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| STS seal | **The Society of Thoracic Surgeons****Adult Cardiac Surgery Database****Data Collection Form Version 2.81**April 23, 2015 |

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| **A. Administrative** |
| Participant ID: ParticID (25) | Record ID:(software generated)RecordID (30) | STS Cost Link: CostLink (35) |
| Patient ID:(software generated)PatID (40) |  |  |  |
| Patient participating in STS-related clinical trial: None Trial 1 Trial 2 Trial 3 Trial 4 Trial 5 Trial 6 (If not “None” →)ClinTrial (45) | Clinical trial patient ID: ClinTrialPatID (46)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| **B. Demographics** |
| Patient Last Name: PatLName (50) | Patient First Name: PatFName (55) | Patient Middle Name: PatMName (60) |
| Date of Birth: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ (mm/dd/yyyy)DOB (65) | Patient Age: \_\_\_\_\_\_ Age (70) | Sex: Male Female Gender (75) |
| Social Security Number: \_\_ \_\_ \_\_ - \_\_ \_\_ - \_\_ \_\_ \_\_ \_\_ SSN (80) | Medical Record Number: MedRecN (85) |
| Street Address: PatAddr (90) | City: PatCity (95) |
| Region: PatRegion (100) | ZIP Code: PatZIP (105) | Country: PatientCountry (115) |
| Is This Patient’s Permanent Address: Yes No Unknown PermAddr (120) |
| Is the Patient’s Race Documented? Yes No Pt. Declined to Disclose RaceDocumented (150) |
| (If Yes →) | Race : (Select all that apply→) | White: RaceCaucasian (155) |  Yes No | Am Indian/Alaskan: RaceNativeAm (170) |  Yes No |
|  | Black/African American:RaceBlack (160) |  Yes No | Hawaiian/Pacific Islander: RacNativePacific (175) |  Yes No |
|  | Asian:RaceAsian (165) |  Yes No | Other: RaceOther (180) |  Yes No |
| Hispanic, Latino or Spanish Ethnicity:  |  Yes No Not Documented Ethnicity (185) |

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| **C. Hospitalization** |
| Hospital Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (If Not Missing →) HospName (205) | Hospital ZIP Code: HospZIP (210) | Hospital Region: HospStat (215) |
| Hospital National Provider Identifier: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ HospNPI (220) |
| Payor – (Select all that apply↓) Government Health Insurance: PayorGov (225) 🞎 Yes 🞎 No (If Yes, select all that apply ↓) |
|  | Medicare: 🞎 Yes 🞎 No (If Yes →) PayorGovMcare (230) | Medicare Fee For Service: 🞎 Yes 🞎 No PayorGovMcareFFS (240) |  |
|  | Medicaid: 🞎 Yes 🞎 NoPayorGovMcaid (245) | Military Health Care: 🞎 Yes 🞎 NoPayorGovMil (250) | State-Specific Plan: 🞎 Yes 🞎 NoPayorGovState (255) |
|  | Indian Health Service: 🞎 Yes 🞎 NoPayorGovIHS (260) | Correctional Facility: 🞎 Yes 🞎 No PayorGovCor (265) | Other Gov’t. Plan: 🞎 Yes 🞎 NoPayorGovOth (270) |
| Commercial Health Insurance: PayorCom (275) | 🞎 Yes 🞎 No | Health Maintenance Organization:PayorHMO (280)  | 🞎 Yes 🞎 No |
| Non-U.S. Insurance:PayorNonUS (285)  | 🞎 Yes 🞎 No | None / Self: PayorNS (290) | 🞎 Yes 🞎 No |
| Admit Date:\_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_  (mm/dd/yyyy)AdmitDt (305) | Date of Surgery: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_\_\_ (mm/dd/yyyy)SurgDt (310) | Date of Discharge: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_\_\_ (mm/dd/yyyy)DischDt (315) |
| Admit Source: |  Elective Admission Emergency Department Transfer in from another hospital/acute care facility Other  |
| AdmitSrc (320) |  (If Transfer →) Other Hospital Performs Cardiac Surgery Yes No OthHosCS (325) |

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| **D. Risk Factors** “Unknown” should only be selected if Patient / Family unable to provide history |
| Height (cm): \_\_\_\_\_\_\_\_ HeightCm (330)  | Weight (kg): \_\_\_\_\_\_\_\_WeightKg (335) |
| Family History of Premature Coronary Artery Disease: 🞎 Yes 🞎 No 🞎 Unknown FHCAD (355) |
| Diabetes: 🞎 Yes 🞎 No 🞎 Unknown (If Yes →) Diabetes-Control: 🞎 None 🞎 Diet only 🞎 Oral 🞎 Insulin 🞎 Other subq 🞎 Other 🞎 UnknownDiabetes (360) DiabCtrl (365) |
| Dyslipidemia: 🞎 Yes 🞎 No 🞎 Unknown Dyslip (370) | Dialysis: 🞎 Yes 🞎 No 🞎 UnknownDialysis (375) | Hypertension: 🞎 Yes 🞎 No 🞎 UnknownHypertn (380) |
| Endocarditis: 🞎 Yes 🞎 No (If Yes→) Endocarditis Type: 🞎 Treated 🞎 ActiveInfEndo (385) InfEndTy (390) |
| (If Yes→)  | Endocarditis Culture:  | 🞎 Culture negative 🞎 Staph aureus 🞎 Strep species 🞎 Coagulase negative staph |
|  | InfEndCult (395) | 🞎 Enterococcus species 🞎 Fungal 🞎 Other 🞎Unknown |
| Tobacco use: TobaccoUse (400) | 🞎 Never smoker🞎 Current every day smoker🞎 Current some day smoker | 🞎 Smoker, current status (frequency) unknown🞎 Former smoker🞎 Smoking status unknown |
| Lung Disease: 🞎 No 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Lung disease documented, severity unknown 🞎 Unknown ChrLungD (405) |
| (If Mild, Moderate or Severe→) | Type: | 🞎 Obstructive 🞎 Reactive 🞎 Interstitial Fibrosis 🞎 Other 🞎 Multiple 🞎 Not DocumentedChrLungDType (410) |
| Pulmonary Function Test Done: 🞎 Yes 🞎 No PFT (415)  |
| (If Yes →) | FEV1 % Predicted: \_\_\_\_\_\_\_\_FEV1 (420) | DLCO Test Performed: 🞎 Yes 🞎 No (If Yes →)DLCO (425) | DLCO % Predicted: \_\_\_\_\_DLCOPred (430) |
| Room Air ABG Performed: 🞎 Yes 🞎 No (If Yes →)ABG (435) | Carbon Dioxide Level:\_\_\_\_\_\_\_\_ PCO2 (440) | Oxygen Level : \_\_\_\_\_\_\_PO2 (445) |
| Home Oxygen: 🞎 Yes, PRN 🞎 Yes, oxygen dependent 🞎 No 🞎 Unknown HmO2 (450)  | Inhaled Medication or Oral Bronchodilator Therapy: 🞎 Yes 🞎 No 🞎 Unknown BDTx (455) |
| Sleep Apnea: 🞎 Yes 🞎 No 🞎 UnknownSlpApn (460) | Pneumonia: 🞎 Recent 🞎 Remote 🞎 No 🞎 UnknownPneumonia (465) |
| Illicit Drug Use: 🞎 Recent 🞎 Remote 🞎 No 🞎 UnknownIVDrugAb (470) | Depression 🞎 Yes 🞎 No 🞎 UnknownDepression (475) |
| Alcohol Use: 🞎 <=1 drink/week 🞎 2- 7 drinks/week 🞎 >=8 drinks/week 🞎 None 🞎 UnknownAlcohol (480) |
| Liver Disease: 🞎 Yes 🞎 No 🞎 UnknownLiverDis (485) | Immunocompromise Present: 🞎 Yes 🞎 No 🞎 UnknownImmSupp (490) |
| Mediastinal Radiation: 🞎 Yes 🞎 No 🞎 UnknownMediastRad (495) | Cancer Within 5 Years: 🞎 Yes 🞎 No 🞎 UnknownCancer (500) |
| Peripheral Artery Disease: 🞎 Yes 🞎 No 🞎 UnknownPVD (505) | Thoracic Aorta Disease: 🞎 Yes 🞎 No 🞎 UnknownThAoDisease (510) |
| Syncope: 🞎 Yes 🞎 No 🞎 UnknownSyncope (515) | Unresponsive State: 🞎 Yes 🞎 No 🞎 UnknownUnrespStat (520) |
| Cerebrovascular Disease: CVD (525) 🞎 Yes 🞎 No 🞎 Unknown  |
| (If Yes→) | Prior CVA: 🞎 Yes 🞎 No 🞎 Unknown (If Yes →)CVA (530) | Prior CVA-When: 🞎 <= 30 days 🞎 > 30 days CVAWhen (535)  |
| CVD TIA: CVDTIA (540) 🞎 Yes 🞎 No 🞎 Unknown |
| CVD Carotid stenosis: CVDCarSten (545) 🞎 Right 🞎 Left 🞎 Both 🞎 None  |
| (If “Right” or “Both” →) | Severity of stenosis on the right carotid artery: 🞎 50-79% 🞎 80 – 99% 🞎 100% 🞎 Not documentedCVDStenRt (550) |
| (If “Left” or “Both” →) | Severity of stenosis on the left carotid artery: 🞎 50-79% 🞎 80 – 99% 🞎 100% 🞎 Not documentedCVDStenLft (555)  |
| History of previous carotid artery surgery and/or stenting: CVDPCarSurg (560) 🞎 Yes 🞎 No  |
| Enter available lab results below. Not all tests are expected or appropriate for all patients. Data Quality Report will only flag missing Creatinine or if both Hemoglobin & Hematocrit are missing |
| WBC Count: \_\_\_\_\_\_WBC (565) | Hemoglobin: \_\_\_\_\_\_RFHemoglobin (570) | Hematocrit: \_\_\_\_\_\_\_Hct (575) | Platelet Count: \_\_\_\_\_\_Platelets (580) |
| Last Creatinine Level: \_\_\_\_\_\_\_CreatLst (585) | Total Albumin:\_\_\_\_\_\_TotAlbumin (590) | Total Bilirubin: \_\_\_\_\_\_\_TotBlrbn (595) | A1c Level: \_\_\_\_\_\_A1cLvl (600) |
| HIT Antibodies 🞎 Yes 🞎 No 🞎 Not ApplicableHITAnti (605) | INR: \_\_\_\_\_\_\_INR (610) | MELD Score: \_\_\_\_\_\_ (System Calculation)MELDScr (615) |
| BNP \_\_\_\_\_ BNP (620) | NTproBNP \_\_\_\_\_NTproBNP (625) | hsTNT \_\_\_\_\_\_\_\_ hsTnT (630) | hsCRP \_\_\_\_\_\_\_\_ hsCRP (635) | GDF-15 \_\_\_\_\_\_\_\_ GDF15 (640) |
| Five Meter Walk Test Done: FiveMWalkTest (645) 🞎 Yes 🞎 No 🞎 Non-ambulatory patient  |
|  (If Yes →) | Time 1: \_\_\_\_\_\_\_ (seconds)FiveMWalk1 (650) | Time 2: \_\_\_\_\_\_\_(seconds)FiveMWalk2 (655) | Time 3 : \_\_\_\_\_\_ (seconds)FiveMWalk3 (660) |

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| **E. Previous Cardiac Interventions** Previous Cardiac Interventions: PrCVInt (665) 🞎 Yes 🞎 No 🞎 Unknown  |
| (If Yes → ) | Previous coronary artery bypass (CAB): PrCAB (670) 🞎 Yes 🞎 No  |
|  | Previous valve procedure: PrValve (675) 🞎 Yes 🞎 No If PrValve Yes, Enter at least one previous valve procedure and up to 5 🡫 |
|  |  | #1PrValveProc1 (695) | #2PrValveProc2 (700) | #3PrValveProc3 (705) | #4PrValveProc4 (710) | #5PrValveProc5 (715) |
|  | No additional valve procedure(s) |  |  |  |  |  |
|  | Aortic valve balloon valvotomy/valvuloplasty |  |  |  |  |  |
|  | Aortic valve repair, surgical |  |  |  |  |  |
|  | Aortic valve replacement, surgical |  |  |  |  |  |
|  | Aortic valve replacement, transcatheter |  |  |  |  |  |
|  | Mitral valve balloon valvotomy/valvuloplasty |  |  |  |  |  |
|  | Mitral valve commissurotomy, surgical |  |  |  |  |  |
|  | Mitral valve repair, percutaneous |  |  |  |  |  |
|  | Mitral valve repair, surgical |  |  |  |  |  |
|  | Mitral valve replacement, surgical |  |  |  |  |  |
|  | Mitral valve replacement, transcatheter |  |  |  |  |  |
|  | Tricuspid valve balloon valvotomy/valvuloplasty |  |  |  |  |  |
|  | Tricuspid valve repair, percutaneous |  |  |  |  |  |
|  | Tricuspid valve repair, surgical |  |  |  |  |  |
|  | Tricuspid valve replacement, surgical |  |  |  |  |  |
|  | Tricuspid valve replacement, transcatheter |  |  |  |  |  |
|  | Tricuspid valvectomy |  |  |  |  |  |
|  | Pulmonary valve balloon valvotomy/valvuloplasty |  |  |  |  |  |
|  | Pulmonary valve repair, surgical |  |  |  |  |  |
|  | Pulmonary valve replacement, surgical |  |  |  |  |  |
|  | Pulmonary valve replacement, transcatheter |  |  |  |  |  |
|  | Pulmonary valvectomy |  |  |  |  |  |
|  | Other valve procedure |  |  |  |  |  |
|  | Previous PCI: POCPCI (775) 🞎 Yes 🞎 No  |
|  | (If Yes →) | PCI Performed Within This Episode Of Care: 🞎 Yes, at this facility 🞎 Yes, at some other acute care facility 🞎 NoPOCPCIWhen (780) |
|  |  | Indication for Surgery: | 🞎 PCI Complication  | 🞎 PCI Failure without Clinical Deterioration |
|  |  | POCPCIndSurg (785) | 🞎 PCI Failure with Clinical Deterioration | 🞎 PCI/Surgery Staged (not STEMI) |
|  | 🞎 PCI for STEMI, multivessel disease | 🞎 Other |
|  |  | PCI Stent: 🞎 Yes 🞎 NoPOCPCISt (790) | (If Yes →) Stent Type: 🞎 Bare metal 🞎 Drug-eluting 🞎 Bioresorbable 🞎Multiple 🞎UnknownPOCPCIStTy (795) |
| PCI Interval: POCPCIIn (800) | 🞎 <= 6 Hours 🞎 > 6 Hours |
|  | Other Previous Cardiac Interventions: 🞎 Yes 🞎 No (If Yes, Enter at least one previous other cardiac procedure and up to 7 ↓)POC (805) |
|  |  | #1POCInt1 (810) | #2POCInt2 (815) | #3POCInt3 (820) | #4POCInt4 (825) | #5POCInt5 (830) | #6POCInt6 (835) | #7POCInt7 (840) |
|  | No additional interventions  |  |  |  |  |  |  |  |
|  | Ablation, catheter, atrial fibrillation |  |  |  |  |  |  |  |
|  | Ablation, catheter, other or unknown |  |  |  |  |  |  |  |
|  | Ablation, catheter, ventricular |  |  |  |  |  |  |  |
|  | Ablation, surgical, atrial fibrillation |  |  |  |  |  |  |  |
|  | Ablation, surgical, other or unknown |  |  |  |  |  |  |  |
|  | Aneurysmectomy, LV |  |  |  |  |  |  |  |
|  | Aortic procedure, arch |  |  |  |  |  |  |  |
|  | Aortic procedure, ascending |  |  |  |  |  |  |  |
|  | Aortic procedure, descending |  |  |  |  |  |  |  |
|  | Aortic procedure, root |  |  |  |  |  |  |  |
|  | Aortic procedure, thoracoabdominal |  |  |  |  |  |  |  |
|  | Aortic Procedure, TEVAR |  |  |  |  |  |  |  |
|  | Aortic root procedure, valve sparing |  |  |  |  |  |  |  |
|  | Atrial appendage obliteration, Left, surgical  |  |  |  |  |  |  |  |
|  | Atrial appendage obliteration, Left, transcatheter |  |  |  |  |  |  |  |
|  | Atrial appendage obliteration, Right, surgical  |  |  |  |  |  |  |  |
|  | Atrial appendage obliteration, Right, transcatheter |  |  |  |  |  |  |  |
|  | Cardiac Tumor |  |  |  |  |  |  |  |
|  | Cardioversion(s) |  |  |  |  |  |  |  |
|  | Closure device, atrial septal defect |  |  |  |  |  |  |  |
|  | Closure device, ventricular septal defect |  |  |  |  |  |  |  |
|  | Congenital cardiac repair, surgical |  |  |  |  |  |  |  |
|  | Implantable Cardioverter Defibrillator (ICD) with or without pacer |  |  |  |  |  |  |  |
|  | Pacemaker |  |  |  |  |  |  |  |
|  | Pericardiectomy |  |  |  |  |  |  |  |
|  | Pulmonary thrombectomy |  |  |  |  |  |  |  |
|  | Total Artificial Heart (TAH) |  |  |  |  |  |  |  |
|  | Transmyocardial Laser Revascularization (TMR) |  |  |  |  |  |  |  |
|  | Transplant heart & lung |  |  |  |  |  |  |  |
|  | Transplant, heart |  |  |  |  |  |  |  |
|  | Transplant, lung(s) |  |  |  |  |  |  |  |
|  | Ventricular Assist Device (VAD), BiVAD |  |  |  |  |  |  |  |
|  | Ventricular Assist Device (VAD), left |  |  |  |  |  |  |  |
|  | Ventricular Assist Device (VAD), right |  |  |  |  |  |  |  |
|  | Other Cardiac Intervention (not listed) |  |  |  |  |  |  |  |

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| **F. Preoperative Cardiac Status** |
| Prior Myocardial Infarction: PrevMI (885) 🞎 Yes 🞎 No 🞎 Unknown (If Yes ↓)  |
|  |  | MI When: 🞎 <=6 Hrs. 🞎 >6 Hrs. but <24 Hrs. 🞎 1 to 7 Days 🞎 8 to 21 Days 🞎 >21 Days  MIWhen (890) |
| Cardiac Presentation/Symptoms: (Choose one from the list below for each column🡫) |
|  | At time of this admission: CardSympTimeOfAdm (895) | At time of surgery: CardSympTimeOfSurg (900) |
|  | No Symptoms |  |  |
|  | Stable Angina |  |  |
|  | Unstable Angina |  |  |
|  | Non-ST Elevation MI (Non-STEMI) |  |  |
|  | ST Elevation MI (STEMI) |  |  |
|  | Angina Equivalent |  |  |
|  | Other |  |  |
| Anginal Classification Within 2 weeks: 🞎 CCS Class 0 🞎 CCS Class I 🞎 CCS Class II 🞎 CCS Class III 🞎 CCS Class IV AnginalClass (905) |
| Heart Failure Within 2 weeks : 🞎 Yes 🞎 No 🞎 Unknown (If Yes→) Classification-NYHA: 🞎 Class I 🞎 Class II 🞎 Class III 🞎 Class IVCHF (910) ClassNYH (915) |
| Prior Heart failure: 🞎 Yes 🞎 No 🞎 Unknown PriorHF (920)  |
| Cardiogenic Shock : 🞎 Yes, at the time of the procedure 🞎 Yes, not at the time of the procedure but within prior 24 hours 🞎 No CarShock (930)  |
| Resuscitation: 🞎 Yes - Within 1 hour of the start of the procedure 🞎 Yes - More than 1 hour but less than 24 hours of the start of the procedure 🞎 No Resusc (935) |
| Arrhythmia: 🞎 Yes 🞎 No 🞎 Unknown Arrhythmia (945) |
| (If Yes →) | (Choose one response for each rhythm below 🡫) |
|  | VTach/VFibArrhythVV (950) | Sick Sinus SyndromeArrhythSSS (955) | AFlutterArrhythAFlutter (960) | Second Degree Heart BlockArrhythSecond (965) | Third Degree Heart BlockArrhythThird (970) |
| None |  |  |  |  |  |
| Remote (> 30 days preop) |  |  |  |  |  |
| Recent (<= 30 days preop) |  |  |  |  |  |
|  |  |
| (If Yes →) | Permanently Paced Rhythm: ArrhythPPaced (975) 🞎 Yes 🞎 No |
|  | Atrial Fibrillation: ArrhythAFib (980) 🞎 None 🞎 Paroxysmal 🞎 Continuous/Persistent  |
|  | If Continuous/persistent→ Indicate duration 🞎 ≤ one year  🞎 > one year   🞎 unknown ArrhythAFibDur (985) |

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| **G. Preoperative Medications**  |
| **Medication** | **Timeframe** | **Administration** |
| ACE or ARBMedACEI48 (1020) | Within 48 hours | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Unknown |
| ADP Inhibitor MedADP5Days (1025) | Within 5 days | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Unknown(If Yes→)ADP Inhibitors Discontinuation: \_\_\_\_\_\_\_ (# days prior to surgery)  MedADPIDis (1030) |
| Amiodarone MedAmiodarone (1035) | Prior to surgery | 🞎 Yes, on home therapy 🞎 Yes, therapy started this admission 🞎 No 🞎 Unknown |
| AnticoagulantsMedACoag (1040) | Within 48 hours | 🞎 Yes 🞎 No (If Yes→)Medication:  | 🞎 Heparin (Unfractionated) 🞎 Heparin (Low Molecular) 🞎 Other MedACMN (1045) |
| AntiplateletsMedAplt5Days (1050) | Within 5 days | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Unknown |
| AspirinMedASA (1055) | Within 5 days | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Unknown |
| Beta Blocker\*MedBeta (1060) | Within 24 hours | 🞎 Yes 🞎 No 🞎 Contraindicated\*  |
| Beta Blocker MedBetaTher (1065) | On therapy for ≥ 2 weeks prior to surgery | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Unknown |
| Calcium Channel Blocker MedCChanTher (1070) | On therapy for ≥ 2 weeks prior to surgery | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Unknown |
| CoumadinMedCoum (1075) | Within 24 hours | 🞎 Yes 🞎 No 🞎 Unknown |
| Factor Xa inhibitorsMedXaInhibitors (1080) | Within 24 hours | 🞎 Yes 🞎 No 🞎 Unknown |
| Glycoprotein IIb/IIIaMedGP (1085) | Within 24 hours | 🞎 Yes 🞎 No 🞎 Unknown(If Yes→)Medication Name: 🞎 Abciximab (ReoPro) 🞎 Eptifibatide (Integrilin) MedGPMN (1090) 🞎 Tirofiban (Aggrastat) 🞎 Other |
| Inotropic, intravenousMedInotr (1095) | Within 48 hours | 🞎 Yes 🞎 No  |
| Lipid loweringMedLipid (1100) | Within 24 hours | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Unknown(If Yes→)Medication Type : 🞎 Statin 🞎 Non-statin 🞎 Other 🞎 Combination  MedLipMN (1105) |
| Long-acting Nitrate MedLongActNit (1110) | On therapy for ≥ 2 weeks prior to surgery | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Unknown |
| Nitrates, intravenousMedNitIV (1115) | Within 24 hours | 🞎 Yes 🞎 No  |
| Other Antianginal Medication MedOthAntiang (1120) | On therapy for ≥ 2 weeks prior to surgery | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Unknown |
| SteroidsMedSter (1130) | Within 24 hours | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Unknown |
| Thrombin InhibitorsMedThrombinIn (1135) | Within 24 hours | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Unknown |
| ThrombolyticsMedThrom (1140) | Within 48 hours | 🞎 Yes 🞎 No |
| ***\*NQF Measure included in composite score for CABG*** |

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| **H. Hemodynamics/Cath/Echo**  |
| Cardiac Catheterization Performed : 🞎 Yes 🞎 No (If Yes→)CarCathPer (1145) | Cardiac Catheterization Date: \_\_ \_\_/ \_\_ \_\_/\_\_ \_\_ \_\_ \_\_ CarCathDt (1150) |
| Coronary Anatomy/Disease known: 🞎 Yes 🞎 No (If Yes🡫) |  |
| CorAnatDisKnown (1155) | Dominance:Dominance (1160) | 🞎 Left 🞎 Right 🞎 Co-dominant 🞎 Not Documented |
|  | Source(s) used to quantify stenosis : StenSource (1165) | 🞎 Angiogram 🞎 CT 🞎 IVUS 🞎 Progress/OP Note 🞎 Other 🞎 Multiple  |
|  | Number Diseased Vessels : NumDisV (1170) | 🞎 None 🞎 One 🞎 Two 🞎 Three |
| (If one, two or three vessel disease 🡫) |
| Each Column with a “yes” response below must have documentation on at least one vessel  |
| **Coronary**(Last known value pre-op) | **Native Artery**% Stenosis Known:🞎 Yes 🞎 No (If yes🡫)PctStenKnown (1175) | **Graft(s)**Graft(s) Present:🞎 Yes 🞎 No (If yes🡫) GraftsPrsnt (1180) | **Stent(s)**Stent(s) Present:🞎 Yes 🞎 No (If yes🡫) StentPrsnt (1185) | **Fractional Flow Reserve (FFR)**FFR Performed:🞎Yes 🞎No (If yes🡫) FFRPerf (1190) |
| **Left Main** | \_\_\_\_\_%PctStenLMain (1195) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenLMain (1200) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenLMain (1205) | \_\_\_\_\_FFRLMain (1210) |
| **Proximal LAD** | \_\_\_\_\_%PctStenProxLAD (1215) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenProxLAD (1220) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenProxLAD (1225) | \_\_\_\_\_FFRProxLAD (1230) |
| **Mid LAD**  | \_\_\_\_\_%PctStenMidLAD (1235) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenMidLAD (1240) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenMidLAD (1245) | \_\_\_\_\_FFRMidLAD (1250) |
| **Distal LAD** | \_\_\_\_\_%PctStenDistLAD (1255) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenDistLAD (1260) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenDistLAD (1265) | \_\_\_\_\_FFRDistLAD (1270) |
| **Diagonal 1** | \_\_\_\_\_%PctStenDiag1 (1275) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenDiag1 (1280) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenDiag1 (1285) | \_\_\_\_\_FFRDiag1 (1290) |
| **Diagonal 2** | \_\_\_\_\_%PctStenDiag2 (1295) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenDiag2 (1300) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenDiag2 (1305) | \_\_\_\_\_FFRDiag2 (1310) |
| **Diagonal 3** | \_\_\_\_\_%PctStenDiag3 (1315) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenDiag3 (1320) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenDiag3 (1325) | \_\_\_\_\_FFRDiag3 (1330) |
| **Circumflex** | \_\_\_\_\_%PctStenCircflx (1335) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenCircflx (1340) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenCircflx (1345) | \_\_\_\_\_FFRCircflx (1350) |
| **Obtuse Marginal1** | \_\_\_\_\_%PctStenOM1 (1355) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenOM1 (1360) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenOM1 (1365) | \_\_\_\_\_FFROM1 (1370) |
| **Obtuse Marginal2** | \_\_\_\_\_%PctStenOM2 (1375) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenOM2 (1380) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenOM2 (1385) | \_\_\_\_\_FFROM2 (1390) |
| **Obtuse Marginal3** | \_\_\_\_\_%PctStenOM3 (1395) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenOM3 (1400) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenOM3 (1405) | \_\_\_\_\_FFROM3 (1410) |
| **Ramus** | \_\_\_\_\_%PctStenRamus (1415) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenRamus (1420) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenRamus (1425) | \_\_\_\_\_FFRRamus (1430) |
| **RCA** | \_\_\_\_\_%PctStenRCA (1435) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenRCA (1440) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenRCA (1445) | \_\_\_\_\_FFRRCA (1450) |
| **Acute Marginal (AM)** | \_\_\_\_\_%PctStenAM (1455) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenAM (1460) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenAM (1465) | \_\_\_\_\_FFRAM (1470) |
| **Posterior Descending (PDA)** | \_\_\_\_\_%PctStenPDA (1475) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenPDA (1480) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenPDA (1485) | \_\_\_\_\_FFRPDA (1490) |
| **Posterolateral (PLB)** | \_\_\_\_\_%PctStenPLB (1495) | 🞎 Patent🞎 Stenosis >=50%🞎 100% occlusion🞎 Not DocumentedGrftStenPLB (1500) | 🞎 Patent🞎 Stenosis >=50%🞎 Not DocumentedStntStenPLB (1505) | \_\_\_\_\_FFRPLB (1510) |
| Syntax Score Known: SyntaxScrKnown (1515) 🞎 Yes 🞎 No (If Yes→) Syntax Score: SyntaxScr (1520) \_\_\_\_\_\_\_\_\_\_ |
| Stress Test: 🞎 Yes 🞎 No (If Yes ↓) |
| StressTst (1525) | Result: 🞎 Normal 🞎 Abnormal 🞎 UnavailableStressTstRes (1530) |
|  | Risk/Extent of ischemia: 🞎 Low Risk 🞎 Intermediate Risk 🞎 High Risk 🞎 UnavailableRiskIschemia (1535) |
| Ejection Fraction Done: HDEFD (1540) 🞎 Yes 🞎 No (If Yes→)  | Ejection Fraction: HDEF (1545) \_\_\_\_\_\_\_\_\_ (%) |
| Dimensions Available: DimAvail (1555) 🞎 Yes 🞎 No (If Yes🡫)  |
|  | LV End-Systolic Dimension: \_\_\_\_\_\_\_\_ (mm) LVSD (1560) | LV End-Diastolic Dimension: \_\_\_\_\_\_\_ (mm) LVEDD (1565) |
| PA Systolic Pressure Measured: 🞎 Yes 🞎 No (If Yes→)PASYSMeas (1570) | PA Systolic Pressure: \_\_\_\_\_\_\_\_ mmHg PASYS (1575) |
| **Aortic Valve** |
| Aortic Insufficiency: 🞎 None 🞎 Trivial/Trace 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Not DocumentedVDInsufA (1590) |
| Aortic Valve Disease: VDAort (1595) 🞎 Yes 🞎 No  |
| (If Yes→ ) | Aortic Stenosis: 🞎 Yes 🞎 No (If Yes→) Hemodynamic/Echo data available: 🞎 Yes 🞎 No (If Yes ↓)VDStenA (1600) AoHemoDatAvail (1605) |
|  |  |  | Smallest Aortic Valve Area: VDAoVA (1610) \_\_\_\_\_\_\_\_ cm2 |
| (If Yes🡫 ) |  |   | Highest Mean Gradient: VDGradA (1615) \_\_\_\_\_\_\_\_ mmHg |
|  Etiology: (Choose at least one and up to 5 etiologies) | #1VDAoEt1 (1625) | #2VDAoEt2 (1630) | #3VDAoEt3 (1635) | #4VDAoEt4 (1640) | #5VDAoEt5 (1645) |
|  | Unknown |  |  |  |  |  |
|  | No additional etiology  |  |  |  |  |  |
|  | Bicuspid valve disease |  |  |  |  |  |
|  | Congenital (other than bicuspid) |  |  |  |  |  |
|  | Degenerative- Calcified |  |  |  |  |  |
|  | Degenerative- Leaflet prolapse with or without annular dilation |  |  |  |  |  |
|  | Degenerative- Pure annular dilation without leaflet prolapse |  |  |  |  |  |
|  | Endocarditis with root abscess |  |  |  |  |  |
|  | Endocarditis without root abscess |  |  |  |  |  |
|  | LV Outflow Tract Pathology, HOCM |  |  |  |  |  |
|  | LV Outflow Tract Pathology, Sub-aortic membrane |  |  |  |  |  |
|  | LV Outflow Tract Pathology, Sub-aortic Tunnel |  |  |  |  |  |
|  | LV Outflow Tract Pathology, Other |  |  |  |  |  |
|  | Primary Aortic Disease, Aortic Dissection |  |  |  |  |  |
|  | Primary Aortic Disease, Atherosclerotic Aneurysm |  |  |  |  |  |
|  | Primary Aortic Disease, Ehler-Danlos Syndrome |  |  |  |  |  |
|  | Primary Aortic Disease, Hypertensive Aneurysm |  |  |  |  |  |
|  | Primary Aortic Disease, Idiopathic Root Dilation |  |  |  |  |  |
|  | Primary Aortic Disease, Inflammatory |  |  |  |  |  |
|  | Primary Aortic Disease, Loeys-Dietz Syndrome |  |  |  |  |  |
|  | Primary Aortic Disease, Marfan Syndrome |  |  |  |  |  |
|  | Primary Aortic Disease, Other Connective tissue disorder |  |  |  |  |  |
|  | Prior Aortic Intervention, Etiology Unknown |  |  |  |  |  |
|  | Rheumatic |  |  |  |  |  |
|  | Supravalvular Aortic Stenosis |  |  |  |  |  |
|  | Trauma |  |  |  |  |  |
|  | Tumor, Carcinoid |  |  |  |  |  |
|  | Tumor, Myxoma |  |  |  |  |  |
|  | Tumor, Papillary Fibroelastoma |  |  |  |  |  |
|  | Tumor, Other |  |  |  |  |  |
|  | Other |  |  |  |  |  |
| **Mitral Valve** |
| Mitral Insufficiency: VDInsufM (1680) 🞎 None 🞎 Trivial/Trace 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Not Documented |
| Mitral Valve Disease: VDMit (1685) 🞎 Yes 🞎 No  |
| (If Yes→)  | Mitral Stenosis: 🞎 Yes 🞎 No (If Yes→)  | Hemodynamic/ Echo data available: 🞎 Yes 🞎 No (If Yes ↓) |
|  | VDStenM (1690) | MiHemoDatAvail (1695) | Smallest Valve Area: \_\_\_\_\_\_\_\_ cm2VDMVA (1700)Highest Mean Gradient: \_\_\_\_\_\_\_\_mmHg VDGradM (1705) |
| (If Yes→) (If Yes🡫) | Carpentier Mitral leaflet motion classification:VDMitFC (1715) | 🞎 Type I 🞎 Type II 🞎 Type IIIa 🞎 Type IIIb 🞎 Not Documented |
|  MV Disease Etiology: (Choose at least one and up to 3 etiologies🡫) | #1VDMiEt1 (1720) | #2VDMiEt2 (1725) | #3VDMiEt3 (1730) |
|  | Unknown |  |  |  |
|  | No additional etiology |  |  |  |
|  | Degenerative |  |  |  |
|  | Rheumatic |  |  |  |
|  | Ischemic- acute, post infarction |  |  |  |
|  | Ischemic- chronic  |  |  |  |
|  | Non-ischemic Cardiomyopathy |  |  |  |
|  | Endocarditis |  |  |  |
|  | Hypertrophic Obstructive Cardiomyopathy (HOCM) |  |  |  |
|  | Tumor, Carcinoid |  |  |  |
|  | Tumor, Myxoma |  |  |  |
|  | Tumor, Papillary fibroelastoma |  |  |  |
|  | Tumor, Other |  |  |  |
|  | Carcinoid |  |  |  |
|  | Trauma |  |  |  |
|  | Congenital |  |  |  |
|  | Prior Mitral Valve Intervention, Etiology Unknown |  |  |  |
|  | Other |  |  |  |
|  MV Lesion(s):(Choose at least one and up to 3 lesions🡫) | #1VDMiLes1 (1735) | #2VDMiLes2 (1740) | #3VDMiLes3 (1745) |
|  | Unknown |  |  |  |
|  | No additional lesions |  |  |  |
|  | Leaflet prolapse, posterior  |  |  |  |
|  | Leaflet prolapse, bileaflet |  |  |  |
|  | Leaflet prolapse, anterior |  |  |  |
|  | Elongated/ruptured chord(s) |  |  |  |
|  | Annular dilation |  |  |  |
|  | Leaflet calcification |  |  |  |
|  | Mitral annular calcification |  |  |  |
|  | Papillary muscle elongation |  |  |  |
|  | Papillary muscle rupture |  |  |  |
|  | Leaflet thickening/retraction |  |  |  |
|  | Chordal tethering |  |  |  |
|  | Chordal thickening/retraction/fusion |  |  |  |
|  | Commissural fusion |  |  |  |
|  | Other |  |  |  |
| **Tricuspid Valve** |
| Tricuspid Insufficiency: VDInsufT (1775) 🞎 None 🞎 Trivial/Trace 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Not Documented |
| Tricuspid Valve Disease: VDTr (1780) 🞎 Yes 🞎 No  |
| (If Yes→) | Tricuspid Stenosis: VDStenT (1785) 🞎 Yes 🞎 No  |  |  |
| (If Yes→)(If Yes🡫)  | Tricuspid Annular Echo Measurement Available: 🞎 Yes 🞎 No (If Yes→)VDTrAnnMeas (1790) | Tricuspid Annulus Size: \_\_\_\_\_\_\_ cmVDTrAnnSize (1795) |
|  | TV Etiology: (Choose at least one and up to 3 etiologies🡫) | #1VDTrEt1 (1800) | #2VDTrEt2 (1805) | #3VDTrEt3 (1810) |
|  | Unknown |  |  |  |
|  | No additional etiology |  |  |  |
|  | Functional |  |  |  |
|  | Endocarditis |  |  |  |
|  | Carcinoid |  |  |  |
|  | Congenital |  |  |  |
|  | Degenerative |  |  |  |
|  | Pacing wire/catheter induced dysfunction |  |  |  |
|  | Rheumatic |  |  |  |
|  | Tumor |  |  |  |
|  | Trauma |  |  |  |
|  | Prior TV intervention, Etiology Unknown |  |  |  |
|  | Other |  |  |  |
| **Pulmonic Valve** |
| Pulmonic Insufficiency: 🞎 None 🞎 Trivial/Trace 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Not DocumentedVDInsufP (1820) |
| Pulmonic Valve Disease: 🞎 Yes 🞎 No VDPulm (1825) |
| (If Yes →) | RVEDD Known:RVEDDKnown (1830) | 🞎 Yes 🞎 No (If Yes →) | RVEDD Indexed to BSA:RVEDD (1835) | \_\_\_\_\_\_\_\_\_\_ cm2 |
| (If Yes →) | Pulmonic Stenosis: VDStenP (1840) | 🞎 Yes 🞎 No (If Yes→)  | Hemodynamic /Echo data available: 🞎 Yes 🞎 No (If Yes ↓)PuHemoDatAvail (1845) |
|  |  |  Highest Mean Gradient : \_\_\_\_\_\_\_mmHg VDGradP (1850) |
| (If Yes→) | Etiology: VDPuEt (1855) (choose one) |
|  |  | 🞎 Acquired | 🞎 Prior Pulmonic Valve Intervention, Etiology Unknown |
|  |  | 🞎 Congenital, s/p Tetralogy of Fallot (TOF) repair | 🞎 Other |
|  |  | 🞎 Congenital, no prior Tetralogy of Fallot (TOF) repair | 🞎 Unknown |
| **Aortic Disease** |
| Disease of aorta: AortaDisease (1860) 🞎 Yes 🞎 No |
| (If Yes→ ) | Presentation:ADPres (1865) | 🞎 Asymptomatic 🞎 Symptomatic, hemodynamics stable 🞎 Symptomatic, hemodynamics unstable |
| (If Yes→ ) | Location: | RootADLocRoot (1870) | 🞎 Yes 🞎 No  | Descending ThoracicADLocDesThor (1885) | 🞎 Yes 🞎 No  |
|  |  | AscendingADLocAsc (1875) | 🞎 Yes 🞎 No  | ThoracoabdominalADLocThora (1890) | 🞎 Yes 🞎 No  |
|  |  | ArchADLocArch (1880)  | 🞎 Yes 🞎 No  |  |  |
| (If Yes→ ) | Lesion Type: | AneurysmADLesTAneur (1895) | 🞎 Yes 🞎 No  | PseudoaneurysmADLesTPseudo (1910) | 🞎 Yes 🞎 No  |
|  |  | Coarctation/NarrowingADLesTCoarcNar (1900) | 🞎 Yes 🞎 No  | Penetrating UlcerADLesTPenUlcer (1915) | 🞎 Yes 🞎 No  |
|  |  | RuptureADLesTRup (1905) | 🞎 Yes 🞎 No  | Intramural HematomaADLesTIntraHema (1920) | 🞎 Yes 🞎 No  |
|  |  | DissectionADLesTDis (1925) | 🞎 Yes 🞎 No  |  |  |
|  |  |  (If Dissection → ) | Dissection Timing: 🞎 Acute 🞎 Chronic 🞎 Acute on chronic 🞎 Not DocumentedADLesTDisTmg (1930) |
|  |  | Dissection Type: 🞎 Stanford Type A 🞎 Stanford Type BADLesTDisTy (1935) |
| (If Yes→ )Etiology (choose at least one and up to 3) | #1ADEt1 (1940) | #2ADEt2 (1945) | #3ADEt3 (1950) |
|  | Unknown |  |  |  |
|  | No additional etiologies |  |  |  |
|  | Aberrant Subclavian artery |  |  |  |
|  | Atherosclerosis |  |  |  |
|  | Bicuspid aortic valve syndrome |  |  |  |
|  | Ehler-Danlos syndrome |  |  |  |
|  | Endocarditis |  |  |  |
|  | Hypertensive aneurysm |  |  |  |
|  | Inflammatory |  |  |  |
|  | Loeys-Dietz Syndrome |  |  |  |
|  | Marfan Syndrome |  |  |  |
|  | Trauma |  |  |  |
|  | Other Congenital Disorder |  |  |  |
|  | Other Connective Tissue Disorder |  |  |  |
|  | Other |  |  |  |

|  |
| --- |
| **I. Operative** |
| Surgeon: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Surgeon (1955)  | Surgeon NPI: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_SurgNPI (1960) |
| Taxpayer Identification Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_TIN (1965) |  |
| Incidence: | 🞎 First cardiovascular surgery  | 🞎 Third re-op cardiovascular surgery |
| Incidenc (1970) | 🞎 First re-op cardiovascular surgery | 🞎 Fourth or more re-op cardiovascular surgery |
|  | 🞎 Second re-op cardiovascular surgery |  |
| Status: Status (1975) | 🞎 Elective  | 🞎 Urgent | 🞎 Emergent | 🞎 Emergent Salvage UrgEmergRsn (1990) |
|  | (If Urgent or Emergent choose one reason🡫) Urgent / Emergent reason:  |
|  | 🞎 | AMI | 🞎 | PCI Incomplete without clinical deterioration |
|  | 🞎 | Anatomy  | 🞎 | PCI or attempted PCI with Clinical Deterioration |
|  | 🞎 | Aortic Aneurysm  | 🞎 | Pulmonary Edema  |
|  | 🞎 | Aortic Dissection  | 🞎 | Pulmonary Embolus  |
|  | 🞎 | CHF  | 🞎 | Rest Angina |
|  | 🞎 | Device Failure  | 🞎 | Shock Circulatory Support  |
|  | 🞎 | Diagnostic/Interventional Procedure Complication  | 🞎 | Shock No Circulatory Support  |
|  | 🞎 | Endocarditis  | 🞎 | Syncope  |
|  | 🞎 | Failed Transcatheter Valve Therapy  | 🞎 | Transplant |
|  | 🞎 | IABP  | 🞎 | Trauma  |
|  | 🞎 | Infected Device  | 🞎 | USA  |
|  | 🞎 | Intracardiac mass or thrombus | 🞎 | Valve Dysfunction  |
|  | 🞎 | Ongoing Ischemia  | 🞎 | Worsening CP  |
|  |  |  | 🞎 | Other |
| Was case previously attempted during this admission, but canceled: PCancCase (1995) 🞎 Yes 🞎 No  |
| (If Yes→) | Date of previous case: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ (mm/dd/yyyy)PCancCaseDt (2000)  |
|  | Timing of previous case: PCancCaseTmg (2005) | 🞎 Prior to induction of anesthesia 🞎 After induction, prior to incision 🞎 After incision made |
|  | Reason previous case was canceled: PCancCaseRsn (2010) | 🞎 Anesthesiology event 🞎 Cardiac arrest 🞎 Equipment/supply issue 🞎 Access Issue 🞎 Unanticipated tumor 🞎 Donor Organ Unacceptable 🞎 Abnormal Labs 🞎 Other |
|  | Planned previous procedure: | CABG PCancCaseCAB (2015) | 🞎 Yes 🞎 No | Valve, Surgical PCancCaseValSur (2030) | 🞎 Yes 🞎 No |
|  |  | Mechanical Assist Device PCancCaseMech (2020) | 🞎 Yes 🞎 No  | Valve, TranscatheterPCancCaseValTrans (2035) | 🞎 Yes 🞎 No |
|  |  | Other Non-cardiac PCancCaseONC (2025)  | 🞎 Yes 🞎 No | Other Cardiac PCancCaseOC (2040)  | 🞎 Yes 🞎 No |
| Was the current procedure canceled: CCancCase (2050) 🞎 Yes 🞎 No  |
| (If Yes→) | Canceled Timing:CCancCaseTmg (2055) | 🞎 Prior to induction of anesthesia 🞎 After induction, prior to incision 🞎 After incision made |
|  | Canceled Reason: CCancCaseRsn (2060) | 🞎 Anesthesiology event 🞎 Cardiac arrest 🞎 Equipment/supply issue 🞎 Access Issue🞎 Unanticipated tumor 🞎 Donor Organ Unacceptable 🞎 Abnormal Labs 🞎 Other |
|  | Planned procedure: | CABG CCancCaseCAB (2065)  | 🞎 Yes 🞎 No | Valve, SurgicalCCancCaseValSur (2085) | 🞎 Yes 🞎 No |
|  |  | Mechanical Assist DeviceCCancCaseMech (2075) | 🞎 Yes 🞎 No  | Valve, TranscatheterCCancCaseValTrans (2090) | 🞎 Yes 🞎 No |
|  |  | Other Non-cardiac CCancCaseONC (2080) | 🞎 Yes 🞎 No | Other Cardiac CCancCaseOC (2095) | 🞎 Yes 🞎 No |
| Initial Operative Approach:OPApp (2100)  | 🞎 Full conventional sternotomy🞎 Partial sternotomy 🞎 Transverse sternotomy 🞎 Right or left parasternal incision🞎 Sub-xiphoid🞎 Sub-Costal  | 🞎 Left Thoracotomy 🞎 Right Thoracotomy 🞎 Bilateral Thoracotomy 🞎 Limited (mini) Thoracotomy , right🞎 Limited (mini) Thoracotomy , left 🞎 Limited (mini) Thoracotomy , bilateral | 🞎 Thoracoabdominal Incision🞎 Percutaneous 🞎 Port Access🞎 Other🞎 None (canceled case) |
| Approach converted during procedure: 🞎 Yes, planned 🞎 Yes, unplanned 🞎 NoApproachCon (2105) |
| Robot Used: 🞎 Yes 🞎 No (If Yes →)Robotic (2110) | 🞎 Used for entire operation 🞎 Used for part of the operationRobotTim (2115) |
| Coronary Artery Bypass: 🞎 Yes, planned 🞎 Yes, unplanned due to surgical complication  🞎 Yes, unplanned due to unsuspected disease or anatomy 🞎 No (If “Yes” complete Section J) OpCAB (2120) |
| Valve Surgery: 🞎 Yes 🞎 No (If “Yes” complete Section K) OpValve (2125) |
| VAD Implanted or Removed: 🞎 Yes 🞎 No VADProc (2130) |
| Other Cardiac Procedure: 🞎 Yes 🞎 No (If “Yes” complete Section M)OpOCard (2140) |
| Other Cardiac Procedure, AFib:🞎 Yes 🞎 No (If “Yes” complete Section M-1)AFibProc (2145) |
| Other Cardiac Procedure, Aortic: 🞎 Yes, planned 🞎 Yes, unplanned due to surgical complication  🞎 Yes, unplanned due to unsuspected disease or anatomy 🞎 No (If “Yes” complete Section M-2) AortProc (2150)  |
| Other Non-Cardiac Procedure: 🞎 Yes 🞎 No (If “Yes” complete Section N)OpONCard (2155) |
| Enter up to 10 CPT-1 Codes pertaining to the surgery for which the data collection form was initiated: |
| 1. \_\_\_\_\_CPT1Code1 (2195) | 2. \_\_\_\_\_\_CPT1Code2 (2200) | 3. \_\_\_\_\_\_CPT1Code3 (2205) | 4. \_\_\_\_\_\_\_CPT1Code4 (2210) | 5. \_\_\_\_\_\_\_CPT1Code5 (2215) |
| 6. \_\_\_\_\_\_CPT1Code6 (2220) | 7. \_\_\_\_\_\_CPT1Code7 (2225) | 8. \_\_\_\_\_\_CPT1Code8 (2230) | 9. \_\_\_\_\_\_\_CPT1Code9 (2235) | 10. \_\_\_\_\_\_CPT1Code10 (2240) |
| OR Entry Date And Time: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ \_\_ \_\_: \_\_ \_\_ mm/dd/yyyy hh:mm - 24 hr clock)OREntryDT (2245) |
| OR Exit Date And Time: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ \_\_ \_\_:\_\_ \_\_ (mm/dd/yyyy hh:mm - 24 hr clock)ORExitDT (2250) |
| Initial Intubation Date and Time: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ \_\_ \_\_: \_\_ \_\_ (mm/dd/yyyy hh:mm - 24 hr clock)IntubateDT (2255) |
| Initial Extubation Date and Time: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ \_\_ \_\_: \_\_ \_\_ (mm/dd/yyyy hh:mm - 24 hr clock)ExtubateDT (2260) |
| Skin Incision Start Date and Time: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ \_\_ \_\_: \_\_ \_\_ (mm/dd/yyyy hh:mm - 24 hr clock)SIStartDT (2265) |
| Skin Incision Stop Date and Time: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ \_\_ \_\_: \_\_ \_\_ (mm/dd/yyyy hh:mm - 24 hr clock)SIStopDT (2270) |
| Anesthesia End Date and Time: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ \_\_ \_\_: \_\_ \_\_ (mm/dd/yyyy hh:mm - 24 hr clock)AnesEndDT (2275) |
| Appropriate Antibiotic Selection:AbxSelect (2280)🞎 Yes 🞎 No 🞎 Exclusion | Appropriate Antibiotic Administration Timing: AbxTiming (2285)🞎 Yes 🞎 No 🞎 Exclusion | Appropriate Antibiotic Discontinuation: AbxDisc (2290)🞎 Yes 🞎 No 🞎 Exclusion |
| Additional intraoperative prophylactic antibiotic dose given : AddIntraopPAnti (2295) 🞎 Yes 🞎 No |
| Lowest Temperature (o C): \_\_\_\_\_\_\_\_\_\_ LwstTemp (2300) | Temperature Source: LwstTempSrc (2305) |  Esophageal CPB venous return Bladder Nasopharyngeal Tympanic Rectal Other Unknown |
| Lowest Intra-op Hemoglobin : \_\_\_\_\_\_\_\_\_\_LwstIntraHemo (2310) | Lowest Intra-op Hematocrit : \_\_\_\_\_\_\_\_LwstHct (2315) | Highest Intra-op Glucose: \_\_\_\_\_\_\_\_\_\_HighIntraGlu (2320) |
| CPB Utilization: CPBUtil (2325) | 🞎 None |  |
| 🞎 Combination | (If Combination→)  | Combination Plan: 🞎 Planned 🞎 Unplanned (If Unplanned↓) CPBCmb (2330) |
|  |  |  | Unplanned Reason:CPBCmbR (2335)  | 🞎 Exposure/visualization 🞎 Bleeding 🞎 Inadequate size/ diffuse disease of distal vessel 🞎 Hemodynamic instability(hypotension/arrhythmias) 🞎 Conduit quality and/or trauma 🞎 Other  |
|  | 🞎 Full | (If “Combination” or “Full”↓) |
|  |  | Arterial Cannulation Insertion Site: (Select all that apply🡫) |
|  |  | Aortic CanArtStAort (2340) | 🞎 Yes 🞎 No  | Axillary CanArtStAx (2350) | 🞎 Yes 🞎 No  | OtherCanArtStOth (2360) | 🞎 Yes 🞎 No |
|  |  | Femoral CanArtStFem (2345) | 🞎 Yes 🞎 No  | InnominateCanArtStInn (2355) | 🞎 Yes 🞎 No |  |  |
|  |  | Venous Cannulation Insertion Site: (Select all that apply🡫) |
|  |  | Femoral CanVenStFem (2365) | 🞎 Yes 🞎 No  | Pulmonary Vein CanVenStPulm (2385) | 🞎 Yes 🞎 No  |
|  |  | Jugular CanVenStJug (2370) | 🞎 Yes 🞎 No  | Caval/Bicaval CanVenStBi (2390) | 🞎 Yes 🞎 No  |
|  |  | Rt Atrial CanVenStRtA (2375) | 🞎 Yes 🞎 No  | Other CanVenStOth (2395) | 🞎 Yes 🞎 No  |
|  |  | Lt Atrial CanVenStLfA (2380) | 🞎 Yes 🞎 No  |
|  |  | Cardiopulmonary Bypass Time (minutes): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ PerfusTm (2400) |
| Circulatory Arrest: 🞎 Yes 🞎 No (If Yes↓) CircArr (2405)  |  |
|  | Circulatory Arrest Without Cerebral Perfusion Time: \_\_\_\_\_ (min) DHCATm (2410) |
|  | Circulatory Arrest With Cerebral Perfusion: 🞎 Yes 🞎 No CPerfUtil (2415) |
|  | (If Yes →) | Cerebral Perfusion Time: \_\_\_\_\_\_\_\_\_\_\_ (min) CPerfTime (2420) |
|  |  | Cerebral Perfusion Type: 🞎 Antegrade 🞎 Retrograde 🞎 Both antegrade and retrograde CPerfTyp (2425)  |
|  | Total Circulatory Arrest Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(System Calculation) TotCircArrTm (2426)  |
| Aortic Occlusion:AortOccl (2430) | 🞎 None – beating heart | 🞎 Aortic Crossclamp |
|  |  | 🞎 None – fibrillating heart | 🞎 Balloon Occlusion |
|  |  | (If “Aortic crossclamp” or “Balloon occlusion” →):  | Cross Clamp Time: \_\_\_\_\_\_\_\_\_\_\_ (min)XClampTm (2435) |
| Cardioplegia Delivery: 🞎 None 🞎 Antegrade 🞎 Retrograde 🞎BothCplegiaDeliv (2440) |
|  | (If “Antegrade”, “Retrograde” or “Both”→) Type of cardioplegia used: 🞎 Blood 🞎 Crystalloid 🞎 Both 🞎 Other CplegiaType (2445) |
| Cerebral Oximetry Used: CerOxUsed (2450) 🞎 Yes 🞎 No  |
| Diffuse Aortic Calcification (Porcelain Aorta) : ConCalc (2490) 🞎 Yes 🞎 No  |
| Assessment of Ascending Aorta/Arch for atheroma/plaque: 🞎 Yes 🞎 No 🞎 Not Reported (If Yes ↓) AsmtAscAA (2495) |
|  | Assessment of Aorta Disease: | 🞎 Normal Aorta/No or minimal plaque | 🞎 Extensive intimal thickening  |
|  | AsmtAoDx (2500) | 🞎 Protruding Atheroma < 5 mm | 🞎 Protruding Atheroma >= 5 mm |
|  |  | 🞎 Mobile plaques | 🞎 Not documented |
| Aortic Condition Altered Plan: AsmtAPln (2505) 🞎 Yes 🞎 No  |
| Intraop Blood Products Refused: IBldProdRef (2510) 🞎 Yes 🞎 No  |
|  | (If No →)  | Intraop Blood Products: 🞎 Yes 🞎 No IBldProd (2515) |
|  | (If Yes →)  | Red Blood Cell Units: \_\_\_\_\_\_ IBdRBCU (2520) | Platelet Units: \_\_\_\_\_\_\_\_\_ IBdPlatU (2530) |
|  |  | Fresh Frozen Plasma Units: \_\_\_\_\_\_\_ IBdFFPU (2525) | Cryoprecipitate Units: \_\_\_\_\_\_\_\_IBdCryoU (2535) |   |
| Intraop Clotting Factors : 🞎 Yes, Factor VIIa 🞎 Yes, FEIBA 🞎 Yes, Composite 🞎 NoIntraClotFact (2545)  |
| Intraop Antifibrinolytic Medications: | Epsilon Amino-Caproic Acid: 🞎 Yes 🞎 NoIMedEACA (2550) | Tranexamic Acid: 🞎 Yes 🞎 NoIMedTran (2555) |
| Intraoperative TEE Performed post procedure: InOpTEE (2560) 🞎 Yes 🞎 No (If Yes ↓)  |
|  | Highest level aortic insufficiency found: 🞎 None 🞎 Trace/trivial 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Not Reported PRepAR (2565) |
|  | Highest level mitral insufficiency found: 🞎 None 🞎 Trace/trivial 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Not Reported PRepMR (2570) |
|  | Highest level tricuspid insufficiency found: 🞎 None 🞎 Trace/trivial 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Not Reported PRepTR (2575)Ejection Fraction post procedure: 🞎 Unchanged 🞎 Increased 🞎 Decreased 🞎 Not ReportedPRepEF (2580) |
| Combined cardiac surgery and PCI Performed: 🞎 Yes 🞎 No (If Yes ↓)CombCardPCI (2585) |
|  | Procedures: 🞎 PCI + CAB 🞎 PCI + Valve 🞎 PCI + Aortic 🞎 PCI + OtherCombProcs (2590) |
|  | Status: 🞎 Concurrent- same setting 🞎 Staged - PCI followed by surgery 🞎 Staged - Surgery followed by PCI CombProcsStatus (2595)  |
|  | PCI Procedure: 🞎 Angioplasty 🞎 Stent 🞎 Angioplasty and Stent 🞎 Attempted PCICombProcsPCI (2600)(If Stent or Angioplasty & Stent→) Stent Type: 🞎 Bare metal 🞎 Drug-eluting 🞎 Bioresorbable 🞎 Multiple 🞎 Not documentedCombProcsStentTy (2605) |

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| **J. Coronary Bypass** (If Coronary Artery Bypass = Yes ↓)  |
| Number of Distal Anastomoses with Arterial Conduits: \_\_\_\_\_\_\_ DistArt (2625) |
| Number of Distal Anastomoses with Venous Conduits: \_\_\_\_\_\_\_(If >0 ↓) DistVein (2630)  |
|  | Vein Harvest Technique: 🞎 Endoscopic 🞎 Direct Vision (open) 🞎 Both 🞎 CryopreservedDistVeinHTech (2635)  |
|  |  (If “Endoscopic”, “Direct Vision (open)” or “Both”→)  | Vein Harvest and Prep Time: \_\_\_\_\_\_\_\_\_ (minutes) SaphHarPrepTm (2650) |
| Internal Mammary Artery used for Grafts:IMAArtUs (2655) | 🞎 Left IMA 🞎 Right IMA 🞎 Both IMAs 🞎 No IMA  |
|  | (If No IMA→) Indicate **Primary** Reason: NoIMARsn (2660) | 🞎 Subclavian stenosis | 🞎 Emergent or salvage procedure |
|  |  | 🞎 Previous cardiac or thoracic surgery | 🞎 No (bypassable) LAD disease |
|  |  | 🞎 Previous mediastinal radiation | 🞎 Other  |
|  | (If Left, Right or Both IMAs→) | Total # of Distal Anastomoses done using IMA grafts: \_\_\_\_\_\_\_\_ NumIMADA (2665) |
|  |  | IMA Harvest Technique:IMATechn (2670) | 🞎 Direct Vision (open) | 🞎 Thoracoscopy | 🞎 Combination | 🞎 Robotic Assist |
| Number of Radial Arteries Used for Grafts: \_\_\_\_\_\_\_\_\_\_\_ (If >0 ↓) NumRadArtUs (2675) |
|  | Number of Radial Artery Distal Anastomoses : \_\_\_\_\_\_\_\_\_\_ NumRadDA (2680) |
|  | Radial Distal Anastomoses Harvest Technique: 🞎 Endoscopic 🞎 Direct Vision (open) 🞎 Both RadHTech (2685) |
|  | Radial Artery Harvest and Prep Time: \_\_\_\_\_\_\_\_\_\_\_ (minutes) RadHarvPrepTm (2700) |
| Number Other Arterial Distal Anastomoses Used (other than radial or IMA): NumOArtD (2705) \_\_\_\_\_\_\_\_  |
| Proximal Technique: ProxTech (2710) 🞎 Single Cross Clamp 🞎 Partial Occlusion Clamp 🞎 Anastomotic Assist Device  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CABG NUMBER (one column per distal insertion)** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **GRAFT** | YesCAB (02-10) | NA | 2770 | 2830 | 2890 | 2950 | 3010 | 3070 | 3130 | 3190 | 3250 |
| No |  |  |  |  |  |  |  |  |  |  |
| **DISTAL INSERTION SITE** | Left Main CABDistSite (01-10) | 2730 | 2790 | 2850 | 2910 | 2970 | 3030 | 3090 | 3150 | 3210 | 3270 |
| Proximal LAD |  |  |  |  |  |  |  |  |  |  |
| Mid LAD  |  |  |  |  |  |  |  |  |  |  |
| Distal LAD |  |  |  |  |  |  |  |  |  |  |
| Diagonal 1 |  |  |  |  |  |  |  |  |  |  |
| Diagonal 2 |  |  |  |  |  |  |  |  |  |  |
| Diagonal 3 |  |  |  |  |  |  |  |  |  |  |
| Circumflex |  |  |  |  |  |  |  |  |  |  |
| Obtuse Marginal 1 |  |  |  |  |  |  |  |  |  |  |
| Obtuse Marginal 2 |  |  |  |  |  |  |  |  |  |  |
| Obtuse Marginal 3 |  |  |  |  |  |  |  |  |  |  |
| Ramus |  |  |  |  |  |  |  |  |  |  |
| RCA |  |  |  |  |  |  |  |  |  |  |
| Acute Marginal (AM) |  |  |  |  |  |  |  |  |  |  |
| Posterior Descending (PDA) |  |  |  |  |  |  |  |  |  |  |
| Posterolateral (PLB) |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| **PROXIMAL SITE** | In Situ Mammary CABProximalSite (01-10) | 2740 | 2800 | 2860 | 2920 | 2980 | 3040 | 3100 | 3160 | 3220 | 3280 |
| Ascending aorta |   |   |   |   |   |   |   |   |   |   |
| Descending aorta |   |   |   |   |   |   |   |   |   |   |
| Subclavian artery |   |   |   |   |   |   |   |   |   |   |
| Innominate artery |   |   |   |   |   |   |   |   |   |   |
| T-graft off SVG |   |   |   |   |   |   |   |   |   |   |
| T-graft off Radial |   |   |   |   |   |   |   |   |   |   |
| T-graft off LIMA |   |   |   |   |   |   |   |   |   |   |
| T-graft off RIMA |   |   |   |   |   |   |   |   |   |   |
| Natural Y vein graft |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| **CONDUIT** | Vein graft CABConduit (01-10) | 2750 | 2810 | 2870 | 2930 | 2990 | 3050 | 3110 | 3170 | 3230 | 3290 |
| In Situ LIMA  |   |   |   |   |   |   |   |   |   |   |
| In Situ RIMA  |   |   |   |   |   |   |   |   |   |   |
| Free IMA |   |   |   |   |   |   |   |   |   |   |
| Radial artery |   |   |   |   |   |   |   |   |   |   |
| Other arteries, homograft |   |   |   |   |   |   |   |   |   |   |
| Synthetic graft |  |  |  |  |  |  |  |  |  |  |
| **DISTAL POSITION** | End to Side CABDistPos (01-10) | 2755 | 2815 | 2875 | 2935 | 2995 | 3055 | 3115 | 3175 | 3235 | 3295 |
| Sequential (side to side) |  |  |  |  |  |  |  |  |  |  |
| **ENDARTERECTOMY**  | Yes CABEndArt (01-10) | 2760 | 2820 | 2880 | 2940 | 3000 | 3060 | 3120 | 3180 | 3240 | 3300 |
| No |  |  |  |  |  |  |  |  |  |  |

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| **K. Valve Surgery** (If Valve Surgery=Yes ↓) |
|  | Valve Prosthesis Explant: ValExp (3310) 🞎 Yes 🞎 No (If Yes ↓) |
|  | Explant Position: ValExpPos (3315) | 🞎 Aortic 🞎 Mitral 🞎 Tricuspid 🞎 Pulmonic  |
|  | Explant Type:ValExpTyp (3320) | 🞎 Mechanical Valve | 🞎 Bioprosthetic Valve | 🞎 Homograft | 🞎 Annuloplasty Device |
|  |  | 🞎 Leaflet Clip | 🞎 Transcatheter Device | 🞎 Other | 🞎 Unknown |
|  | Explant Etiology:ValExpEt (3325) | 🞎 Endocarditis | 🞎 Incompetence | 🞎 Prosthetic Deterioration | 🞎 Thrombosis |
|  |  | 🞎 Failed Repair | 🞎 Pannus | 🞎 Sizing/Positioning issue | 🞎 Other |
|  |  | 🞎 Hemolysis | 🞎 Para-valvular leak | 🞎 Stenosis | 🞎 Unknown |
|  |  |  |  |  |  |
|  | Explant Device known: 🞎 Yes 🞎 No (If Yes→) Explant model#:\_\_\_\_\_\_\_\_ ValExpDevKnown (3330) ValExpDev (3335) | Unique Device Identifier (UDI):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ValExpUDI (3340) |
|  | Second Valve Prosthesis Explant: ValExp2 (3350) 🞎 Yes 🞎 No (If Yes↓)  |
|  | Explant Position: ValExpPos2 (3355) | 🞎 Aortic 🞎 Mitral 🞎 Tricuspid 🞎 Pulmonic |
|  | Explant Type:ValExpTyp2 (3360) | 🞎 Mechanical Valve | 🞎 Bioprosthetic Valve | 🞎 Homograft | 🞎 Annuloplasty Device |
|  |  | 🞎 Leaflet Clip | 🞎 Transcatheter Device | 🞎 Other | 🞎 Unknown |
|  | Explant Etiology:ValExpEt2 (3365) | 🞎 Endocarditis | 🞎 Incompetence | 🞎 Prosthetic Deterioration | 🞎 Thrombosis |
|  |  | 🞎 Failed Repair | 🞎 Pannus Formation | 🞎 Sizing/Positioning issue | 🞎 Other |
|  |  | 🞎 Hemolysis | 🞎 Para-valvular leak | 🞎 Stenosis | 🞎 Unknown |
|  | Explant Device known: 🞎 Yes 🞎 No (If Yes→) Explant model#:\_\_\_\_\_\_\_\_\_ValExpDevKnown2 (3370) ValExpDev2 (3375) | Unique Device Identifier (UDI):\_\_\_\_\_\_\_\_\_\_\_\_ValExpDevUDI (3380) |

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|  | Aortic Valve Procedure Performed: 🞎 Yes, planned 🞎 Yes, unplanned due to surgical complication VSAV (3390)  🞎 Yes, unplanned due to unsuspected disease or anatomy 🞎 No (If Yes ↓) |
|  | Procedure Performed: VSAVPr (3395) |
|  |  | 🞎 Replacement (If Yes ↓) |
|  |  |  | Transcatheter Valve Replacement: 🞎 Yes 🞎 No (If Yes ↓) VSTCV (3400)  |
|  |  |  |  Approach: 🞎 Transapical 🞎 Transaxillary 🞎 Transfemoral 🞎 Transaortic 🞎 Subclavian 🞎 Other  VSTCVR (3405) |
|  |  | 🞎 Repair / Reconstruction If Repair / Reconstruction **↓**)  |
|  | Primary Repair Type: (Select all that apply) |  |  |  |
|  | Commissural Annuloplasty VSAVRComA (3410) | 🞎 Yes 🞎 No | Ring AnnuloplastyVSAVRRingA (3435) | 🞎 Yes 🞎 No |
|  | Leaflet plication VSAVRLPlic (3415) | 🞎 Yes 🞎 No | Leaflet resection suture VSAVRLResect (3440) | 🞎 Yes 🞎 No |
|  | Leaflet free edge reinforcement (PTFE) VSAVRPTFE (3420)  | 🞎 Yes 🞎 No | Leaflet pericardial patchVSAVRLPPatch (3445) | 🞎 Yes 🞎 No |
|  | Leaflet commissural resuspension suture VSAVRComRS (3425)  | 🞎 Yes 🞎 No | Leaflet debridement VSAVRDeb (3450) | 🞎 Yes 🞎 No |
|  | Division of fused leaflet rapheVSAVRRaphe (3430) | 🞎 Yes 🞎 No | Repair of Periprosthetic Leak VSAVRPeriLeak (3455) | 🞎 Yes 🞎 No |
|  |  | 🞎 Root Replacement with valved conduit (Bentall) |
|  |  | 🞎 Replacement AV and insertion aortic non-valved conduit in supra-coronary position |
|  |  | 🞎 Replacement AV and major root reconstruction/debridement with 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 root replacement |
|  |  | 🞎 Valve sparing root reimplantation (David) |
|  |  | 🞎 Valve sparing root remodeling (Yacoub) |
|  |  | 🞎 Valve sparing root reconstruction (Florida Sleeve) |
|  | Aortic Annular Enlargement: AnlrEnl (3460) 🞎 Yes 🞎 No |
|  | Implant: AorticImplant (3470) 🞎 Yes 🞎 No (If Yes ↓) |
|  |  | Implant Type:AorticImplantTy (3475) | 🞎 Mechanical Valve | 🞎 Bioprosthetic Valve  | 🞎 Homograft | 🞎 Autograft (Ross) |
|  |  | 🞎 Annuloplasty Device | 🞎 Transcatheter Device  | 🞎 Other |  |
|  |  | Implant Model Number : VSAoIm (3480)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  | Size: VSAoImSz (3485) \_\_\_\_\_\_\_\_\_\_\_ |
|  |  | Unique Device Identifier (UDI): VSAoImUDI (3490)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |
|  | Mitral Valve Procedure Performed: 🞎 Yes, planned 🞎 Yes, unplanned due to surgical complication VSMV (3495)  🞎 Yes, unplanned due to unsuspected disease or anatomy 🞎 No (If Yes ↓) |
|  | Procedure Performed: VSMVPr (3500) |
|  |  | 🞎 Repair  |  |  |
|  |  | (If Repair→) Repair Type: (Select all that apply↓) |  |
|   |  | Annuloplasty VSMitRAnnulo (3505) | 🞎 Yes 🞎 No |  |
|  |  | Leaflet Resection VSMitRLeafRes (3510) | 🞎 Yes 🞎 No  | (If Yes↓) |
|  |  |  | Resection Type: 🞎 Triangular 🞎 Quadrangular 🞎 OtherVSLeafResTyp (3515) |
|  |  |  | Location: 🞎 Anterior 🞎 Posterior 🞎 Both Anterior and PosteriorVSLeafRepLoc (3520) |
|  |  | Leaflet PlicationVSMitRLeafPlic (3525) | 🞎 Yes 🞎 No |  |
|  |  | Leaflet DebridementVSMitRLeafDeb (3530) | 🞎 Yes 🞎 No |  |
|  |  | Folding PlastyVSMitRFold (3535) | 🞎 Yes 🞎 No |  |
|  |  | Sliding Plasty VSMitRSlidP (3540)  | 🞎 Yes 🞎 No |  |
|  |  | Annular decalcification/debridement VSMitRADecalc (3545) | 🞎 Yes 🞎 No |  |
|  |  | Neochords (PTFE)VSMitRPTFE (3550)  | 🞎 Yes 🞎 No  | (If Yes→) # of neochords inserted: \_\_\_\_\_\_\_\_\_\_\_\_\_\_VSNeoChNum (3555) |
|  |  | Chordal /Leaflet transfer VSMitRChord (3560) | 🞎 Yes 🞎 No |  |
|  |  | Leaflet extension/replacement/patchVSMitRLeafERP (3565) | 🞎 Yes 🞎 No |  |
|  |  | Edge to Edge Repair VSMitREdge (3570)  | 🞎 Yes 🞎 No |  |
|  |  | Mitral leaflet clipVSMitRMLeafClip (3575) | 🞎 Yes 🞎 No |  |
|  |  | Mitral commissurotomy VSMitRMitComm (3580) | 🞎 Yes 🞎 No |  |
|  |  | Mitral commissuroplastyVSMitRMitCplasty (3585) | 🞎 Yes 🞎 No |  |
|  |  | Mitral Cleft repair (scallop closure)VSMitRMitCleft (3590) | 🞎 Yes 🞎 No |  |
|  |  | Other repairVSMitRMitOth (3595) | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Replacement | (If Replacement🡫)  |  |
|  |  |  | Repair attempted prior to Mitral Valve Replacement: 🞎 Yes 🞎 NoMitralIntent (3600)  |
|  |  |  | Mitral Chords Preserved: VSChorPres (3605) | 🞎Anterior 🞎 Posterior 🞎 Both 🞎 None  |
|  |  |  | Transcatheter Replacement: 🞎 Yes 🞎 No VSTCVMit (3610)  |
|  | Implant: MitralImplant (3615) 🞎 Yes 🞎 No (If Yes ↓) |
|  |  | Implant Type:  | 🞎 Mechanical Valve | 🞎 Bioprosthetic Valve  | 🞎 Annuloplasty Device |  |
|  | MitralImplantTy (3620) | 🞎 Mitral Leaflet Clip | 🞎 Transcatheter Device | 🞎 Other  |  |
|  |  | Implant Model Number: VSMiIm (3625)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Size: VSMiImSz (3630) \_\_\_\_\_\_\_\_\_\_\_  |
|  |  | Unique Device Identifier (UDI): VSMiImUDI (3635)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |
|  | Tricuspid Valve Procedure Performed: 🞎 Yes, planned 🞎 Yes, unplanned due to surgical complication VSTV (3640) 🞎 Yes, unplanned due to unsuspected disease or anatomy 🞎 No (If Yes ↓) |
|  | Procedure Performed: OpTricus (3645)  |  |
|  | 🞎 Annuloplasty only  |  |
|  | 🞎 Replacement  | (If Replacement→) | Transcatheter Replacement: 🞎 Yes 🞎 No |
|  | 🞎 Reconstruction with Annuloplasty  |  VSTCVTri (3650) |
|  | 🞎 Reconstruction without Annuloplasty  |  |
|  | (If “Annuloplasty only” OR “Reconstruction with Annuloplasty” →) | Type of Annuloplasty: OpTricusAnTy (3655) 🞎 Pericardium 🞎Suture 🞎 Prosthetic Ring 🞎 Prosthetic Band  🞎 Other |
|  | 🞎 Valvectomy |  |
|  | Implant: TricuspidImplant (3660) 🞎 Yes 🞎 No (If Yes ↓) |  |
|  | Implant Type:  | 🞎 Mechanical Valve | 🞎 Bioprosthetic Valve  | 🞎 Homograft |  |
|  | TricusImplantTy (3665) | 🞎 Annuloplasty Device | 🞎 Transcatheter Device  | 🞎 Other |  |
|  | Implant Model Number:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_VSTrIm (3670) | Size: \_\_\_\_\_\_\_\_\_\_\_ VSTrImSz (3675) |
|  | Unique Device Identifier (UDI): VSTrImUDI (3680)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |
|  | Pulmonic Valve Procedure Performed: 🞎 Yes, planned 🞎 Yes, unplanned due to surgical complication VSPV (3685)  🞎 Yes, unplanned due to unsuspected disease or anatomy 🞎 No (If Yes ↓) |
|  | Procedure Performed: OpPulm (3690) |  |  |
|  | 🞎 Replacement  | (If Replacement→) | Transcatheter Replacement: 🞎 Yes 🞎 No |
|  | 🞎 Reconstruction |  VSTCVPu (3695) |
|  | 🞎 Valvectomy |  |
|  | Implant: PulmonicImplant (3700) 🞎 Yes 🞎 No (If Yes ↓) |  |
|  | Implant Type: | 🞎 Mechanical Valve | 🞎 Bioprosthetic Valve  | 🞎 Homograft |  |
|  | PulmonicImplantTy (3705) | 🞎 Annuloplasty Device | 🞎 Transcatheter Device  | 🞎 Other |  |
|  | Implant Model Number:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_VSPuIm (3710) | Size: \_\_\_\_\_\_\_\_\_\_\_ VSPuImSz (3715) |
|  | Unique Device Identifier (UDI): VSPuImUDI (3720)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |

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| **L. Mechanical Cardiac Assist Devices** |
| Intra-Aortic Balloon Pump (IABP): 🞎 Yes 🞎 No (If Yes ↓) IABP (3725) |
|  | IABP Insertion: 🞎 Preop 🞎 Intraop 🞎 Postop IABPWhen (3730) |
|  | Primary Reason for Insertion: 🞎 Hemodynamic Instability 🞎 Procedural Support 🞎 Unstable Angina  IABPInd (3735) 🞎 CPB Weaning Failure 🞎 Prophylactic 🞎 Other |
| Catheter Based Assist Device Used: 🞎 Yes 🞎 No (If Yes ↓) CathBasAssist (3745) |
|  | Type: 🞎 RV 🞎 LV 🞎 BiV CathBasAssistTy (3755) |
|  | When Inserted: 🞎 Preop 🞎 Intraop 🞎 Postop 🞎 Non-operative CathBasAssistWhen (3760) |
|  | Primary Reason for Insertion: 🞎 Hemodynamic instability 🞎 CPB weaning failure 🞎 PCI failure 🞎 Procedural support 🞎OtherCathBasAssistInd (3765) |
| ECMO: 🞎 Veno-venous 🞎 Veno-arterial 🞎 Veno-venous converted to Veno-arterial 🞎 No (If Yes ↓) ECMO (3775) |
|  | ECMO Initiated: 🞎 Preop 🞎 Intraop 🞎 Postop 🞎 Non-operative ECMOWhen (3780) |
|  | Clinical Indication for ECMO: 🞎 Cardiac Failure 🞎 Respiratory Failure 🞎 Hypothermia 🞎 Rescue/salvage 🞎 OtherECMOInd (3785) |
| **L.2 Ventricular Assist Devices**  |
| (Use Key to complete table below -will be dropdown lists in software) |
|  | **Timing:**  | 1. Pre-Operative (during same hospitalization but not same OR trip as CV surgical procedure) 2. Stand-alone VAD procedure 3. In conjunction with CV surgical procedure (same trip to the OR)- planned4. In conjunction with CV surgical procedure (same trip to the OR)- unplanned5. Post-Operative (after surgical procedure during reoperation) |
|  | **Indication:** | 1. Bridge to Transplantation2. Bridge to Recovery3. Destination4. Postcardiotomy Ventricular Failure 5. Device Malfunction6. End of (device) Life  | **Type:**  | 1. Right VAD (RVAD)2. Left VAD (LVAD)3. Biventricular VAD (BiVAD) 4. Total Artificial Heart (TAH)  | **Reason:** | 1. Cardiac Transplant 2. Recovery 3. Device Transfer4. Device-Related Infection5. Device Malfunction 6. End of (device) Life  |
|  |  | 7. Salvage |  |  |  |  |
|  | **Device:** | See VAD list |  |  |  |  |
| **Was patient admitted with VAD** PrevVAD (3790) 🞎 Yes 🞎 No |
| (If Yes →) | Previous VAD implanted at another facility PrevVADF (3795) 🞎 Yes 🞎 No |
| Insertion date: PrevVADD (3800) \_\_/\_\_/\_\_\_\_ |
| Indication: PrevVADIn (3805) |
| Type: PrevVADTy (3810) |
| Device Model Number: PrevVADDevice (3815)  |
| UDI: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_PrevVADUDI (3820) |
| Previous VAD Explanted During This Admission: | 🞎 Yes, not during this procedure🞎 Yes, during this procedure🞎 NoPrevVADExp (3825) |
| (If “Yes, not during this procedure” or “Yes, during this procedure” →) | Reason: PrevVADExpRsn (3830) |
| (If “Yes, not during this procedure” →) | Date: PrevVADExpDt (3835) \_\_/\_\_/\_\_\_\_ |
| **Ventricular Assist Device Implanted during this hospitalization** 🞎 Yes 🞎 No VADImp (3840) |
| (If Yes, provide data on up to 3 separate devices implanted 🡫) |
| **VAD IMPLANT(s)**  | **Initial implant** | **2nd device implanted?**VImp2 (3895)🞎 Yes 🞎 No (If Yes ↓) | **3rd Device implanted?**VImp3 (3950)🞎 Yes 🞎 No (If Yes ↓) |
| Timing  | VADImpTmg (3845) | VADImpTmg2 (3900) | VADImpTmg3 (3955) |
| Indication  | VADInd (3850) | VADInd2 (3905) | VADInd3 (3960) |
| Type  | VImpTy (3855) | VImpTy2 (3910) | VImpTy3 (3965) |
| Device  | VProdTy (3860) | VProdTy2 (3915) | VProdTy3 (3970) |
| Implant Date  | \_\_/\_\_/\_\_\_\_VImpDt (3865) | \_\_/\_\_/\_\_\_\_VImpDt2 (3920) | \_\_/\_\_/\_\_\_\_VImpDt3 (3975) |
| UDI  | VImpUDI (3870) | VImpUDI2 (3925) | VImpUDI3 (3980) |
| **VAD was explanted**  | 🞎 Yes, not during this procedure🞎 Yes, during this procedure🞎 No VExp (3875) | 🞎 Yes, not during this procedure🞎 Yes, during this procedure🞎 No VExp2 (3930) | 🞎 Yes, not during this procedure🞎 Yes, during this procedure🞎 No VExp3 (3985) |
| Reason (If “Yes, not during this procedure” or “Yes, during this procedure” →) | VExpRsn (3880) | VExpRsn2 (3935) | VExpRsn3 (3990) |
| Date (If “Yes, not during this procedure” →) | \_\_/\_\_/\_\_\_\_VExpDt (3885) | \_\_/\_\_/\_\_\_\_VExpDt2 (3940) | \_\_/\_\_/\_\_\_\_VExpDt3 (3995) |
| **Complications related to Mechanical Assist Device(s):** CompMAD (4010)🞎 No 🞎 Yes, IABP 🞎 Yes, CBAD 🞎 Yes, ECMO 🞎 Yes, VAD 🞎 Yes, Multiple devices  |
| (If Yes, select up to 3 complications →) | **1st complication**CompMAD1 (4015) | **2nd complication**CompMAD2 (4020) | **3rd complication**CompMAD3 (4025) |
|  | No additional complications |  |  |  |
|  | Cannula/Insertion site issue |  |  |  |
|  | Cardiac |  |  |  |
|  | GI |  |  |  |
|  | Hemorrhagic |  |  |  |
|  | Hemolytic |  |  |  |
|  | Infection |  |  |  |
|  | Metabolic |  |  |  |
|  | Neurologic |  |  |  |
|  | Pulmonary |  |  |  |
|  | Other |  |  |  |

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| **M. Other Cardiac Procedure**  (If Other Cardiac Procedure = Yes ↓) |
| These procedures do not impact isolated category | These procedures move the case out of isolated category |
| AFib Epicardial lesions (complete M-1)OCarAFibEpLes (4070) | 🞎 Yes 🞎 No | AFib Intracardiac lesions (complete M-1)  | 🞎 Yes 🞎 No OCarAFibIntraLes (4105) |
| ASD repair- PFO typeOCarASDPFO (4075) | 🞎 Yes 🞎 No | ASD Repair- secundum or sinus venosus  | 🞎 Yes 🞎 No OCarASDSec (4110) |
| Atrial Appendage procedure: 🞎 RAA 🞎LAA 🞎 Both 🞎 NoOCarAAProc (4080) | Lead Extraction OCarACDLE (4120)  | 🞎 Yes, planned 🞎 Yes, unplanned due to surgical complication 🞎 Yes, unplanned due to unsuspected disease or anatomy🞎 No |
| Arrhythmia Device: OCarACD (4085)🞎 Pacemaker 🞎 Pacemaker with CRT🞎 ICD 🞎 ICD with CRT 🞎 Implantable Recorder 🞎 None | LV Aneurysm Repair: | 🞎 Yes 🞎 No OCarLVA (4125) |
| Pulmonary Thromboembolectomy:  | 🞎 Yes, Acute 🞎 Yes, Chronic 🞎 No OCPulThromDis (4130) |
| Lead InsertionOCarLeadInsert (4090) | 🞎 Yes 🞎 No | Subaortic Stenosis Resection  (If Yes 🡫) | 🞎 Yes 🞎 NoOCarSubaStenRes (4135) |
| Myocardial Stem Cell TherapyOCarStemCell (4095) | 🞎 Yes 🞎 No |  Type : 🞎 Muscle 🞎 Ring 🞎 Membrane 🞎 Web 🞎 Not Reported OCarSubaStenResTy (4140) |
| TMROCarLasr (4100) | 🞎 Yes 🞎 No | Surgical Ventricular Restoration: | 🞎 Yes 🞎 No OCarSVR (4145) |
|  |  | Tumor:  | 🞎 Myxoma 🞎Fibroelastoma 🞎 Hypernephroma 🞎 Sarcoma 🞎 Other 🞎 NoOCTumor (4150)  |
|  |  | Cardiac Transplant: | 🞎 Yes 🞎 No OCarCrTx (4152) |
|  |  | Cardiac Trauma: | 🞎 Yes 🞎 No OCarTrma (4153) |
|  |  | VSD Repair: | 🞎 Yes-congenital 🞎 Yes-acquired 🞎 No OCarVSD (4155) |
|  |  | Other Cardiac Procedure: | 🞎 Yes 🞎 No OCarOthr (4160) |
| This procedures can sometimes (but not always) impact isolated category:Congenital Defect Repair (complete M-3) 🞎 Yes 🞎 NoOCarCong (4162) |

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| **M.1. Complete for Epicardial and Intracardiac Atrial Fibrillation Procedures** (If Other Cardiac Procedure, AFib = Yes ↓) |
| Lesion location: 🞎 Primarily epicardial 🞎 Primarily Intracardiac OCarAFibLesLoc (4191) |
| Lesions Documented: OCarLesDoc (4195) 🞎 Yes 🞎 No (If Yes ↓) |
|  | Method of Lesion Creation: (Select all that apply↓) |
|  |  | RadiofrequencyOCarAFibMethRad (4200) | 🞎 Yes 🞎 No (If Yes →) | Bipolar 🞎 Yes 🞎 No OCarAFibMethRadBi (4205)  |  |  |  |
|  |  | Cut-and-sewOCarAFibMethCAS (4210) | 🞎 Yes 🞎 No |  |  |  |  |
|  |  | CryoOCarAFibMethCryo (4215) | 🞎 Yes 🞎 No |  |  |  |  |
| **P:\STS_Dev\RegistrySystemModules\AFib\v1_0\Baseline\graphics\lesionclose.jpg** |
|  | Lesions: (check all that apply ↓) |
|  | 🞎 | 1 | Pulmonary Vein IsolationAFibLes1 (4250) | 🞎 | 9 | Intercaval Line to Tricuspid Annulus (“T” lesion)AFibLes9 (4295) |
|  | 🞎 | 2 | Box LesionAFibLes2 (4255) | 🞎 | 10 | Tricuspid Cryo Lesion, MedialAFibLes10 (4300) |
|  | 🞎 | 3a | Inferior Pulmonary Vein Connecting LesionAFibLes3a (4260) | 🞎 | 11 | Intercaval LineAFibLes11 (4305) |
|  | 🞎 | 3b | Superior Pulmonary Vein Connecting LesionAFibLes3b (4265) | 🞎 | 12 | Tricuspid Annular Line to RAAAFibLes12 (4310) |
|  | 🞎 | 4 | Posterior Mitral Annular LineAFibLes4 (4270) | 🞎 | 13 | Tricuspid Cryo LesionAFibLes13 (4315) |
|  | 🞎 | 5 | Pulmonary Vein Connecting Lesion to Anterior Mitral AnnulusAFibLes5 (4275) | 🞎 | 14 | RAA Ligation/RemovalAFibLes14 (4320) |
|  | 🞎 | 6 | Mitral Valve Cryo LesionAFibLes6 (4280) | 🞎 | 15a | RAA Lateral Wall (Short)AFibLes15a (4325) |
|  | 🞎 | 7 | LAA Ligation/RemovalAFibLes7 (4285) | 🞎 | 15b | RAA Lateral Wall to “T” LesionAFibLes15b (4330) |
|  | 🞎 | 8 | Pulmonary Vein to LAAAFibLes8 (4290) | 🞎 | 16 | OtherAFibLes16 (4335) |

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| **M.2. Complete for Aortic Procedures** (If Other Cardiac Procedure , Aortic = Yes ↓) |
| Procedure Location: (Choose all that apply) | Root | 🞎 Yes 🞎 No AortProcRoot (4340) |
|  | Ascending | 🞎 Yes 🞎 No AortProcAsc (4345) |
|  | Hemi- Arch | 🞎 Yes 🞎 No AortProcHemi (4350) |
|  | Total Arch | 🞎 Yes 🞎 No AortProcTotArch (4355) |
|  | Descending - Proximal | 🞎 Yes 🞎 No AortProcDesProx (4360) |
|  | Descending - Mid | 🞎 Yes 🞎 No AortProcDesMid (4365)  |
|  | Descending - Distal | 🞎 Yes 🞎 No AortProcDesDist (4370) |
|  | Thoracoabdominal  | 🞎 Yes 🞎 No AortProcThora (4375) |
| Synthetic Graft used: SynthGft (4380) |  🞎 Yes 🞎 No | (If Yes →)  | Intercostal vessels re-implanted: 🞎 Yes 🞎 No SynthGftInter (4385) |
|  | CSF drainage utilized: 🞎 Yes 🞎 No SynthGftCSF (4390) |
|  | Elephant Trunk: 🞎 Yes 🞎 No SynthGftEleph (4395) |
| Coil Embolization of aortic false lumen: 🞎 Yes 🞎 No AortProcCoil (4400) |
| TEVAR: 🞎 Yes with debranching 🞎 Yes without debranching 🞎 No AortProcTEVAR (4405) |
| Other Aortic Surgery: 🞎 Yes 🞎 No AortProcOther (4410) |

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| **M.3. Complete for Congenital Defect Repair (other than ASD, VSD or Bicuspid valve)** |
|  | Congenital Diagnoses: Select up to three most significant diagnoses: (refer to “Congenital Diagnoses/Procedures List” document)Diagnosis 1: \_\_\_\_\_\_\_\_\_ Diagnosis 2: \_\_\_\_\_\_\_\_\_ Diagnosis 3: \_\_\_\_\_\_\_\_\_OCarCongDiag1 (4500) OCarCongDiag2 (4505) OCarCongDiag3 (4510) |
|  | Congenital Procedures: Select up to three most significant: (refer to “Congenital Diagnoses/Procedures List” document)Procedure 1: \_\_\_\_\_\_\_\_\_ Procedure 2: \_\_\_\_\_\_\_\_\_ Procedure 3: \_\_\_\_\_\_\_\_\_ OCarCongProc1 (4515) OCarCongProc2 (4520) OCarCongProc3 (4525)  |

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| **N. Other Non-Cardiac Procedures** (If Other Non-Cardiac Procedure = Yes ↓) |
|  | Carotid Endarterectomy: 🞎 Yes, planned 🞎 Yes, unplanned due to surgical complication  🞎 Yes, unplanned due to unsuspected disease or anatomy 🞎 No ONCCarEn (4530) |
|  | Other Vascular: 🞎 Yes, planned 🞎 Yes, unplanned due to surgical complication  🞎 Yes, unplanned due to unsuspected disease or anatomy 🞎 No ONCOVasc (4535) |
|  | Other Thoracic: 🞎 Yes, planned 🞎 Yes, unplanned due to surgical complication  🞎 Yes, unplanned due to unsuspected disease or anatomy 🞎 No ONCOThor (4540) |
|  | Other: 🞎 Yes, planned 🞎 Yes, unplanned due to surgical complication  🞎 Yes, unplanned due to unsuspected disease or anatomy 🞎 No ONCOther (4545) |

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| **O. Post-Operative** |
| Peak Glucose within18-24 hours of anesthesia end time:\_\_\_\_\_\_\_\_\_ PostOpPeakGlu (4550) |
| Postoperative Creatinine Level: \_\_\_\_\_\_\_\_\_\_\_\_ PostCreat (4555) |
| Blood Products Used Postoperatively: 🞎 Yes 🞎 No (If Yes ↓) BldProd (4560) |
|  | Red Blood Cell Units: \_\_\_\_\_\_ BdRBCU (4565) | Fresh Frozen Plasma Units: \_\_\_\_\_\_ BdFFPU (4570) | Cryoprecipitate Units: \_\_\_\_\_\_ BdCryoU (4575) | Platelet Units: \_\_\_\_\_\_ BdPlatU (4580) |
| Extubated in OR: 🞎 Yes 🞎 No ExtubOR (4585) |
| Re-intubated During Hospital Stay: 🞎 Yes 🞎 No ReIntub (4590) (If yes →) Additional Hours Ventilated: \_\_\_\_\_\_\_\_\_\_\_\_ VentHrsA (4595)Total post-operative ventilation hours \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(System Calculation) VentHrsTot (4600) |
| ICU Visit: 🞎 Yes 🞎 No (If Yes →) ICUVisit (4605) Initial ICU Hours: \_\_\_\_\_\_\_\_ ICUInHrs (4610) |
| Readmission to ICU: 🞎 Yes 🞎 No ICUReadm (4615) (If Yes →) Additional ICU Hours: \_\_\_\_\_\_\_\_\_\_ ICUAdHrs (4620) |
| Post Op Echo Performed to evaluate valve(s): 🞎 Yes 🞎 No (If Yes ↓) POpTTEch (4625) |
|  | Highest level aortic insufficiency found: 🞎 None 🞎 Trace/trivial 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Not Reported POpTTAR (4630) |
|  | Highest level mitral insufficiency found: 🞎 None 🞎 Trace/trivial 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Not Reported POpTTMR (4635) |
|  | Highest level tricuspid insufficiency found: 🞎 None 🞎 Trace/trivial 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Not Reported POpTTTR (4640) |
|  | Highest level pulmonic insufficiency found: 🞎 None 🞎 Trace/trivial 🞎 Mild 🞎 Moderate 🞎 Severe 🞎 Not Reported POpTTPu (4645) |
| Post Op Ejection Fraction: 🞎 Yes 🞎 No POpEFD (4650)(If Yes →) | Post Op Ejection Fraction: \_\_\_\_\_\_\_\_\_ (%) POpEF (4655) |
| Cardiac Enzymes (biomarkers) Drawn: 🞎 Yes 🞎 No (If Yes →)POpEnzDrawn (4660) | Peak CKMB: \_\_\_\_\_\_ Peak Troponin I \_\_\_\_\_ Peak Troponin T \_\_\_\_\_POpPkCKMB (4665) POpPkTrI (4670) POpPkTrT (4675) |
| 12-Lead EKG Findings: POpEKG (4680)🞎 Not performed 🞎 No ischemic changes 🞎 New ST changes 🞎 New Pathological Q-wave or LBBB  🞎 New STEMI 🞎 Other 🞎 NA (no pre-op EKG for comparison, transplant) |
| Imaging Study for Myocardial Injury : POpImagStdy (4685) |  |
|  | 🞎 Not performed  |
|  | 🞎 Angiographic evidence of new thrombosis or occlusion of graft or native coronary |
|  | 🞎 Imaging evidence of new loss of viable myocardium |
|  | 🞎 No evidence of new myocardial injury |
|  | 🞎 Other |

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| **P. Postoperative Events** |
| Surgical Site Infection within 30 days of operation: 🞎 Yes 🞎 No (If Yes ↓) SurSInf (4690) |
|  | Sternal Superficial Wound Infection: 🞎 Yes, within 30 days of procedure 🞎 Yes, >30 days after procedure but during hosp. for surgery 🞎 No CSternalSupInf (4695) |
|  | Deep Sternal Infection/ Mediastinitis: DeepSternInf (4700)  🞎 Yes, within 30 days of procedure 🞎 Yes, >30 days after procedure but during hosp. for surgery 🞎 No(If either Yes value →) Diagnosis Date: \_\_ \_\_/ \_\_ \_\_/ \_\_ \_\_ \_\_ \_\_ (mm/dd/yyyy) DeepSternInfDt (4705) |
|  | Thoracotomy: 🞎 Yes, within 30 days of procedure 🞎 Yes, >30 days after procedure but during hosp. for surgery 🞎 No CIThor (4710) |
|  | Conduit Harvest : 🞎 Yes, within 30 days of procedure 🞎 Yes, >30 days after procedure but during hosp. for surgery 🞎 No ConduitHarv (4715) |
|  | Cannulation Site: 🞎 Yes, within 30 days of procedure 🞎 Yes, >30 days after procedure but during hosp. for surgery 🞎 No CanSite (4720) |
|  | Wound Intervention/Procedure: 🞎 Yes 🞎 No (If Yes ↓) WoundInter (4725) |
|  |  | Wound Intervention – Open with Packing/Irrigation:WoundIntOpen (4730) | 🞎 Yes, primary incision 🞎 Yes, secondary incision 🞎 Both 🞎No |
|  |  | Wound Intervention – Wound Vac: WoundIntVac (4735) | 🞎 Yes, primary incision 🞎 Yes, secondary incision 🞎 Both 🞎 No |
|  |  | Secondary Procedure Muscle Flap: WoundIntMuscle (4740) | 🞎 Yes, primary incision 🞎 Yes, secondary incision 🞎 Both 🞎 No |
|  |  | Secondary Procedure Omental Flap: WoundIntOmental (4745) | 🞎 Yes 🞎 No |
| Other In Hospital Postoperative Event Occurred: 🞎 Yes 🞎 No (If Yes ↓) Complics (4750) |
|  | **Operative** |
|  | ReOp for Bleeding /Tamponade: 🞎 Yes 🞎 No COpReBld (4755) (If Yes →) Bleed Timing: 🞎 Acute 🞎 Late COpReBldTim (4760) |
|  | ReOp for Valvular Dysfunction: 🞎 Yes, surgical 🞎 Yes, transcatheter 🞎 No COpReVlv (4765) |
|  | ReOp for Graft Occlusion: 🞎 Yes, surgical 🞎 Yes, PCI 🞎 No COpReGft (4770) |
|  | ReOp for Other Cardiac Reasons: 🞎 Yes 🞎 No COpReOth (4775) |
|  | ReOp for Other Non-Cardiac Reasons: 🞎 Yes 🞎 No COpReNon (4780) |
|  | Open chest with planned delayed sternal closure: 🞎 Yes 🞎 No COpPlndDelay (4785) |
|  | Sternotomy Issue: 🞎 Yes 🞎 No CSternal (4790) (If Yes →) Sternal instability/dehiscence (sterile): 🞎 Yes 🞎 No CSternalDehis (4795) |
|  | **Infection**  |
|  | Sepsis: 🞎 Yes 🞎 No CSepsis (4800) (If Yes →) Positive Blood Cultures: 🞎 Yes 🞎 No CSepsisPBC (4805) |
|  | **Neurologic** |
|  | Postoperative Stroke: 🞎 Yes, hemorrhagic  🞎 Yes, embolic    🞎 Yes, undetermined type  🞎 No CNStrokP (4810) |
|  | Transient Ischemic Attack (TIA): 🞎 Yes 🞎 No CNStrokTTIA (4815) |
|  | Encephalopathy: 🞎 None 🞎 Anoxic 🞎 Embolic 🞎 Drug 🞎 Metabolic 🞎 Intracranial Bleeding 🞎 Other 🞎 UnknownCNComaEnceph (4820) |
|  | Paralysis: 🞎 Yes 🞎 No CNParal (4825) (If Yes →) Paralysis Type: 🞎 Transient 🞎 Permanent CNParalTy (4830) |
|  | **Pulmonary** |
|  | Prolonged Ventilation: 🞎 Yes 🞎 No (OR exit time until initial extubation, plus any additional reintubation hours) CPVntLng (4835) |
|  | Pneumonia: 🞎 Yes 🞎 No CPPneum (4840) |
|  | Venous Thromboembolism – VTE: 🞎 Yes 🞎 No (If Yes ↓) CVTE (4845) |
|  |  | Pulmonary Thromboembolism: 🞎 Yes 🞎 No PulmEmb (4850) |
|  |  | Deep Venous Thrombosis: 🞎 Yes 🞎 No DVT (4855) |
|  | Pleural Effusion Requiring Drainage: 🞎 Yes 🞎 No CPlEff (4860) |
|  | Pneumothorax Requiring Intervention: 🞎 Yes 🞎 No PostOpPneumo (4865) |
|  | **Renal** |
|  | Renal Failure: 🞎 Yes 🞎 No (If Yes ↓) CRenFail (4870) |
|  |  | Dialysis (Newly Required): 🞎 Yes 🞎 No (If Yes →) Required after Hospital Discharge: 🞎 Yes 🞎 NoCRenDial (4875) DialDur (4880) |
|  | Ultra Filtration Required: 🞎 Yes 🞎 No CUltraFil (4885) |
|  | **Vascular** |
|  | Iliac/Femoral Dissection: 🞎 Yes 🞎 No CVaIlFem (4890) |
|  | Acute Limb Ischemia: 🞎 Yes 🞎 No CVaLbIsc (4895) |
|  | **Other** |
|  | Rhythm Disturbance Requiring Permanent Device: 🞎 Pacemaker 🞎 ICD 🞎 Pacemaker/ICD 🞎 Other 🞎None CRhythmDis (4900) |
|  | Cardiac Arrest: 🞎 Yes 🞎 No COtArrst (4905) |
|  | Anticoagulant Event: 🞎 Yes 🞎 No COtCoag (4910) |
|  | Tamponade (Non-Surgical Intervention): 🞎 Yes 🞎 No COtTamp (4915) |
|  | Gastro-Intestinal Event: 🞎 Yes 🞎 No COtGI (4920) |
|  | Multi-System Failure: 🞎 Yes 🞎 No COtMSF (4925) |
|  | Atrial Fibrillation: 🞎 Yes 🞎 No COtAFib (4930) |
|  | Aortic Dissection: 🞎 Yes 🞎 No CVaAoDis (4935) |
|  | Recurrent Laryngeal Nerve Injury: 🞎 Yes 🞎 No RecLarynNrvInj (4940) |
|  | Phrenic Nerve Injury: 🞎 Yes 🞎 No PhrenNrvInj (4945) |
|  | Other: 🞎 Yes 🞎 No COtOther (4950) |

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| **Q. Mortality** |
| Mortality: 🞎 Yes 🞎 NoMortalty (5005)  | Discharge Status: 🞎 Alive 🞎 DeadMtDCStat (5010) | Status at 30 days After Surgery: 🞎 Alive 🞎 Dead 🞎 UnknownMt30Stat (5015) |
| Primary method used to verify 30-day status: Mt30StatMeth (5020) |
|  | 🞎 Phone call to patient or family🞎 Letter from medical provider | 🞎 Medical record 🞎 Office visit >= 30 days after procedure | 🞎 Social Security Death Master File /NDI🞎 Other |
|  | (If Mortality = Yes ↓) |
|  | Operative Death: 🞎 Yes 🞎 No MtOpD (5025) | Mortality - Date \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ (mm/dd/yyyy) MtDate (5030) |
|  | Location of Death: MtLocatn (5035) | 🞎 OR During Initial Surgery 🞎 Hospital (Other than OR) 🞎 Home 🞎 Extended Care Facility 🞎 Hospice 🞎 Acute Rehabilitation 🞎 OR During Reoperation 🞎 Unknown 🞎 Other |
|  | Primary Cause of Death (select only one) MtCause (5040) |
|  |  🞎 Cardiac 🞎 Neurologic 🞎 Renal 🞎 Vascular 🞎 Infection 🞎 Pulmonary 🞎 Unknown 🞎 Other |

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| **R. Discharge** (If Discharge Status = Alive↓) |
| Discharge Location:DisLoctn (5045) | 🞎 Home 🞎 Extended Care/Transitional Care Unit/Rehab 🞎 Other Acute Care Hospital 🞎 Nursing Home 🞎 Hospice 🞎 Left AMA 🞎 Other  |
| Cardiac Rehabilitation Referral: | 🞎 Yes 🞎 No 🞎 Not Applicable CardRef (5050) |
| Smoking Cessation Counseling: | 🞎 Yes 🞎 No 🞎 Not Applicable SmokCoun (5055) |
| **Medication(s) Prescribed:** |
| Antiplatelets | Aspirin | 🞎 Yes 🞎 No 🞎 Contraindicated DCASA (5060) |
| P2Y12 Antagonists | 🞎 Yes 🞎 No 🞎 Contraindicated DCP2Y12 (5065) |
| ADP Inhibitor | 🞎 Yes 🞎 No 🞎 Contraindicated DCADP (5070) |
| Other Antiplatelet  | 🞎 Yes 🞎 No 🞎 Contraindicated DCOthAntiplat (5075) |
| Anticoagulants | Thrombin Inhibitors | 🞎 Yes 🞎 No 🞎 Contraindicated DCDirThromIn (5080)  |
| Warfarin (Coumadin) | 🞎 Yes 🞎 No 🞎 Contraindicated DCCoum (5085)  |
| Factor Xa inhibitors | 🞎 Yes 🞎 No 🞎 Contraindicated DCFactorXa (5090) |
| Other Anticoagulant | 🞎 Yes 🞎 No 🞎 Contraindicated DCOthAnticoag (5095) |
|  | ACE or ARB  | 🞎 Yes 🞎 No 🞎 Contraindicated 🞎 Not indicated (no hx CHF or EF>40%) DCACE (5100) |
|  | Beta Blocker  | 🞎 Yes 🞎 No 🞎 Contraindicated DCBeta (5105) |
|  | Amiodarone  | 🞎 Yes 🞎 No 🞎 Contraindicated DCAmiodarone (5110) |
|  | Lipid lowering Statin  | 🞎 Yes 🞎 No 🞎 Contraindicated DCLipLowStat (5115) |
|  | Lipid lowering non-Statin | 🞎 Yes 🞎 No 🞎 Contraindicated DCLipLowNonStat (5120) |

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| **S. Readmission**  |
| (If Discharge Status = Alive↓) |
| Readmit : 🞎 Yes 🞎 No 🞎 Unknown (If Yes ↓) Readmit (5140) |
|  | Readmit Date: \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ (mm/dd/yyyy) ReadmitDt (5145) |
|   | Readmit Primary Reason: ReadmRsn (5160) |
|  | 🞎 Anticoagulation Complication - Pharmacological 🞎 Anticoagulation Complication – Valvular 🞎 Arrhythmia/Heart Block🞎 Congestive Heart Failure 🞎 Coronary Artery/Graft Dysfunction 🞎 DVT🞎 Endocarditis🞎 Infection, Conduit Harvest Site 🞎 Infection, Deep Sternum / Mediastinitis🞎 Myocardial Infarction and/or Recurrent Angina 🞎 PE🞎 Pericardial Effusion and/or Tamponade 🞎 Pleural effusion requiring intervention | 🞎 Pneumonia 🞎 Renal Failure 🞎 Respiratory complication, Other🞎 Stroke🞎 TIA🞎 Transplant Rejection🞎 VAD Complication🞎 Valve Dysfunction 🞎 Vascular Complication, acute🞎 Other – Related Readmission🞎 Other – Nonrelated Readmission🞎 Other – Planned Readmission🞎 Unknown |
|  |  |
|  | Readmit Primary Procedure: ReadmPro (5165) |  |
|  | 🞎 No Procedure Performed🞎 Cath lab for Valve Intervention🞎 Cath lab for Coronary Intervention (PCI)🞎 Dialysis🞎 OR for Bleeding🞎 OR for Coronary Artery Intervention🞎 OR for Sternal Debridement / Muscle Flap🞎 OR for Valve Intervention🞎 OR for Vascular Procedure | 🞎 Pacemaker Insertion / AICD 🞎 Pericardiotomy / Pericardiocentesis🞎 Thoracentesis/ Chest tube insertion🞎 Wound vac🞎 Other Procedure🞎 Unknown |
|  |
| Temporary Coded Field: Indicate whether the STS Risk Calculator score was discussed with the patient/family prior to surgery. |
| TempCode (5230) | 1 Yes – A risk calculator score was calculated and discussed with the patient/family prior to surgery as documented in the medical record |
|  | 2 No – A risk calculator score was calculated but not discussed with the patient/family prior to surgery or discussion was not documented |
|  | 3 NA – Not applicable (emergent or salvage case, or no risk score calculated for this procedure) |