

New Jersey Department of Health
OPEN HEART SURGERY RISK STRATIFICATION PROJECT
DATA COLLECTION FORM, VERSION 4.3

A. DEMOGRAPHICS

Patient: Last Name (1): _____ First Name (2): _____ MI(3): _____
Date of Birth (mm/dd/yyyy)(4): _____ / _____ / _____ Gender (5): Male = 0 Female = 1 _____
SS# (6): _____ - _____ - _____ Medical Record # (7): _____ Patient Zip Code (8): _____
Race (9): White=1 Black=2 Asian=3 Native American/Alaska Native=4 Hawaiian/Other Pacific Islander=5 Other=6 Multiracial=7 _____
Hispanic or Latino (10): No=0 Yes=1 _____
Referring Cardiologist: Last Name (11): _____ First Name (12): _____ MI(13): _____
Referring Physician: Last Name (15): _____ First Name (16): _____ MI(17): _____

B. HOSPITALIZATION

Hospital Code (18): _____ Medical Facility Transferred From Code (19): _____
Payor (20): Blue Cross/Blue Shield=1 Commercial=2 HMO=3 Medicaid=4 Medicare=5 Self-Pay=6 Tricare (CHAMPUS)=7
Uninsured/Indigent=8 Other=9 _____
Date of Admission (mm/dd/yyyy)(21): _____ / _____ / _____ Date of Surgery (mm/dd/yyyy)(22): _____ / _____ / _____
Date of Discharge (mm/dd/yyyy)(23): _____ / _____ / _____
Discharged Where (24): Not Discharged=0 Home=1 Other Acute Care Hosp=2 Rehab/Sub-Acute/LTAC=3 Nursing Home=4
Other=5 Deceased=6 Left AMA=7 Hospice=8 Unknown=9 _____

C. PREOPERATIVE RISK FACTORS

Weight (25): _____ (kg) Height (26): _____ (cm)
Ever Smoker (27): No=0 Yes=1 _____ If Yes, Current Smoker (28): No=0 Yes=1 _____
Diabetes (29): No=0 Yes=1 _____ If Yes, Control Type (30): None=0 Diet=1 Oral=2 Insulin=3 Other/Other Subq=4 _____
Dyslipidemia (31): No=0 Yes=1 _____ If Yes, Control Type (32): None=0 Statin=1 Non-Statins=2 Both=3 _____
Last Creatinine Level Preop (33): _____
Renal Failure (34): No=0 Yes=1 _____ If Yes, Dialysis (35): No=0 Yes=1 _____
Hypertension (36): No=0 Yes=1 _____
Cerebrovascular Accident (37): No=0 Yes=1 _____
If Yes, When (38): Recent ≤30 Days=1 Remote >30 Days=2 _____
Cerebrovascular Disease (CVD) (39): No=0 Yes=1 _____
If Yes, Type of CVD (40): Coma=1 CVA=2 RIND=3 TIA=4 Non-Invasive >79%=5 Prior Carotid Surgery=6
Moderate Disease 50-79%=7 _____
Infectious Endocarditis (41): No=0 Yes=1 _____ If Yes, Type (42): Treated=1 Active=2 _____
Chronic Lung Disease (43): No=0 Mild=1 Moderate=2 Severe=3 Lung Disease Documented, Severity Unknown=4 _____
Immunosuppressive Therapy (44): No=0 Yes=1 _____
Peripheral Vascular Disease (45): No=0 Yes=1 _____

D. PREVIOUS CV INTERVENTIONS

Incidence (46): First CV Surgery=1 First reop=2 Second reop=3 Third reop=4 Four or more reops=5 _____
Prior PCI (47): No=0 Yes=1 _____
If Yes, Prior PCI-Interval (48): ≤6 Hours=1 >6 Hours=2 _____

E. PREOPERATIVE CARDIAC STATUS

Myocardial Infarction (49): No=0 Yes=1 _____
If Yes, When (50): ≤6 Hours=1 >6 Hours but <24 Hours=2 1-7 Days=3 8-21 Days=4 >21 Days=5 _____
Congestive Heart Failure (51): No=0 Yes=1 _____
Angina (52): No=0 Yes=1 _____ If Yes, Angina Type (53): Stable=1 Unstable=2 _____
Cardiogenic Shock (54): No=0 Yes at the time of the proc=1 Yes not at proc but <24 hours=2 _____
If Yes, Cardiogenic Shock Type (55): Refractory Shock=1 Hemodynamic Instability=2 _____
Resuscitation (56): No=0 ≤1 Hour=1 >1 Hour but within 24 Hours=2 _____
Arrhythmia (57): No=0 Recent (≤30 Days)=1 Remote (>30 Days)=2 _____
If Yes, Arrhythmia Type (58): None=0 Sust VT/VF=1 Heart Block=2 AFib/Flutter=3 Sick Sinus Syndrome=4 _____
NYHA Classification (59): I = 1 II = 2 III = 3 IV = 4 _____

F. PREOPERATIVE MEDICATIONS									
Beta Blockers (60):	No=0	Yes=1		ACE Inhibitors/ARBs (61):	No=0	Yes=1			
		Contraindicated=2	_____						
Nitrates-IV (62):	No=0	Yes=1	_____	Anticoagulants (63):	No=0	Yes=1			_____
If Yes, Anticoagulant Medication Name (64): Heparin (Unfractionated)=1 Heparin (Low molecular)=2 Thrombin Inhibitors=3 Other=9									_____
Coumadin (65):	No=0	Yes=1	_____	Inotropes (66):	No=0	Yes=1			_____
Steroids (67):	No=0	Yes=1	_____	Aspirin (68):	No=0	Yes=1			_____
ADP Inhibitor (69):	No=0	Yes=1	_____	Glyco IIB IIIA (70):	No=0	Yes=1			_____
Other (71):	No=0	Yes=1	_____						

G. PREOPERATIVE HEMODYNAMICS AND CATH									
Number of Diseased Coronary Vessels (Left Main Counts as Two) (72): None=0 One=1 Two=2 Three=3 Not Documented/Unknown=9 _____									
Left Main Disease (>50% Occlusion) (73): No=0 Yes=1 Not Documented/Unknown=9 _____									
Ejection Fraction Done (74): No=0 Yes=1 _____ If Yes, Ejection Fraction % (75): _____									
Ejection Fraction Method (76): LVgram=1 Radionuclide=2 Estimate=3 Echo=4 MRI=5 Other=6 _____									

H. OPERATIVE PROCEDURE

Surgery: Last Name (77): _____ First Name (78): _____ MI(79): _____ License #(80): _____

Status of Procedure (81): _____ Elective=1 Urgent=2 Emergent=3 Emergent Salvage=4 _____

If Urgent, Reason (82): _____ AMI=1 IABP=2 Worsening CP=3 CHF=4 Anatomy=5 USA=6 Rest Angina=7
Valve Dysfunction=8 Aortic Dissection=9 Angiographic Accident=10 Cardiac Trauma=11
Infected Device=12 Syncope=13 PCI/CABG Hybrid=14 PCI Failure w/o Clinical Deterioration=15
Aortic Aneurysm=16 Device Failure=17 Diagnostic/Interventional Procedure Complication=18
Endocarditis=19 Failed Transcatheter Valve Therapy=20 Intracardiac Mass or Thrombus=21
Ongoing Ischemia=22 PCI w/Clinical Deterioration=23 Pulmonary Edema=24
Shock Circ. Support=26 Shock No Circ. Support=27 Transplant=28 Other=29 _____

If Emergent, Reason (83): _____ Shock Circ Supp=1 Shock No Circ Supp=2 Pulmonary Edema=3 AEML=4 Ongoing Ischemia=5
Valve Dysfunction=6 Aortic Dissection=7 Angiographic Accident=8 Cardiac Trauma=9
Infected Device=10 Syncope=11 PCI/CABG Hybrid=12 Anatomy=13 Aortic Aneurysm=14
Congestive Heart Failure=15 Device Failure=16 Diag/Intervention Proc Complication=17
Endocarditis=18 Failed Transcatheter Valve Therapy=19 IABP=20
Intracardiac Mass or Thrombus=21 PCI Incomplete w/o Clinical Deterioration=22
PCI or attempted PCI w/Clinical Deterioration=23 Pulmonary Embolism=24 Rest Angina=25
Transplant=26 Unstable Angina=27 Worsening Chest Pain=28 Other=29 _____

Operative Category (84): CAB=1 CAB+Valve=2 CAB+Other=3 CAB+Valve+Other=4 Valve=5 Valve+Other=6 Other=7 _____

Robotic Technology used (85): _____ No=0 Yes=1 _____

Minimally Invasive Incision Attempted (86): _____ No=0 Yes=1 _____

If Yes, Conversion to Standard Incision (87): _____ No=0 Yes=1 _____

CPB Utilization (88): _____ None=0 Combination=1 Full=2 _____ If Combination or Full, Perfusion Time (min) (89): _____

Aortic Occlusion (90): _____ None=0 Aortic Crossclamp=1 Balloon Occlusion=2 Partial Crossclamp=3 _____

If Aortic Crossclamp or Balloon Occlusion, Cross Clamp Time (min) (91): _____

Cardioplegia (92): _____ No=0 Yes=1 _____

IABP (93): _____ No=0 Yes=1 _____

If Yes, When Inserted (94): _____ Preoperatively=1 Intraoperatively=2 Postoperatively=3 _____

Indication (95): Hemodynamic Instability=1 Procedural Support=2 Unstable Angina=3 CPB Wean=4 Prophylactic=5 Other=6 _____

Blood Products Used During Surgery (96): _____ No=0 Yes=1 _____

I. CORONARY BYPASS	
Number of Distal Anastomoses With Arterial Conduits (97):	_____
Number of Distal Anastomoses With Venous Conduits (98):	_____
Number of IMA Distal Anastomoses (99):	_____
Number of Radial Artery Distal Anastomoses (100):	_____
Number of Gastro-Epiploic Artery (GEPA) Distal Anastomoses (101):	_____
Other Arterial Anastomoses (102):	_____

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J. VALVE SURGERY

Aortic (103):	No=0	Replacement (excluding TAVR)=1 Repair/Reconstruct=2 Root Reconstruction with Valve Conduit=3 Replacement + Aortic Graft Conduit (not a valve conduit)=4 Root Reconstruction with Valve Sparing=5 Resuspension Aortic Valve with Replacement of Ascending Aorta=6 Resuspension Aortic Valve w/o Replacement of Ascending Aorta=7 Resection Sub-Aortic Stenosis=8 Apico-Aortic Conduit=9 Autograft with Pulmonary Valve-Ross Procedure=10 Homograft=11 Transcatheter AV Replacement=12	_____
Mitral (104):	No=0	Annuloplasty Only=1 Replacement (excluding Transcatheter)=2 Reconstruction with Annuloplasty=3 Reconstruction without Annuloplasty=4 Transcatheter Replacement=5	_____
Tricuspid (105):	No=0	Annuloplasty Only=1 Replacement (excluding Transcatheter)=2 Reconstruction with Annuloplasty=3 Reconstruction without Annuloplasty=4 Valvectomy=5 Transcatheter Replacement=6	_____
Pulmonic (106):	No=0	Replacement (excluding Transcatheter)=1 Repair/Reconstruction=2 Valvectomy=3 Transcatheter Replacement=4	_____

K. OTHER PROCEDURES

Left Vent Aneurysm Repair (107):	No=0	Yes=1	_____	Vent. Septal Defect Repair (108):	No=0	Yes=1	_____
Atrial Septal Defect Repair (109):	No=0	Yes=1	_____	Surgical Ventricular Restoration (110):	No=0	Yes=1	_____
Congenital Defect Repair (111):	No=0	Yes=1	_____	TMR (112):	No=0	Yes=1	_____
Cardiac Trauma Repair (113):	No=0	Yes=1	_____	Cardiac Transplant (114):	No=0	Yes=1	_____
Pacemaker (115):	No=0	Yes=1	_____	AICD (116):	No=0	Yes=1	_____
Atrial Fib Correction (117):	None=0	MAZE=1	Other=2	Combination=3	Left Atrial Appendage Ligation/Removal=4	_____	
Aortic Aneurysm Repair (118):	No=0	Yes=1	_____	Other Cardiac (119):	No=0	Yes=1	_____
Carotid Endarterectomy (120):	No=0	Yes=1	_____	Other Vascular (121):	No=0	Yes=1	_____
Other Thoracic (122):	No=0	Yes=1	_____	VAD (123):	None=0	LVAD=1	RVAD=2 BiVAD=3
Other non-Cardiac (124)	No=0	Yes=1	_____				_____

L. IN HOSPITAL COMPLICATIONS

<u>OPERATIVE:</u>				<u>INFECTION:</u>			
Reop-Bleeding/Tamponade (125):	No=0	Yes=1	_____	Sternal-Deep (131):	No=0	Yes=1	_____
Reop-Valvular Dysfunction (126):	No=0	Yes=1	_____	Thoracotomy (132):	No=0	Yes=1	_____
Reop-Graft Occlusion(127):	No=0	Yes=1	_____	Leg (133):	No=0	Yes=1	_____
Reop-Other Cardiac Problem (128):	No=0	Yes=1	_____	Septicemia (134):	No=0	Yes=1	_____
Reop-Other Non-Cardiac Problem (129):	No=0	Yes=1	_____	UTI (135):	No=0	Yes=1	_____
Perioperative MI (130):	No=0	Yes=1	_____				
<u>NEUROLOGIC:</u>				<u>PULMONARY:</u>			
Postoperative Stroke For >24 Hrs (136):	No=0	Yes=1	_____	Prolonged Ventilation (139):	No=0	Yes=1	_____
Transient Neurologic Deficit (137):	No=0	Yes=1	_____	Pulmonary Embolism (140):	No=0	Yes=1	_____
Coma/Encephalopathy (138):	No=0	Yes=1	_____	Pneumonia (141):	No=0	Yes=1	_____
<u>RENAL:</u>							
Renal Failure (142):	No=0	Yes=1	_____				
If Yes, Dialysis (143):	No=0	Yes=1	_____				
<u>VASCULAR:</u>							
Iliac/Femoral Dissection (144):	No=0	Yes=1	_____				
Acute Limb Ischemia (145):	No=0	Yes=1	_____				
<u>OTHER:</u>							
Heart Block (146):	No=0	Pacemaker=1	ICD=2				
		Pacemaker/ICD=3	Other=4	Cardiac Arrest (147):	No=0	Yes=1	_____
Anticoagulant (148):	No=0	Yes=1	_____	Tamponade (149):	No=0	Yes=1	_____
GI Complication (150):	No=0	Yes=1	_____	Multi System Failure (151):	No=0	Yes=1	_____
A-Fib/Flutter (152):	No=0	Yes=1	_____	Aortic Dissection (153):	No=0	Yes=1	_____
Other (154):	No=0	Yes=1	_____				
If Yes, Specify (155): _____							

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M. MORTALITY

Discharge Status (156): Alive=1 Dead=2 _____ Status at 30 Days after Surgery (160): Alive=1 Dead=2 Unknown=3 _____

 If Dead, Date of Death (mm/dd/yyyy) (157): _____ / _____ / _____

 Location of Death (158): OR During Initial Surgery=1 Hospital=2 Home=3 Other Care Facility=4
 OR During Reoperation=5 Unknown=6 Extended Care Facility=7 Hospice=8
 Acute Rehab=9 Other=10 _____

 Primary Cause of Death (Select Only One) (159):

 Cardiac=1 Neurologic=2 Renal=3 Vascular=4
 Infection=5 Pulmonary=6 Valvular=7 Other=8 Unknown=9 _____