk1 (1170)		FiveMWalkTest (1161) Time 2: _____ (secs) FiveMWalk2 (1180)	Time 3 : _____ (secs) FiveMWalk3 (1190)

E. Previous Cardiac Interventions
Previous Cardiac Interventions: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓) PrCVInt (1200)

Previous CAB prior to current admission: Yes No **PrCAB (1215)**

Previous Valve: Yes No (If Yes ↓) **PrValve (1216)**

Previous Aortic Valve Replacement - Surgical: Yes No **PrevProcAVReplace (1220)**

Previous Aortic Valve Repair - Surgical: Yes No **PrevProcAVRepair (1230)**

Previous Mitral Valve Replacement - Surgical: Yes No **PrevProcMVRReplace (1240)**

Previous Mitral Valve Repair - Surgical: Yes No **PrevProcMVRRepair (1250)**

Previous Tricuspid Valve Replacement - Surgical: Yes No **PrevProcTVReplace (1260)**

Previous Tricuspid Valve Repair - Surgical: Yes No **PrevProcTVRepair (1270)**

Previous Pulmonic Valve Repair / Replacement - Surgical: Yes No **PrevProcPV (1280)**

Previous Aortic Valve Balloon Valvuloplasty: Yes No **PrevProcAVBall (1285)**

Previous Mitral Valve Balloon Valvuloplasty: Yes No **PrevProcMVBall (1290)**

Previous Transcatheter Valve Replacement: Yes No **PrevProcTCVRep (1300)**

Previous Percutaneous Valve Repair: Yes No **PrevProcPercVRepair (1310)**

Indication for Reoperation: Structural Prosthetic Valve Deterioration
IndReop (1340) Non-structural prosthetic valve dysfunction
 (If Non-structural prosthetic →) **Primary type:** Paravalvular Leak Hemolysis
NonStVDys (1350) Entrapment by pannus, tissue, or suture
 Sizing or positioning issue
 Other

Prosthetic Valve Endocarditis
 Valve Thrombosis
 Failed Repair
 Repeat valve procedure on a different valve
 Other

Exact Date of Previous Valve Procedure Known: Yes No **PrValDtKnown (1410)**
 (If Yes →) Date of Previous Valve Procedure: ___/___/___ **PrValveDate (1420)**
 (If No →) Estimate Number of Months Since Previous Valve Procedure: _____ **PrValveMonths (1430)**

Previous Other Cardiac: Yes No **PrOthCar (1440)** (If Yes →) Previous Arrhythmia Surgery: Yes No **POArr (1445)**

Previous Congenital: Yes No **PrOthCongen (1450)**

Previous ICD (Implantable Cardioverter/Defibrillator): Yes No **PrOCAICD (1460)**

Previous Pacemaker: Yes No **PrOCPace (1470)**

Previous PCI (Percutaneous Cardiac Intervention): Yes No **POCPCI (1480)**
 (If Yes →) PCI Performed Within This Episode Of Care: Yes, at this facility Yes, at some other acute care facility No
POCPCIWhen (1481)
 (If Yes →) Indication for Surgery: PCI Complication
POCPCIIndSurg (1490) PCI Failure without Clinical Deterioration
 PCI/CABG Hybrid Procedure

PCI Stent: Yes No (If Yes →) Stent Type: Bare metal Drug-eluting Unknown
POCPCIst (1500) **POCPCIstTy (1510)**

PCI Interval: ≤ 6 Hours > 6 Hours **POCPCIIn (1520)**

Other Previous Cardiovascular Intervention: Yes No **POCO (1530)**

F. Preoperative Cardiac Status

Prior Myocardial Infarction: Yes No (If Yes ↓) **PrevMI (1540)**
 MI When: ≤6 Hrs >6 Hrs but <24 Hrs 1 to 7 Days 8 to 21 Days >21 Days **MIWhen (1550)**

Anginal Classification Within 2 weeks: No Symptoms, No Angina CCA I CCA II CCA III CCA IV **AnginalClass (1570)**

Heart Failure Within 2 weeks: Yes No (If Yes →) Classification-NYHA: Class I Class II Class III Class IV
CHF (1580) **ClassNYH (1585)**

Prior Heart failure: Yes No **PriorHF (1590)**

Cardiac Presentation on Admission: No Symptoms, No Angina Symptoms Unlikely to be Ischemia Stable Angina
CardPres (1610) Unstable Angina Non-ST Elevation MI (Non-STEMI) ST Elevation MI (STEMI)

Cardiogenic Shock: Yes No **CarShock (1620)**

Resuscitation: Yes No **Resusc (1630)**

Arrhythmia When: None Remote Recent (If Recent ↓) **ArrythWhen (1650)**

Arrhythmia Type: Vtach/Vfib: Yes No **Second Degree Heart Block: Yes No**
ArrhyVtach (1660) **ArrhyVtachHrtBlk (1670)**
 Sick Sinus Syndrome: Yes No **Third Degree Heart Block: Yes No**
ArrhyVtachSicSinSyn (1680) **ArrhyTHB (1690)**
 Afib/Aflutter: Yes No **ArrhyAfib (1700)**
 (If Yes →) **Type:** Paroxysmal Continuous/Persistent **ArrhyAfibTy (1701)**

G. Preoperative Medications

Beta Blockers: Yes No Contraindicated **MedBeta (1710)**

ACE or ARB Inhibitors Within 48 Hours: Yes No **MedACEI48 (1730)**

Nitrates-I.V.: Yes No **MedNitIV (1740)**

Anticoagulants: Yes No (If Yes →) Medication Name: Heparin (Unfractionated) Heparin (Low Molecular)
MedACoag (1750) **MedACMN (1760)** Thrombin Inhibitors Other

Preoperative Antiarrhythmics: Yes No **MedAArrhy (1770)**

Coumadin: <input type="checkbox"/> Yes <input type="checkbox"/> No MedCoum (1780)	
Inotropes : <input type="checkbox"/> Yes <input type="checkbox"/> No MedInotr (1790)	
Steroids : <input type="checkbox"/> Yes <input type="checkbox"/> No MedSter (1800)	
Aspirin: <input type="checkbox"/> Yes <input type="checkbox"/> No MedASA (1820)	
Lipid Lowering: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes→)	Medication Type : <input type="checkbox"/> Statin <input type="checkbox"/> Non-statin <input type="checkbox"/> Both
MedLipid (1830)	MedLipMN (1840)
ADP Inhibitors Within Five Days : <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes→)	ADP Inhibitors Discontinuation: _____ (# days prior to surgery)
MedADP5Days (1850)	MedADPIDis (1860)
Antiplatelets Within 5 Days : <input type="checkbox"/> Yes <input type="checkbox"/> No MedApl5Days (1870)	
Glycoprotein IIb/IIIa Inhibitor: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes→)	Medication Name: <input type="checkbox"/> Abciximab (ReoPro) <input type="checkbox"/> Eptifibatide (Integrilin)
MedGP (1880)	MedGPMN (1890) <input type="checkbox"/> Tirofiban (Aggrastat)
Thrombolytics within 48 hours: <input type="checkbox"/> Yes <input type="checkbox"/> No MedThrom (1900)	

H. Hemodynamics/Cath/Echo

Cardiac Catheterization Performed : <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes→)	Cardiac Catheterization Date: ___/___/_____
CarCathPer (1910)	CarCathDt (1920)
Number Diseased Vessels: <input type="checkbox"/> None <input type="checkbox"/> One <input type="checkbox"/> Two <input type="checkbox"/> Three	NumDisV (1930)
Left Main Disease >= 50%: <input type="checkbox"/> Yes <input type="checkbox"/> No	LMainDis (1940)
Proximal LAD >= 70%: <input type="checkbox"/> Yes <input type="checkbox"/> No	ProxLAD (1941)
Ejection Fraction Done: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓)	HDEFD (1950)
HDEF (1960) Ejection Fraction: _____ (%)	
HDEFMeth (1970) Ejection Fraction Method: <input type="checkbox"/> LV Gram <input type="checkbox"/> Radionucleotide <input type="checkbox"/> Estimate <input type="checkbox"/> ECHO <input type="checkbox"/> MRI/CT <input type="checkbox"/> Other	
LV Systolic Dimension: _____ (mm)	LVSD (1980)
LV End-Diastolic Dimension: _____ (mm)	LVEDD (1990)
PA Systolic Pressure Measured: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes→)	PA Systolic Pressure: _____ mmHg(highest prior to surgery)
PASYSMeas (2020)	PASYS (2030)
Aortic Valve Disease: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓) VDAort (2040)	
Aortic Etiology: <input type="checkbox"/> Degenerative (senile) VDAoEt (2090)	
<input type="checkbox"/> Endocarditis (If Endocarditis→) Root Abscess: <input type="checkbox"/> Yes <input type="checkbox"/> No VDEndAB (2110)	
<input type="checkbox"/> Congenital (If Congenital→) Type: <input type="checkbox"/> Bicuspid <input type="checkbox"/> Other VDCongenT (2120)	
<input type="checkbox"/> Rheumatic	
<input type="checkbox"/> Primary Aortic Disease: (If PAD→) Type: <input type="checkbox"/> Marfans <input type="checkbox"/> Other Connective tissue disorder VDPriAo (2130)	
<input type="checkbox"/> Atherosclerotic Aneurysm <input type="checkbox"/> Inflammatory	
<input type="checkbox"/> Aortic Dissection <input type="checkbox"/> Idiopathic Root Dilatation	
<input type="checkbox"/> LV Outflow Tract Obstruction: (If LV outflow tract obstruction ↓)	
Type: <input type="checkbox"/> HOCM VDLVOuOb (2140)	
<input type="checkbox"/> Sub-aortic membrane <input type="checkbox"/> Sub-aortic Tunnel	
<input type="checkbox"/> Supravalvular Aortic Stenosis	
<input type="checkbox"/> Tumor: (If Tumor→) Type: <input type="checkbox"/> Myxoma <input type="checkbox"/> Papillary fibroelastoma <input type="checkbox"/> Carcinoid <input type="checkbox"/> Other VDAortTumor (2150)	
<input type="checkbox"/> Trauma <input type="checkbox"/> Other	
Aortic Stenosis: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓) VDStenA (2152)	
Smallest Aortic Valve Area: _____ cm ² VDAoVA (2153)	
Highest Mean Gradient : _____ mmHg VDGradA (2154)	
Aortic Insufficiency: <input type="checkbox"/> None <input type="checkbox"/> Trace/Trivial <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe VDInsufA (2155)	
Mitral Valve Disease: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓) VDMit (2160)	
Mitral Etiology: <input type="checkbox"/> Annular or Degenerative Disease (If Annular or Degenerative Disease ↓) VDMitET (2170)	
Location: <input type="checkbox"/> Posterior Leaflet <input type="checkbox"/> Anterior Leaflet <input type="checkbox"/> Bileaflet VDMitDegLoc (2180)	
Type: <input type="checkbox"/> Pure Annular Dilatation <input type="checkbox"/> Mitral Annular Calcification VDMitAnDegDis (2190)	
<input type="checkbox"/> Endocarditis <input type="checkbox"/> Rheumatic	
<input type="checkbox"/> Ischemic (If Ischemic→) Type: <input type="checkbox"/> Acute (If acute →) Papillary Muscle Rupture: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Chronic VDMitIsTy (2210) VDMitPMR (2220)	
<input type="checkbox"/> Congenital	
<input type="checkbox"/> Hypertrophic Obstructive Cardiomyopathy (HOCM)	
<input type="checkbox"/> Tumor: (If Tumor→) Type: <input type="checkbox"/> Myxoma <input type="checkbox"/> Papillary fibroelastoma <input type="checkbox"/> Carcinoid <input type="checkbox"/> Other VDMitTumor (2221)	
<input type="checkbox"/> Trauma <input type="checkbox"/> Non-ischemic cardiomyopathy <input type="checkbox"/> Other	
Mitral Valve Disease Functional Class: <input type="checkbox"/> Type I <input type="checkbox"/> Type II <input type="checkbox"/> Type IIIa <input type="checkbox"/> Type IIIb VDMitFC (2230)	
Mitral Stenosis: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓) VDStenM (2240)	
Smallest Mitral Valve Area : _____ cm ² VDMVA (2250)	

Highest Mean Gradient: _____ mm Hg **VDGradM (2260)**
 Mitral Insufficiency: None Trace/trivial Mild Moderate Severe **VDInsufM (2270)**

Tricuspid Valve Disease: Yes No (If Yes ↓) **VDTr (2280)**
 Tricuspid Etiology: Functional **VDTrEt (2290)**
 Endocarditis
 Congenital
 Tumor
 Trauma
 Other

Tricuspid Stenosis: Yes No **VDStenT (2300)**
 Tricuspid Insufficiency: None Trace/trivial Mild Moderate Severe **VDInsufT (2320)**

Pulmonic Valve Disease: Yes No (If Yes ↓) **VDPulm (2321)**
 Pulmonic Stenosis: Yes No **VDStenP (2330)**
 Pulmonic Insufficiency: None Trace/trivial Mild Moderate Severe **VDInsufP (2340)**

I. Operative

Surgeon: _____ Surgeon NPI: _____
Surgeon (2350) **SurgNPI (2360)**

Taxpayer Identification Number: _____ **TIN (2370)**

Incidence: First cardiovascular surgery Third re-op cardiovascular surgery
Incidenc(2380) First re-op cardiovascular surgery Fourth or more re-op cardiovascular surgery
 Second re-op cardiovascular surgery

Status: Elective
Status (2390) Urgent (If Urgent ↓) **UrgntRsn (2400)**
 Reason: AMI IABP Worsening CP CHF Anatomy USA Rest Angina
 Valve Dysfunction Aortic Dissection Angiographic Accident Cardiac Trauma
 Infected Device Syncope PCI/CABG Hybrid PCI Failure w/out clinical deterioration

Emergent (If Emergent ↓) **EmergRsn (2410)**
 Reason: Shock Circ Support Shock No Circ Support Pulmonary Edema AEMI
 Ongoing Ischemia Valve Dysfunction Aortic Dissection
 Angiographic Accident Cardiac Trauma Infected Device Syncope
 PCI/CABG Hybrid Anatomy

Emergent Salvage

Was case previously attempted during this admission, but canceled: Yes No **PCancCase (2415)**
 (If Yes →) Date of previous case: ____/____/____ (mm/dd/yyyy) **PCancCaseDt (2416)**
 Timing of previous case: Prior to induction of anesthesia After induction, prior to incision
PCancCaseTmg (2417) After incision made

Reason previous case was canceled: **PCancCaseRsn (2418)** Anesthesiology event Cardiac arrest Equipment/supply issue
 Unanticipated tumor Other

Planned previous procedure: CABG Yes No Valve Yes No
PCancCaseCAB (2419) **PCancCaseVal (2420)**
 Mechanical Assist Device Yes No Other Cardiac Yes No
PCancCaseMech (2421) **PCancCaseOC (2422)**
 Other Non-cardiac Yes No
PCancCaseONC (2423)

Was the current procedure canceled: Yes No **CCancCase (2424)**
 (If Yes →) Canceled Timing: Prior to induction of anesthesia After induction, prior to incision
CCancCaseTmg (2425) After incision made

Canceled Reason: **CCancCaseRsn (2426)** Anesthesiology event Cardiac arrest Equipment/supply issue
 Unanticipated tumor Other

Planned procedure: CABG Yes No Valve Yes No
CCancCaseCAB (2427) **CCancCaseVal (2428)**
 Mechanical Assist Device Yes No Other Cardiac Yes No
CCancCaseMech (2429) **CCancCaseOC (2430)**
 Other Non-cardiac Yes No
CCancCaseONC (2431)

Operative Approach: Full conventional sternotomy Partial sternotomy Right or left parasternal incision
 Left Thoracotomy Right Thoracotomy Transverse sternotomy (includes clamshell)

Minimally invasive OPAp (2435)

Robotic Technology Assisted: Yes No Robotic (2436)

Coronary Artery Bypass: Yes No OpCAB (2437)

(If "Yes" complete Section J)

Valve Surgery: Yes No (If Yes ↓) (If "Yes" complete Section K) OpValve (2440)

Valve Prosthesis Explant: Yes No (If Yes ↓) ValExp (2450)

Explant Position: Aortic Mitral Tricuspid Pulmonic
ValExpPos (2451)

Explant Type: Unknown Mechanical Valve Bioprosthetic Valve

ValExpTyp (2460)

Annuloplasty Device Mitral Clip Transcatheter Device

Device None (Homograft or Cryolife Lillehei-Kaster OmniScience
Manufacturer: Pulmonary Autograft) Cryolife O'Brien MCRI Sorin
ValExpMan(2461) ATS Edwards Medtronic Sorin-Puig
 Baxter Genesee Medtronic Colvin Galloway St. Jude Medical
 Biocore Hancock Medtronic-Duran St. Jude Tailor
 Björk-Shiley Ionescu-Shiley Medtronic-Hall Starr-Edwards
 CarboMedics Labcor Mitroflow Ultracor
 Carpentier-Edwards LifeNet OmniCarbon Unknown
 Cosgrove-Edwards Other

Explant Device: _____ (Refer to Explant Device Key below) ValExpDev (2462)

Second Valve Prosthesis Explant: Yes No (If Yes ↓) ValExp2 (2463)

Explant Position: Aortic Mitral Tricuspid Pulmonic
ValExpPos2 (2464)

Explant Type: Unknown Mechanical Valve Bioprosthetic Valve

ValExpTyp2 (2465)

Annuloplasty Device Mitral Clip Transcatheter Device

Device None (Homograft or Cryolife Lillehei-Kaster OmniScience
Manufacturer: Pulmonary Autograft) Cryolife O'Brien MCRI Sorin
ValExpMan2(2466) ATS Edwards Medtronic Sorin-Puig
 Baxter Genesee Medtronic Colvin St. Jude Medical
 Biocore Hancock Galloway St. Jude Tailor
 Björk-Shiley Ionescu-Shiley Medtronic-Duran Starr-Edwards
 CarboMedics Labcor Medtronic-Hall Ultracor
 Carpentier-Edwards LifeNet Mitroflow Unknown
 Cosgrove-Edwards OmniCarbon Other

Explant Device: _____ (Refer to Explant Device Key below) ValExpDev2 (2467)

Explant Device Key (Note this list is different from the implant list used below).

Mechanical

2 = ATS Mechanical Prosthesis
3 = Björk-Shiley Convex-Concave Mechanical Prosthesis
4 = Björk-Shiley Monostrut Mechanical Prosthesis
6 = CarboMedics Mechanical Prosthesis
57 = CarboMedics Carbo-Seal Ascending Aortic Valved Conduit Prosthesis
58 = CarboMedics Carbo-Seal Valsalva Ascending Aortic Valved Conduit Prosthesis
59 = CarboMedics Reduced Cuff Aortic Valve
60 = CarboMedics Standard Aortic Valve
61 = CarboMedics Top-Hat Supra-annular Aortic Valve
62 = CarboMedics OptiForm Mitral Valve
63 = CarboMedics Standard Mitral Valve
64 = CarboMedics Orbis Universal Valve
65 = CarboMedics Small Adult Aortic and Mitral Valves
53 = Lillehei-Kaster Mechanical Prosthesis
10 = MCRI On-X Mechanical Prosthesis
8 = Medtronic-Hall/Hall Easy-Fit Mechanical Prosthesis

66 = Medtronic ADVANTAGE Mechanical Prosthesis
9 = OmniCarbon Mechanical Prosthesis
54 = OmniScience Mechanical Prosthesis
11 = Sorin Bicarbon (Baxter Mira) Mechanical Prosthesis
12 = Sorin Monoleaflet Allcarbon Mechanical Prosthesis
13 = St. Jude Medical Mechanical Heart Valve
67 = St. Jude Medical Masters Series Mechanical Heart Valve
68 = St. Jude Medical Masters Series Aortic Valve Graft Prosthesis
69 = St. Jude Medical Mechanical Heart Valve Hemodynamic Plus (HP) Series
70 = St. Jude Medical Masters Series Hemodynamic Plus Valve with FlexCuff Sewing Ring
71 = St. Jude Medical Regent Valve
14 = Starr-Edwards Caged-Ball Prosthesis
15 = Ultracor Mechanical Prosthesis
133 = Medtronic Hall Conduit

Bioprosthesis

108 = ATS 3f Aortic Bioprosthesis
72 = Edwards Prima Stentless Porcine Bioprosthesis - Subcoronary
73 = Edwards Prima Stentless Porcine Bioprosthesis - Root
19 = Biocor Porcine Bioprosthesis
74 = Biocor Stentless Porcine Bioprosthesis - Subcoronary
75 = Biocor Stentless Porcine Bioprosthesis - Root
21 = CarboMedics PhotoFix Pericardial Bioprosthesis
76 = Carpentier-Edwards Porcine Bioprosthesis
77 = Edwards Prima Plus Stentless Porcine Bioprosthesis - Subcoronary
78 = Edwards Prima Plus Stentless Porcine Bioprosthesis - Root
22 = Carpentier-Edwards PERIMOUNT Pericardial Bioprosthesis

85 = Medtronic Contegra Bovine Jugular Bioprosthesis
37 = Mitroflow Pericardial Bioprosthesis
39 = St. Jude Medical Toronto SPV Stentless Porcine Bioprosthesis
40 = St. Jude Medical-Bioimplant Porcine Bioprosthesis
86 = St. Jude Medical Biocor Stented Tissue Valve
87 = St. Jude Medical Epic Stented Porcine Bioprosthesis
88 = St. Jude Medical Toronto Root Stentless Porcine Bioprosthesis
38 = Sorin Pericarbon Stentless Pericardial Bioprosthesis
111 = Carpentier-Edwards PERIMOUNT MAGNA Pericardial Bioprosthesis with Carpentier-Edwards Therafix Tissue Process
112 = Carpentier-Edwards PERIMOUNT Theon RSR Pericardial

103 = Carpentier-Edwards PERIMOUNT Pericardial Magna Bioprosthesis
 23 = Carpentier-Edwards Standard Porcine Bioprosthesis
 25 = Carpentier-Edwards Supra-Annular Aortic Porcine Bioprosthesis
 79 = Cryolife O'Brien Stentless Porcine Bioprosthesis - Subcoronary
 80 = Cryolife O'Brien Stentless Porcine Bioprosthesis - Root
 55 = Hancock Standard Porcine Bioprosthesis
 28 = Hancock II Porcine Bioprosthesis
 29 = Hancock Modified Orifice Porcine Bioprosthesis
 30 = Ionescu-Shiley Pericardial Bioprosthesis
 31 = Labcor Stented Porcine Bioprosthesis
 81 = Labcor Stentless Porcine Bioprosthesis - Subcoronary
 82 = Labcor Stentless Porcine Bioprosthesis - Root
 83 = Medtronic Freestyle Stentless Porcine Bioprosthesis - Subcoronary
 84 = Medtronic Freestyle Stentless Porcine Bioprosthesis - Root
 35 = Medtronic Intact Porcine Bioprosthesis
 36 = Medtronic Mosaic Porcine Bioprosthesis

Bioprosthesis
 113 = Carpentier-Edwards PERIMOUNT RSR Pericardial Bioprosthesis
 114 = Carpentier-Edwards PERIMOUNT Theon Pericardial Bioprosthesis
 115 = Carpentier-Edwards S.A.V. Porcine Bioprosthesis
 116 = Edwards Prima Plus Stentless Bioprosthesis
 117 = Carpentier-Edwards PERIMOUNT Plus Pericardial Bioprosthesis with Tricentrix Holder
 118 = Carpentier-Edwards Duraflex Low Pressure Porcine Bioprosthesis
 119 = Carpentier-Edwards Duraflex Low Pressure ESR Porcine Bioprosthesis
 120 = Carpentier-Edwards PERIMOUNT Theon Pericardial Bioprosthesis with Tricentrix Holder.
 121 = St. Jude Medical Biocor Supra Stented Porcine Bioprosthesis
 122 = St. Jude Medical Epic Supra Stented Porcine Bioprosthesis.
 134 = Carpentier Edwards Physio II
 135 = Carpentier Edwards Perimount Magna Mitral Valve

Homograft

89 = CryoLife Aortic Homograft
 90 = CryoLife Pulmonary Homograft
 91 = CryoLife CryoValve SG(Decellularized)Aortic Homograft
 92 = CryoLife CryoValve SG Pulmonary Homograft
 41 = Homograft Aortic - Subcoronary

42 = Homograft Aortic - Root
 43 = Homograft Mitral
 44 = Homograft Pulmonic Root
 93 = LifeNet CV Allografts

Autograft

45 = Pulmonary Autograft to aortic root (Ross Procedure)

Ring - Annuloplasty

109 = ATS Stimulus Flex-O Ring
 94 = CarboMedics AnnuloFlo Ring
 95 = CarboMedics AnnuloFlex Ring
 96 = CarboMedics CardioFix Bovine Pericardium with PhotoFix Technology
 46 = Carpentier-Edwards Classic Annuloplasty Ring
 104 = Carpentier-Edwards Geoform Ring
 105 = Carpentier-Edwards IMR Etlogix Ring
 47 = Carpentier-Edwards Physio Annuloplasty System Ring
 48 = Cosgrove-Edwards Annuloplasty System Ring
 97 = Edwards MC³ Tricuspid Annuloplasty System
 98 = Genesee Sculptor Annuloplasty Ring
 49 = Medtronic Sculptor Ring
 50 = Medtronic-Duran AnCore Ring
 51 = Sorin-Puig-Messana Ring

52 = St. Jude Medical Séguin Annuloplasty Ring.
 106 = St. Jude Medical Rigid Saddle Ring
 99 = St. Jude Medical Tailor Annuloplasty Ring
 123 = ATS Stimulus Flexible Annuloplasty ring.
 124 = ATS Stimulus Semi-Rigid Annuloplasty ring
 125 = Carpentier-Edwards Classic Annuloplasty Ring with Duraflo Treatment
 126 = Carpentier-Edwards Physio Annuloplasty Ring with Duraflo Treatment
 127 = Cosgrove-Edwards Annuloplasty System with Duraflo Treatment
 128 = Myxo Etlogix Annuloplasty Ring
 131 = Sorin Memo 3D Ring
 132 = UNIRING, Universal Annuloplasty System
 137 = Medtronic Colvin Galloway Future Ring
 138 = Medtronic Profile 3D Ring

Band - Annuloplasty

100 = Medtronic Colvin Galloway Future Band
 101 = Medtronic Duran Band
 102 = Medtronic Duran - Ancore Band

107 = St. Jude Medical Tailor Annuloplasty Band
 110 = ATS Stimulus Flex-C Band

Other

777 = Other

VAD Implanted or Removed: No Yes, implanted Yes, explanted Yes, implanted and explanted (If "Yes" complete Section L)
VADProc (2480)

Other Cardiac Procedure: Yes No (If "Yes" complete Section M)
OpOCard (2490)

Other Non-Cardiac Procedure: Yes No (If "Yes" complete Section N)
OpONCard (2500)

Unplanned Procedure: No
 Yes, unsuspected patient disease or anatomy
UnplProc (2501) Yes, surgical complication
 (If Yes ↓)

Unplanned CABG: Yes No **UnplCABG (2502)**
 Unplanned Aortic Valve Procedure: Yes No **UnplAV (2503)**
 Unplanned Mitral Valve Procedure: Yes No **UnplMV (2504)**
 Unplanned Aorta Procedure: Yes No **UnplAo (2505)**
 Unplanned VAD Insertion: Yes No **UnplVAD (2506)**
 Unplanned Other Procedure: Yes No **UnplOth (2507)**

Enter up to 10 CPT-1 Codes pertaining to the surgery for which the data collection form was initiated:

1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____
CPT1Code1 (2510) CPT1Code2 (2520) CPT1Code3 (2530) CPT1Code4 (2540) CPT1Code5 (2550) CPT1Code6 (2560) CPT1Code7 (2570) CPT1Code8 (2580) CPT1Code9 (2590) CPT1Code10 (2600)

OR Entry Date And Time: **OREntryDT (2610)** / / : mm/dd/yyyy hh:mm - 24 hr clock

OR Exit Date And Time: **ORExitDT (2620)** / / : (mm/dd/yyyy hh:mm - 24 hr clock)

Initial Intubation Date and Time: **IntubatedDT (2670)** / / : (mm/dd/yyyy hh:mm - 24 hr clock)

Initial Extubation Date and Time: **ExtubatedDT (2680)** / / : (mm/dd/yyyy hh:mm - 24 hr clock)

Skin Incision Start Date and Time: **SISStartDT (2690)** / / : (mm/dd/yyyy hh:mm - 24 hr clock)

Skin Incision Stop Date and Time: **SISStopDT (2700)** / / : (mm/dd/yyyy hh:mm - 24 hr clock)

Appropriate Antibiotic Selection:
 Yes No Exclusion
AbxSelect (2710)

Appropriate Antibiotic Administration Timing:
 Yes No Exclusion
AbxTiming (2720)

Appropriate Antibiotic Discontinuation:
 Yes No Exclusion
AbxDisc (2730)

CPB Utilization: None
CPBUutil (2740) Combination

(If Combination ↓)
 Combination Plan: Planned

J. Coronary Bypass	
(If OpCAB = Yes ↓)	
Hybrid Procedure CAB and PCI Performed: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓) CABHybrPCI (3165) Status: <input type="checkbox"/> Planned - concurrent <input type="checkbox"/> Planned - staged <input type="checkbox"/> Unplanned HybrStat (3170) PCI Procedure Performed: <input type="checkbox"/> Angioplasty <input type="checkbox"/> Stent HybrProc (3180)	
Number of Distal Anastomoses with Arterial Conduits: _____ DistArt (3190)	
Number of Distal Anastomoses with Venous Conduits: _____ (If >0 ↓) DistVein (3200) Vein Harvest Technique: <input type="checkbox"/> Endoscopic <input type="checkbox"/> Direct Vision (open) <input type="checkbox"/> Both <input type="checkbox"/> Cryopreserved DistVeinHTech (3205) (If "Endoscopic", "Direct Vision (open)" or "Both" →) Saphenous Vein Harvest Time: _____ (minutes) SaphHrvstT (3206) Saphenous Vein Preparation Time: _____ (minutes) SaphPrepT (3207)	
Internal Mammary Artery used for Grafts: <input type="checkbox"/> Left IMA <input type="checkbox"/> Right IMA <input type="checkbox"/> Both IMAs <input type="checkbox"/> No IMA IMAArtUs (3210)	
(If No IMA →)	Indicate Primary Reason: <input type="checkbox"/> The IMA is not a suitable conduit due to size or flow NoIMARsn (3220) <input type="checkbox"/> Subclavian stenosis <input type="checkbox"/> Previous cardiac or thoracic surgery <input type="checkbox"/> Previous mediastinal radiation <input type="checkbox"/> Emergent or salvage procedure <input type="checkbox"/> No LAD disease
(If Left, Right or Both IMAs →)	Total # of Distal Anastomoses done using IMA grafts: _____ NumIMADA (3230) IMA Harvest Technique: <input type="checkbox"/> Direct Vision (open) <input type="checkbox"/> Thoracoscopy IMATech (3240) <input type="checkbox"/> Combination <input type="checkbox"/> Robotic Assist
Number of Radial Arteries Used for Grafts: _____ (If >0 ↓) NumRadArtUs (3260) Number of Radial Artery Distal Anastomoses : _____ NumRadDA (3270) Radial Distal Anastomoses Harvest Technique: <input type="checkbox"/> Endoscopic <input type="checkbox"/> Direct Vision (open) <input type="checkbox"/> Both RadHTech (3280) Radial Artery Harvest Time: _____ (minutes) RadHrvstT (3285) Radial Artery Preparation Time: _____ (minutes) RadPrepT (3286)	
Number Other Arterial Distal Anastomoses Used (other than radial or IMA): _____ NumOArtD (3300)	

Native Coronary Disease Location Key:

1 = Left Main	4 = Distal LAD	7 = Circumflex	10 = OM 3	13 = PLB
2 = Prox LAD	5 = Diagonal 1	8 = OM 1	11 = RCA	14 = AM branches
3 = Mid LAD	6 = Diagonal 2	9 = OM 2	12 = PDA	15 = Ramus

For each question, check the one choice that applies for each graft:

CABG NUMBER		1	2	3	4	5	6	7	8	9	10
GRAFT DONE	Yes CAB[02 -10]	NA	3440	3530	3620	3710	3800	3890	3980	4070	4160
	No										
NATIVE CORONARY DISEASE LOCATION (See key above) CABDisLoc[01-10]		3355	3445	3535	3625	3715	3805	3895	3985	4075	4165
HIGHEST PERCENT STENOSIS IN NATIVE VESSEL CABPctSten[01-10]		3356	3446	3536	3626	3716	3806	3896	3986	4076	4166
PREVIOUS CONDUIT	Yes - Diseased CABPrevCon[01-10]	3357	3447	3537	3627	3717	3807	3897	3987	4077	4167
	Yes - No disease										
	No previous conduit										
PROXIMAL SITE	In Situ Mammary CABProximalSite[01-10]	3360	3450	3540	3630	3720	3810	3900	3990	4080	4170
	Ascending aorta										
	Descending aorta										
	Subclavian artery										
	Innominate artery										
	T-graft off SVG										
	T-graft off Radial										
	T-graft off LIMA										
T-graft off RIMA											
PROXIMAL TECHNIQUE	In Situ Mammary CABProxTech[01-10]	3370	3460	3550	3640	3730	3820	3910	4000	4090	4180
	Running										
	Interrupted										
	Anastomotic Device										
	Anastomotic Assist Device										
CONDUIT	Vein graft CABConduit[01-10]	3380	3470	3560	3650	3740	3830	3920	4010	4100	4190
	In Situ LIMA										
	In Situ RIMA										
	Free IMA										
	Radial artery										
	Other arteries, homograft										
DISTAL INSERTION SITE	Right Coronary (RCA) CABDistSite[01-10]	3390	3480	3570	3660	3750	3840	3930	4020	4110	4200
	Acute Marginal (AM)										
	Posterior Descending Artery (PDA)										
	Posterolateral Branch (PLB)										
	Proximal LAD										
	Mid LAD										
	Distal LAD										
	Diagonal 1										
	Diagonal 2										
	Ramus										
	Obtuse Marginal 1										
	Obtuse Marginal 2										
	Obtuse Marginal 3										
Other											
DISTAL TECHNIQUE	Running CABDistTech[01-10]	3400	3490	3580	3670	3760	3850	3940	4030	4120	4210
	Interrupted										
	Clips										
	Anastomotic device										
DISTAL POSITION	End to Side CABDistPos[01-10]	3410	3500	3590	3680	3770	3860	3950	4040	4130	4220
	Sequential (side to side)										
ENDARTERECTOMY	Yes CABEndArt[01-10]	3420	3510	3600	3690	3780	3870	3960	4050	4140	4230
	No										
I > B R I D	No CABHyPCI[01-10]	3430	3520	3610	3700	3790	3880	3970	4060	4150	4240
	Angioplasty										

Stent														
-------	--	--	--	--	--	--	--	--	--	--	--	--	--	--

K. Valve Surgery

(If Valve Surgery=Yes ↓)

Aortic Valve Procedure Performed: Yes No **VSAV (4270)**

(If Yes ↓)

Procedure Performed:

VSAVPr (4280):

- Replacement
- Repair / Reconstruction

(If Repair / Reconstruction ↓)

Primary Repair Type: (Select all that apply)

- | | | | |
|---|--|----------------------------|--|
| Commissural Annuloplasty | <input type="checkbox"/> Yes <input type="checkbox"/> No | Ring Annuloplasty | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| VSAVRComA (4282) | | VSAVRRingA (4283) | |
| Leaflet plication | <input type="checkbox"/> Yes <input type="checkbox"/> No | Leaflet resection suture | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| VSAVRLPlic (4284) | | VSAVRLResect (4285) | |
| Leaflet free edge reinforcement (PTFE) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Leaflet pericardial patch | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| VSAVRPTFE (4286) | | VSAVRLPPatch (4287) | |
| Leaflet commissural resuspension suture | <input type="checkbox"/> Yes <input type="checkbox"/> No | Leaflet debridement | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| VSAVRComRS (4288) | | VSAVRDeb (4289) | |
| Division of fused leaflet raphe | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| VSAVRRaphe (4290) | | | |

- Root Reconstruction with valved conduit
- Replacement and insertion aortic non-valved conduit
- Resuspension AV without replacement of ascending aorta
- Resuspension AV with replacement of ascending aorta
- Apico-aortic conduit (Aortic valve bypass)
- Autograft with pulmonary valve-Ross procedure
- Homograft
- Valve sparing root reimplantation (David)
- Valve sparing root remodeling (Yacoub)

Transcatheter Valve Replacement: Yes No **VSTCV (4295)**

(If Yes →) Replacement approach: Transapical Transaxillary Transfemoral **VSTCVR (4300)**

Aortic Annular Enlargement: Yes No **AnlrEnl (4310)**

Resection of sub-aortic stenosis: Yes No **ResectSubA (4311)**

Implant Model Number : _____ Size: _____
VSAoIm (4330) **VSAoImSz (4340)**

Mitral Valve Procedure Performed: Yes No **VSMV (4351)**

(If Yes ↓)

Procedure Performed: **VSMVPr (4352)**

Repair

(If Repair →) Repair Type: (Select all that apply ↓)

- | | | |
|-------------------------------------|--|---|
| Annuloplasty | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| VSMitRAnnulo (4361) | | |
| Leaflet Resection | <input type="checkbox"/> Yes <input type="checkbox"/> No | (If Yes ↓) |
| VSMitRLeafRes (4362) | | Resection Type: <input type="checkbox"/> Triangular <input type="checkbox"/> Quadrangular <input type="checkbox"/> Other |
| | | VSLeafResTyp (4380) |
| | | Location: <input type="checkbox"/> Anterior <input type="checkbox"/> Posterior <input type="checkbox"/> Both Anterior and Posterior |
| | | VSLeafRepLoc (4390) |
| Sliding Plasty | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| VSMitRSlidP (4391) | | |
| Annular decalcification | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| VSMitRADecalc (4393) | | |
| Neochords (PTFE) | <input type="checkbox"/> Yes <input type="checkbox"/> No | (If Yes ↓) |
| VSMitRPTE (4394) | | Number of neochords inserted: _____ |
| | | VSNeoChNum (4400) |
| Chordal /Leaflet transfer | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| VSMitRChord (4401) | | |
| Leaflet extension/replacement/patch | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| VSMitRLeafERP (4402) | | |
| Edge to Edge Repair | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| VSMitREdge (4403) | | |
| Mitral commissurotomy | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| VSMitRMitComm (4404) | | |

Replacement (If Replacement →) Repair attempted prior to Mitral Valve Replacement: Yes No
MitralIntent (4410)

Implant Model Number: _____ Size: _____
VSMilm (4430) **VSMilmSz (4440)**

Mitral Chords Preserved: None Anterior Posterior Both **VSChorPres (4450)**

Tricuspid Valve Procedure Performed: **OpTricus (4500)**
 No
 Annuloplasty only (If "Annuloplasty only" OR "Reconstruction with Annuloplasty" ↓)
 Replacement
 Type of Annuloplasty: Pericardium Suture Prosthetic Ring
OpTricusAnTy (4510)
 Reconstruction with Annuloplasty
 Reconstruction without Annuloplasty
 Valvectomy
 Implant Model Number: _____ Size: _____
VSTrlm (4540) **VSTrlmSz (4550)**

Pulmonic Valve Procedure Performed: **OpPulm (4560)**
 No
 Replacement
 Reconstruction
 Valvectomy
 Implant Model Number: _____ Size: _____
VSPulm (4580) **VSPulmSz (4590)**

L. Mechanical Cardiac Assist Devices

Intra Aortic Balloon Pump (IABP): Yes No (If Yes ↓) **IABP (4610)**
 IABP Insertion: Preop Intraop Postop **IABPWhen (4620)**
 Primary Reason for Insertion: Hemodyn Instability PTCA Support Unstable Angina
 CPB Weaning Failure Prophylactic
IABPInd (4630)
 Date IABP Removed: ___/___/____ (mm/dd/yyyy)
IABPRemDt (4640)

Catheter Based Assist Device Used: Yes No (If Yes ↓) **CathBasAssist (4660)**
 Device: Impella Tandem Heart Other **CathBasAssistDev (4670)**
 When Inserted: Preop Intraop Postop **CathBasAssistWhen (4690)**
 Primary Reason for Insertion: Hemodynamic instability CPB weaning failure PCI failure Other **CathBasAssistInd (4700)**
 Date Device Removed: ___/___/____ (mm/dd/yyyy)
CathBasAssistRemDt (4710)

Extracorporeal Membrane Oxygenation (ECMO): Yes No (If Yes ↓) **ECMO (4730)**
 ECMO Initiated: Preop Intraop Postop Non-operative **ECMOWhen (4740)**
 Clinical Indication for ECMO Placement: Cardiac Failure Respiratory Failure Hypothermia Rescue/salvage
ECMOInd (4750)

Previous VAD: Yes No (If Yes ↓) **PrevVAD (4760)**
 Implanted at another facility: Yes No **PrevVADF (4770)**
 Prev VAD Insertion Date: ___/___/____ (mm/dd/yyyy) **PrevVADD (4771)**
 Prev VAD Indication: Bridge to Transplantation Bridge to Recovery Destination Post Cardiotomy Ventricular failure
PrevVADIn (4772) Device Malfunction End of Life
 Prev VAD Type: RVAD LVAD BiVAD TAH **PrevVADTy (4773)**
 Prev VAD Device: _____ (refer to current "On-Demand Device Lists" document) **PrevVADDevice (4774)**

(If VAD Implanted or Removed ↓)

References to "Initial VAD" refer to the initial VAD for this hospitalization, not a VAD placed during a previous hospitalization.

VAD Implant Type: Right VAD (RVAD) Left VAD (LVAD)
 Biventricular VAD (BiVAD) Total Artificial Heart (TAH)

VAD Device: (refer to current "On-Demand Device Lists" document)

Explant Reason: 1. Cardiac Transplant 2. Recovery 3. Device Transfer 4. Device-Related Infection
 5. Device Malfunction 6. End of Life

Indication for this VAD: Bridge to Transplantation Bridge to Recovery Destination
VADInd (4790) Postcardiotomy Ventricular Failure Device Malfunction End of Life

Initial Implant Data

Implant Type	VAD Device	Implant Date	Explant	Explant Date	Explant Reason	Transplant Date
____	____	___/___/____ mm dd yyyy	<input type="checkbox"/> Yes <input type="checkbox"/> No	___/___/____ mm dd yyyy	____	___/___/____ mm dd yyyy
VImpTy (4850)	VProdTy (4880)	VImpDt (4890)	VExp (4900)	VExpDt (4910)	VExpRsn (4920)	VTxDt (4930)

Additional Implant(s) Data

Second Device Implanted: Yes No (If Yes ↓) **VImp2 (4940)**

Implant Type#2	VAD Device #2	Implant Date#2	Explant#2	Explant Date#2	Explant Reason#2	Transplant Date#2
____	____	___/___/____ mm dd yyyy	<input type="checkbox"/> Yes <input type="checkbox"/> No	___/___/____ mm dd yyyy	____	___/___/____ mm dd yyyy
VImpTy2 (4950)	VProdTy2 (4980)	VImpDt2 (4990)	VExp2 (5000)	VExpDt2 (5010)	VExpRsn2 (5020)	VTxDt2 (5030)

Third Device Implanted: Yes No (If Yes ↓) **VImp3 (5040)**

Implant Type#3	VAD Device #3	Implant Date#3	Explant#3	Explant Date#3	Explant Reason#3	Transplant Date#3
_____	_____	___/___/___	<input type="checkbox"/> Yes <input type="checkbox"/> No	___/___/___	_____	___/___/___
		mm dd yyyy		mm dd yyyy		mm dd yyyy
VImpTy3 (5050)	VProdTy3 (5080)	VImpDt3 (5090)	VExp3 (5100)	VExpDt3 (5110)	VExpRsn3 (5120)	VTxDt3 (5130)

Primary VAD Complications Data:

Intracranial Bleed Yes No
PVCmpBld (5140)

Embolic Stroke Yes No
PVCmpESt (5150)

Driveline and/or cannula Infection Yes No
PVCmpDCI (5160)

Pump Pocket Infection Yes No
PVCmpPPI (5170)

Endocarditis Yes No
PVCmpEnd (5180)

Device Malfunction Yes No
PVCmpMal (5190)

Hemolysis Yes No
PVCmpHem (5191)

Bowel Obstruction Yes No
PVCmpBO (5200)

Additional Complications (not specific to initial VAD as above) to be collected in Postoperative Events section.

VAD Discharge Status: With VAD
 Without VAD
 Expired in Hospital

M. Other Cardiac Procedure

(If Other Card = Yes ↓)

Left Ventricular Aneurysm Repair: Yes No **OCarLVA (5220)**

Ventricular Septal Defect Repair: Yes No **OCarVSD (5230)**

Atrial Septal Defect Repair: Yes No **OCarASD (5240)**
 (If Yes →) ASD Type: Secundum Sinus Venosus PFO **OCarASDTy (5241)**

Surgical Ventricular Restoration: Yes No **OCarSVR (5290)**

Congenital Defect Repair: Yes No (If Yes ↓) **OCarCong (5300)**

Congenital Diagnoses: Select up to three most significant diagnoses: (refer to "Congenital Diagnoses/Procedures List" document)

Diagnosis 1: _____ Diagnosis 2: _____ Diagnosis 3: _____
OCarCongDiag1 (5310) **OCarCongDiag2 (5320)** **OCarCongDiag3 (5330)**

Congenital Procedures: Select up to three most significant: (refer to "Congenital Diagnoses/Procedures List" document)

Procedure 1: _____ Procedure 2: _____ Procedure 3: _____
OCarCongProc1 (5340) **OCarCongProc2 (5350)** **OCarCongProc3 (5360)**

Transmyocardial Laser Re-vascularization (TMR): Yes No **OCarLasr (5370)**

Cardiac Trauma: Yes No **OCarTrma (5380)**

Cardiac Transplant: Yes No **OCarCrTx (5390)**

Arrhythmia Correction Surgery: None Permanent Pacemaker
 Permanent Pacemaker with Cardiac Resynchronization Technique (CRT)
 Implantable Cardioverter Defibrillator (ICD) ICD with CRT

(If not None →) Arrhythmia Correction Surgery Lead Insertion or Replacement: Yes No **OCarACDLI (5410)**

Arrhythmia Correction Surgery Lead Extraction: Yes No **OCarACDLE (5430)**

Atrial Fibrillation Surgical Procedure: Yes No **OCarAFibSur (5450)**

(If Yes →) Surgical Procedure Location: Biatrial Left atrial only Right atrial only **OCarAFibSurLoc (5451)**

Left Atrial Appendage Obliterated Yes No **OCarAFibSurLAA (5452)**

Method of Lesion Creation: (Select all that apply ↓)

Radio frequency Yes No **OCarAFibMethRad (5455)** Cryo Yes No **OCarAFibMethCryo (5457)** Laser Yes No **OCarAFibMethLas (5459)**

Ultrasound Yes No **OCarAFibMethUltra (5456)** Microwave Yes No **OCarAFibMethMicro (5458)** Cut-and-sew Yes No **OCarAFibMethCAS (5460)**

Atrial Fibrillation Ablation Procedure: **OCarAFibAProc (5465)**

Primarily epicardial procedure (e.g., pulmonary vein isolation with or without connection to left atrial appendage).

Primarily intracardiac procedure (e.g., Maze procedures; lesions to mitral annulus; etc.)

Aortic Procedure Type: **OCaProcType (5471)**

<input type="checkbox"/> None	
<input type="checkbox"/> Aneurysm	(If Aneurysm ↓) Aortic Root: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCAoRt (5473) (If Yes →) Dacron graft used: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCAoGraft (5474) Repair of ascending aortic aneurysm: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCAAsc (5480) Repair of aneurysm in the arch of the aorta: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCArch (5490) (If Yes →) Extent of repair: <input type="checkbox"/> Hemi-arch <input type="checkbox"/> Total arch ONCArchRepExt (5491) Repair of a descending aortic aneurysm: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCDesc (5500) Repair of a thoracoabdominal aneurysm: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCThAbd (5510) (If Yes →) Graft replacement used: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCThAbdGraft (5511) (If Yes →) Intercostal vessels re-implanted: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCThAbdInterVes (5512) CSF drainage utilized: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCThAbdLumCSF (5513) Extent of descending aorta replacement: ONCThAbdExtent (5514) <input type="checkbox"/> Proximal <input type="checkbox"/> Mid <input type="checkbox"/> Distal <input type="checkbox"/> Proximal - Mid <input type="checkbox"/> Proximal - Mid - Distal <input type="checkbox"/> Mid - Distal
<input type="checkbox"/> Dissection (including intramural hematoma) <input type="checkbox"/> Trauma <input type="checkbox"/> Coarctation <input type="checkbox"/> Other	(If Dissection ↓) Aortic dissection is acute: <input type="checkbox"/> Yes <input type="checkbox"/> No AoDisAc (5516) Dissection type: <input type="checkbox"/> Stanford Type A <input type="checkbox"/> Stanford Type B AoDisTyp (5517) (If Trauma →) Aortic Trauma type: <input type="checkbox"/> Blunt <input type="checkbox"/> Penetrating AoTrTyp (5518)
Endovascular Procedure (TEVAR): <input type="checkbox"/> Yes <input type="checkbox"/> No EndoProc (5520) (If Yes →) Endovascular Debranching: <input type="checkbox"/> Yes <input type="checkbox"/> No EndoProcDeb (5521)	
Tumor Resection: <input type="checkbox"/> None <input type="checkbox"/> Myxoma <input type="checkbox"/> Fibroelastoma <input type="checkbox"/> Hypernephroma <input type="checkbox"/> Sarcoma <input type="checkbox"/> Other OCTumor (5530)	
Pulmonary Thromboembolism: <input type="checkbox"/> None <input type="checkbox"/> Yes, Acute <input type="checkbox"/> Yes, Chronic OCPuThromDis (5540)	
Other: <input type="checkbox"/> Yes <input type="checkbox"/> No OCarOthr (5550)	

N. Other Non Cardiac Procedures
(If Other Non-Card = Yes ↓)
Carotid Endarterectomy: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCCarEn (5560)
Other Vascular: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCOVasc (5570)
Other Thoracic: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCOThor (5580)
Other: <input type="checkbox"/> Yes <input type="checkbox"/> No ONCOther (5590)

O. Post Operative
Postoperative Creatinine Level: _____ PostCreat (5610)
Blood Products Used Postoperatively: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓) BldProd (5620)
Red Blood Cell Units: _____ Fresh Frozen Plasma Units: _____ Cryoprecipitate Units: _____ Platelet Units: _____ BdRBCU (5630) BdFFPU (5640) BdCryoU (5650) BdPlatU (5660)
Extubated in OR: <input type="checkbox"/> Yes <input type="checkbox"/> No ExtubOR (5670)
Re-intubated During Hospital Stay: <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes →) Additional Hours Ventilated: _____ ReIntub (5680) VentHrsA (5690)
ICU Visit: <input type="checkbox"/> Yes <input type="checkbox"/> No ICUVisit (5700) (If Yes →) Initial ICU Hours: _____ ICUInHrs (5710)
Readmission to ICU: <input type="checkbox"/> Yes <input type="checkbox"/> No ICUReadm (5720) (If Yes →) Additional ICU Hours: _____ ICUAdHrs (5730)
Post Op Echo Performed: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓) POpTTEch (5744) Highest level aortic insufficiency found: <input type="checkbox"/> None <input type="checkbox"/> Trace/trivial <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe POpTTAR (5745) Highest level mitral insufficiency found: <input type="checkbox"/> None <input type="checkbox"/> Trace/trivial <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe POpTTMR (5746) Highest level tricuspid insufficiency found: <input type="checkbox"/> None <input type="checkbox"/> Trace/trivial <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe POpTTTR (5747)
Post Op Ejection Fraction Done: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓) POpEFD (5748) Post Op Ejection Fraction: _____ (%) POpEF (5749)
Cardiac Enzymes (biomarkers) Drawn: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes →) Peak CKMB: _____ Peak Troponin I _____ Peak Troponin T _____ POpEnzDrawn (5750) POpPkCKMB (5751) POpPkTrI (5752) POpPkTrT (5753)
12-Lead EKG Findings: <input type="checkbox"/> Not performed <input type="checkbox"/> No significant changes <input type="checkbox"/> New Pathological Q-wave or LBBB POpEKG (5754)
Imaging Study Findings: POpImagStdy (5755) <input type="checkbox"/> Not performed <input type="checkbox"/> Angiographic evidence of new thrombosis or occlusion of graft or native coronary <input type="checkbox"/> Imaging evidence of new loss of viable myocardium <input type="checkbox"/> No evidence of new myocardial injury

P. Postoperative Events
In Hospital Postoperative Event Occurred: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓) Complics (5759)
Operative
ReOp for Bleeding /Tamponade: <input type="checkbox"/> Yes <input type="checkbox"/> No COpReBld (5760) (If Yes →) Bleed Timing: <input type="checkbox"/> Acute <input type="checkbox"/> Late COpReBldTim (5770)
ReOp for Valvular Dysfunction: <input type="checkbox"/> Yes <input type="checkbox"/> No COpReVlv (5780)

ReOp for Graft Occlusion: Yes No **COpReGft (5790)**
 ReOp for Other Cardiac Reasons: Yes No **COpReOth (5800)**
 ReOp for Other Non-Cardiac Reasons: Yes No **COpReNon (5810)**
 Open chest with planned delayed sternal closure: Yes No **COpPlndDelay (5811)**
 Sternalotomy Issue: Yes No **CSternal (5830)** (If Yes →) Sternal instability/dehiscence (sterile): Yes No **CSternalDehis (5840)**

Infection (see CDC definitions in training manual)

Surgical Site Infection: Yes No (If Yes ↓) **SurSInf (5841)**
 Sternal Superficial Wound Infection: Yes No **CSternalSupInf (5850)**
 Deep Sternal Infection: Yes No **CIStDeep (5860)**
 Mediastinitis: Yes No (If Yes ↓) **CSternalMedia (5870)**
 Diagnosis Date: ___/___/___ (mm/dd/yyyy) **CSternalMediaDtDiag (5880)**
 Secondary Procedure Open with Packing/Irrigation: Yes No **CSternalMediaSPOpen (5890)**
 Secondary Procedure Wound Vac: Yes No **CSternalMediaSPWVac (5900)**
 Secondary Procedure Muscle Flap: Yes No **CSternalMediaSPMuscle (5910)**
 Secondary Procedure Omental Flap: Yes No **CSternalMediaSPOmental (5920)**
 Thoracotomy: Yes No **CIThor (5930)**
 Conduit Harvest or Cannulation Site: Yes No **CILeg (5940)**
 Wound Intervention - Open with Packing/Irrigation: Yes No **WndIntOpen (5960)**
 Wound Intervention - Wound Vac - Yes No **WndIntWVac (5970)**
 Sepsis: Yes No **CSepsis (6010)** (If Yes →) Positive Blood Cultures: Yes No **CSepsisPBC (6020)**

Neurologic

Postoperative Stroke (Perm>24 hours): Yes No **CNStrokP (6030)**
 Transient Ischemic Attack (TIA): Yes No **CNStrokTTIA (6040)**
 Encephalopathy: None Anoxic Embolic Drug Metabolic Intracranial Bleeding Other
CNComaEnceph (6070)
 Paralysis: Yes No **CNParal (6110)** (If Yes →) Paralysis Type: Transient Permanent **CNParalTy (6120)**

Pulmonary

Prolonged Ventilation: Yes No **CPVntLng (6130)**
 Pneumonia: Yes No **CPPneum (6150)**
 Venous Thromboembolism - VTE: Yes No **CVTE (6160)** (If Yes ↓)
 Pulmonary Thromboembolism: Yes No **PulmEmb (6170)**
 Deep Venous Thrombosis: Yes No **DVT (6180)**
 Pleural Effusion Requiring Drainage: Yes No **CPIEff (6190)**

Renal

Renal Failure: Yes No **CRenFail (6200)** (If Yes ↓)
 Dialysis (Newly Required): Yes No (If Yes →) Required after Hospital Discharge: Yes No
CRenDial (6210) **DialDur (6220)**
 Ultra Filtration Required: Yes No **CUltraFil (6230)**

Vascular

Iliac/Femoral Dissection: Yes No **CVaIlFem (6240)**
 Acute Limb Ischemia: Yes No **CVaLblsc (6250)**

Other

Rhythm Disturbance Requiring Permanent Device: Pacemaker ICD Pacemaker/ICD None **CRhythmDis (6270)**
 Cardiac Arrest: Yes No **COTArrst (6280)**
 Anticoagulant Event: Yes No **COTCoag (6290)**
 Tamponade (Non-Surgical Intervention): Yes No **COTamp (6300)**
 Gastro-Intestinal Event: Yes No **COTGI (6310)**
 Multi-System Failure: Yes No **COTMSF (6320)**
 Atrial Fibrillation: Yes No **COTAFib (6330)**
 Aortic Dissection: Yes No **CVaAoDis (6340)**
 Recurrent Laryngeal Nerve Injury: Yes No **ReclarynNrvInj (6341)**
 Phrenic Nerve Injury: Yes No **PhrenNrvInj (6342)**
 Other: Yes No **COTOther (6350)**

Q. Mortality

Mortality: Yes No **Mortality (6360)** Discharge Status: Alive Dead **MtDCStat (6370)** Status at 30 days After Surgery: Alive Dead Unknown **Mt30Stat (6380)**

Primary method used to verify 30-day status: **Mt30StatMeth (6381)**

Phone call to patient or family Evidence of life in medical record Social Security Death Master File
 Letter from medical provider Office visit to surgeon >= 30 days after procedure Other

(If Mortality = Yes ↓)

Operative Death: Yes No **MtOpD (6390)**

Mortality - Date ___/___/___ (mm/dd/yyyy) **MtDate (6400)**

Location of Death: OR During Initial Surgery Hospital (Other than OR) Home Extended Care Facility
MtLocatn (6410) Hospice Acute Rehabilitation OR During Reoperation Unknown Other

Primary Cause of Death (select only one) **MtCause (6420)**

Cardiac Neurologic Renal Vascular Infection Pulmonary Valvular Unknown Other

R. Discharge	
(If Discharge Status = Alive.)	
ADP Inhibitors:	<input type="checkbox"/> Yes <input type="checkbox"/> No DCADP (6430)
Antiarrhythmics:	<input type="checkbox"/> Yes <input type="checkbox"/> No DCAArhy (6440)
Aspirin:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Contraindicated DCASA (6460)
ACE or ARB Inhibitors:	<input type="checkbox"/> Yes <input type="checkbox"/> No, contraindicated <input type="checkbox"/> No, not indicated DCACE (6470)
Beta Blockers:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Contraindicated DCBeta (6480)
Lipid Lowering:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Contraindicated (If Yes →) <input type="checkbox"/> Statin <input type="checkbox"/> Non Statin <input type="checkbox"/> Both <input type="checkbox"/> Other DCLipid (6490) DCLipMT (6500)
Coumadin:	<input type="checkbox"/> Yes <input type="checkbox"/> No DCCoum (6510)
Direct Thrombin Inhibitors:	<input type="checkbox"/> Yes <input type="checkbox"/> No DCDirThromIn (6511)
Discharge Location:	<input type="checkbox"/> Home <input type="checkbox"/> Extended Care/Transitional Care Unit/Rehab <input type="checkbox"/> Other Hospital DisLoctn (6520) <input type="checkbox"/> Nursing Home <input type="checkbox"/> Hospice <input type="checkbox"/> Other
Cardiac Rehabilitation Referral:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable CardRef (6530)
Smoking Cessation Counseling:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable SmokCoun (6540)

S. Readmission	
(If Discharge Status = Alive.)	
Readmit <=30 Days from Date of Procedure:	<input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓) Readm30 (6550)
Readmit <u>Primary</u> Reason: ReadmRsn (6560)	Readmit <u>Primary</u> Procedure: ReadmPro (6570)
<input type="checkbox"/> Anticoagulation Complication - Valvular <input type="checkbox"/> Anticoagulation Complication - Pharmacological <input type="checkbox"/> Arrhythmia/Heart Block <input type="checkbox"/> Congestive Heart Failure <input type="checkbox"/> Myocardial Infarction and/or Recurrent Angina <input type="checkbox"/> Pericardial Effusion and/or Tamponade <input type="checkbox"/> Pneumonia or other Respiratory Complication <input type="checkbox"/> Coronary Artery Dysfunction <input type="checkbox"/> Valve Dysfunction <input type="checkbox"/> Infection - Deep Sternum / Mediastinitis <input type="checkbox"/> Infection - Conduit Harvest Site <input type="checkbox"/> Renal Failure <input type="checkbox"/> TIA <input type="checkbox"/> Permanent CVA <input type="checkbox"/> Acute Vascular Complication <input type="checkbox"/> Subacute Endocarditis <input type="checkbox"/> VAD Complication <input type="checkbox"/> Transplant Rejection <input type="checkbox"/> PE <input type="checkbox"/> DVT <input type="checkbox"/> Other - Related Readmission <input type="checkbox"/> Other - Nonrelated Readmission	<input type="checkbox"/> OR for Bleeding <input type="checkbox"/> Pacemaker Insertion / AICD <input type="checkbox"/> PCI <input type="checkbox"/> Pericardiectomy / Pericardiocentesis <input type="checkbox"/> OR for Coronary Arteries <input type="checkbox"/> OR for Valve <input type="checkbox"/> OR for Sternal Debridement / Muscle Flap <input type="checkbox"/> Dialysis <input type="checkbox"/> OR for Vascular <input type="checkbox"/> No Procedure Performed <input type="checkbox"/> Other Procedure <input type="checkbox"/> Unknown