OSHPD

Office of Statewide Health Planning and Development

California CABG Outcomes Reporting Program (CCORP)

Data Element Specifications

Version 8.3

Cardiac Online Reporting for California

June 29, 2020

1. Medical Record Number:

   Format: Alphanumeric, length 12

   Valid Values: Free text

   Category: Demographics

   Definition/Description: Indicate the patient's medical record number at the hospital where surgery occurred.

2. Type of Coronary Artery Bypass Graft (CABG):

   Format: Numeric, length 1

   Valid Values: 1 = Isolated CABG; 3 = CABG + Valve; 4= Other non-isolated CABG

   Category: Operative

   Definition/Description: Indicate the type of CABG.

   Type of CABG should be coded Isolated CABG if none of the procedures listed in this subsection was performed concurrently with the coronary artery bypass surgery.

   - Valve repairs or replacements
   - Operations on structures adjacent to heart valves (papillary muscle, chordae tendineae, traebeculae carneae cordis, annuloplasty, infundibulectomy)
   - Ventriculectomy when diagnosed preoperatively as a rupture, aneurysm or remodeling procedure. Excludes 1) sites intra-operatively diagnosed, 2) patch applications for site oozing discovered during surgery and 3) prophylactic patch applications to reduce chances of future rupture
   - Repair of atrial and ventricular septa, excluding closure of patent foramen ovale
   - Excision of aneurysm of heart
   - Head and neck, intracranial endarterectomy
   - Other open heart surgeries, such as aortic arch repair, pulmonary endarterectomy
   - Endarterectomy of aorta
   - Thoracic endarterectomy (endarterectomy on an artery outside the heart)
   - Carotid endarterectomy
   - Heart transplantation
   - Repair of certain congenital cardiac anomalies, excluding closure of patent foramen ovale (e.g., tetralology of fallot, atrial septal defect (ASD), ventricular septal defect (VSD), valvular abnormality)
   - Any aortic aneurysm repair (abdominal or thoracic)
   - Aorta-subclavian-carotid bypass
   - Aorta-renal bypass
   - Aorta-iliac-femoral bypass
   - Caval-pulmonary artery anastomosis
   - Extracranial-intracranial (EC-IC) vascular bypass
   - Coronary artery fistula

- Resection of a lobe or segment of the lung (e.g., lobectomy or segmental resection of lung). Does not include simple biopsy of lung nodule in which surrounding lung is not resected, biopsy of a thoracic lymph node, or excision or stapling of an emphysematous bleb.
- Pleural decortication
- Mastectomy for breast cancer (not simple breast biopsy)
- Amputation of any part of an extremity (e.g., foot or toe)
- Resection of LV aneurysm
- Planned Ventricular Assist Device (VAD) for long term treatment.
- Septal myectomy with hypertrophic obstructive cardiomyopathy
- Full open MAZE
- Repair of aortic dissection

Type of CABG should be coded CABG + Valve if none of the procedures listed in this subsection were performed concurrently with a CABG that included aortic valve replacement (AVR), mitral valve replacement (MVR), mitral valve repair (MV repair), or AVR+MVR/MV repair.

- Pulmonic Valve Procedure
- Tricuspid Valve Procedure
- Ventriculectomy when diagnosed preoperatively as a rupture, aneurysm or remodeling procedure. Excludes 1) sites intra-operatively diagnose, 2) patch application for site oozing discovered during surgery, and 3) prophylactic patch applications to reduce chances of future rupture
- Repair of atrial and ventricular septa, excluding closure of patent foramen ovale
- Excision of aneurysm of heart
- Head and neck intracranial endarterectomy
- Other open heart surgeries such as aortic arch repair, pulmonary endarterectomy
- Endarterectomy of aorta
- Thoracic endarterectomy (endarterectomy on an artery outside the heart)
- Carotid endarterectomy
- Resection of LV aneurysm
- Heart transplantation
- Repair of congenital cardiac anomalies such as tetraology of fallot, atrial septal defect (ASD), ventricular septal defect (VSD), or other complex anomaly
- Any aortic aneurysm repair (abdominal or thoracic)
- Repair of aortic dissection
- Aorta-subclavian-carotid-bypass
- Aorta-renal bypass
- Aorta-iliac-femoral bypass
- Caval-pulmonary artery anastomosis

- Extracranial-intracranial (EC-IC) vascular bypass
- Coronary artery fistula
- Resection of a lobe or segment of the lung (e.g., lobectomy or segmental resection of lung). Does not include simple biopsy of lung nodule in which surrounding lung is not resected, biopsy of a thoracic lymph node or excision or stapling of an emphysematous bleb
- Pleural Decortication
- Mastectomy for breast cancer (not simple breast biopsy)
- Amputation of any extremity (e.g., foot or toe)
- Resection of LV aneurysm
- Planned Ventricular Assist Device (VAD) for long term treatment.
- Infundibulectomy
- Septal myectomy with hypertrophic obstructive cardiomyopathy
- Full Open MAZE for Aortic Valve cases only (epicardial MAZE procedures are not excluded and Full Open procedures are not excluded for Mitral Valve)

Type of CABG should be coded Other Non-isolated CABG if case is not included in Isolated CABG or CABG + Valve

3. Date of Surgery:

Format: Numeric, length 8

Valid Values: mmddyyyy

Category: Hospitalization

Definition/Description: Indicate the date of coronary artery bypass graft procedure.

4. Date of Birth:

Format: Numeric, length 8

Valid Values: mmddyyyy

Category: Demographics

Definition/Description: Indicate the patient's date of birth using 4-digit format for year.

5. Patient Age:

Format: Numeric, length 3

Valid Values: 18 - 110

Category: Demographics

Definition/Description: Indicate the patient's age in years, at time of surgery. This should be calculated from the date of birth and the date of surgery, according to the convention used in the USA (the number of birthdate anniversaries reached by the date of surgery).

6. Sex:

Format: Numeric, length 1

Valid Values: 1 = Male; 2 = Female

Category: Demographics

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

7. Primary Payor

Format: Numeric, length 2

Valid Values: 1 = Non/Self; 2 = Medicare; 3 = Medicaid; 4 = Military Health; 9 = Commercial Health Insurance; 10 = Health Maintenance Organization; 11 = Non-U.S. Plan; 13 = Other

Category: Hospitalization

Definition/Description: Indicate the primary insurance payor for this admission. When there is more than one payor, the primary payor pays first.

8. Secondary (Supplemental) Payor

Format: Numeric, length 2

Valid Values: 1 = Non/Self; 2 = Medicare; 3 = Medicaid; 4 = Military Health; 9 = Commercial Health Insurance; 10 = Health Maintenance Organization; 11 = Non-U.S. Plan; 13 = Other

Category: Hospitalization

Definition/Description: Indicate which if any secondary insurance payor was used for this admission. When there is more than one payor, the secondary payor pays after the primary payor.

9. Race Documented

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Patient Declined to Disclose

Category: Demographics
Definition/Description: Indicate whether race is documented.

10. Race - White:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Demographics

Definition/Description: Indicate whether the patient's race, as determined by the patient or family, includes White. "White" refers to a person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicated their race(s) as "White" or reported entries such as Irish, German, Italian, Lebanese, Arab, Moroccan, or Caucasian.

11. Race - Black/African American:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Demographics

Definition/Description: Indicate whether the patient's race, as determined by the patient or

family, includes Black / African American. "Black or African American" refers to a person having origins in any of the Black racial groups of Africa. It includes people who indicated their race(s) as "Black, African Am., or Negro" or reported entries such as African American, Kenyan, Nigerian, or Haitian.

12. Race - Asian:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Demographics

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

13. Race - American Indian/Alaskan Native:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Demographics

Definition/Description: Indicate whether the patient's race, as determined by the patient or family, includes American Indian / Alaskan Native. "American Indian or Alaska Native" refers to a person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment. This category includes people who indicated their race(s) as "American Indian or Alaska Native" or reported their enrolled or principal tribe, such as Navajo, Blackfeet, Inupiat, Yup'ik, or Central American Indian groups or South American Indian groups.

14. Race - Native Hawaiian/Pacific Islander:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Demographics

Definition/Description: Indicate whether the patient's race, as determined by the patient or family, includes Native Hawaiian / Pacific Islander. "Native Hawaiian or Other Pacific Islander" refers to a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicated their race(s) as "Pacific Islander" or reported entries such as "Native Hawaiian", "Guamanian or Chamorro", "Samoan", and "Other Pacific Islander" or provided other detailed Pacific Islander responses.

15. Race - Other:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Demographics

Definition/Description: Indicate whether the patient's race, as determined by the patient or family, includes any other race. "Some Other Race" includes all other responses not included in the White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander race categories described above.

16. Hispanic or Latino or Spanish Ethnicity:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Not Documented

Category: Demographics

Definition/Description: Indicate if the patient is of Hispanic, Latino or Spanish ethnicity as reported by the patient / family. "Hispanic, Latino or Spanish" refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.

17. Hospital Discharge Date:

Format: Numeric, length 8

Valid Values: mmddyyyy

Category: Discharge/ Mortality

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

18. Status at Hospital Discharge:

Format: Numeric, length 1

Valid Values: 2 = Died in Hosp; 3 = Discharged Alive, Last Known status Alive (Other than Hospice) ; 4 = Discharged Alive, died after discharge ; 5 = Discharged to Hospice

Category: Discharge/ Mortality

Definition/Description: Indicate the discharge and current vital status of patient.

19. Patient Transfer to Another Acute Care Hospital

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Discharge/ Mortality

Definition/Description: Indicate if the patient was transferred to another acute care hospital.

20. Patient Transferred to Another Acute Hospital – Date

Format: Numeric, length 8

Valid Values: mmddyyyy

Category: Discharge/ Mortality

Definition/Description: Indicate the date the patient was transferred.

21. Mortality Date

Format: Numeric, length 8

Valid Values: mmddyyyy

Category: Mortality

Definition/Description: Indicate the date the patient was declared dead.

22. Mort – Status at 30 Days After Surgery (either discharged or in-hospital)

Format: Numeric, length 1

Valid Values: 1 = Alive; 2 = Dead; 3 = Unknown

Category: Discharge/ Mortality

Definition/Description: Indicate whether the patient was alive or dead at 30 days post-surgery (whether in hospital or not).

23. Responsible Surgeon Name (3 separate fields):

Format: Surgeon Last Name text length 25 (alpha) Surgeon First Name text length 20 (alpha) Surgeon Middle Initial text length 1(alpha)

Valid Values: Free Text

Category: Operative

Definition/Description: The responsible surgeon is the surgeon as defined in Section 97170.

24. Responsible Surgeon CA License Number:

Format: Alphanumeric, length 9

Valid Values: Free text

Category: Operative

Definition/Description: California physician license number of responsible surgeon, assigned by the Medical Board of California of the Department of Consumer Affairs. If the responsible surgeon is an osteopath, then the license number assigned by the Osteopathic Medical Board of California.

25. Height (cm):

Format: Numeric, length 4

Valid Values: 20.0-251.0 cm

Category: Risk Factors

Definition/Description: Indicate the height of the patient in centimeters closest to time of OR entry.

26. Weight (kg):

Format: Numeric, length 4

Valid Values: 10.0 - 250.0 kg

Category: Risk Factors

Definition/Description: Indicate weight closest to the date of surgery in kilograms.

27. Diabetes:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3=Unknown

Category: Risk Factors

Definition/Description: History of diabetes diagnosed and/or treated by a healthcare provider. The American Diabetes Association criteria include documentation of the following:

A1c >=6.5%;

Fasting plasma glucose >=126 mg/dl (7.0 mmol/l);

Two-hour plasma glucose >=200 mg/dl (11.1 mmol/l) during an oral glucose tolerance test;

In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis, a random plasma glucose >=200 mg/dl (11.1 mmol/l)

This does not include gestational diabetes.

28. Diabetes Control:

Format: Numeric, length 1

Valid Values: 1 = None; 2 = Diet only; 3 = Oral; 4 = Insulin; 5 = Other; 6= Other subcutaneous medication; 7 = Unknown

Category: Risk Factors

Definition/Descriptions: Indicate the patient's control method as presented on admission. Patients placed on a pre-procedure diabetic pathway of insulin drip at admission but whose diabetes was controlled by diet or oral method are not coded as being treated with insulin. Choose the most aggressive therapy from the order below:

Insulin: insulin treatment (includes any combination with insulin);

Other subcutaneous medications (e.g., GLP-1 agonist);

Oral: treatment with oral agent (includes oral agent with or without diet treatment);

Diet only: treatment with diet only;

None: no treatment for diabetes;

Other: other adjunctive treatment, non-oral/insulin/diet;

Unknown

29. Dialysis:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Unknown

Category: Risk Factors

Definition/Description: Indicate whether the patient is currently (prior to surgery) undergoing dialysis. Refers to whether the patient is currently on dialysis, not distant past history.

30. Hypertension:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Unknown

Category: Risk Factors

Definition/Description: Indicate if the patient has a current diagnosis of hypertension defined by any one of the following:

History of hypertension diagnosed and treated with medication, diet and/or exercise;

Prior documentation of blood pressure >140 mmHg systolic or 90 mmHg diastolic for patients without diabetes or chronic kidney disease, or prior documentation of blood pressure >130 mmHg systolic or 80 mmHg diastolic on at least 2 occasions for patients with diabetes or chronic kidney disease;

Currently undergoing pharmacologic therapy for treatment of hypertension.

31. Endocarditis:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Risk Factors

Definition/Description: Endocarditis must meet the current CDC definition. Choose "Yes" for patients with pre-operative endocarditis who begin antibiotics post-op. Code "Yes" for patients who are diagnosed intraoperatively:

Patient has organisms cultured from valve or vegetation;

Patient has 2 or more of the following signs or symptoms: fever (>38°C), new or changing murmur, embolic phenomena, skin manifestations (i.e., petechiae, splinter hemorrhages, painful subcutaneous nodules), congestive heart failure, or cardiac conduction abnormality with no other recognized cause and at least 1 of the following:

- Organisms cultured from 2 or more blood cultures
- Organisms seen on Gram's stain of valve when culture is negative or not done
- Valvular vegetation seen during an invasive procedure or autopsy
- Positive laboratory test on blood or urine (e.g., antigen tests for H influenzae, S pneumoniae, N meningitis, or Group B Streptococcus)
- Evidence of new vegetation seen on echocardiogram and if diagnosis is made antemortem, physician institutes appropriate antimicrobial therapy

32. Infectious Endocarditis Type:

Format: Numeric, Length 1

Valid Values: 1 = Treated; 2 = Active

Category: Risk Factors

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

33. Chronic Lung Disease:

Format: Numeric, length 1

Valid Values: 1 = No; 2 = Mild; 3 = Moderate; 4 = Severe; 5= Lung disease documented, severity unknown; 6 = Unknown

Category: Risk Factors

Definition/Description: Indicate whether the patient has chronic lung disease, and the severity level according to the following classification:

No;

Mild: FEV1 60% to 75% of predicted, and/or on chronic inhaled or oral bronchodilator therapy;

Moderate: FEV1 50% to 59% of predicted, and/or on chronic oral/systemic steroid therapy aimed at lung disease;

Severe: FEV1 <50% and/or Room Air pO <60 or pCO2 > 50;

Chronic Lung Disease present, severity not documented;

Unknown.

34. Pneumonia

Format: Numeric, length 1
Valid Values: 1 = No; 2 = Recent; 3 = Remote; 4 = Unknown

Category: Risk Factors

Definition/Description: Indicate whether the patient had pneumonia at the time of procedure.

35. Liver Disease:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Unknown

Category: Risk Factors
Definition/Description: Indicate whether the patient has a history of hepatitis B, hepatitis C, drug induced hepatitis, autoimmune hepatitis, cirrhosis, portal hypertension, esophageal varices, liver transplant, or congestive hepatopathy. Exclude NASH in the absence of cirrhosis.

36. Immunocompromised Present:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Unknown

Category: Risk Factors
Definition/Description: Indicate whether immunocompromise is present due to immunosuppressive medication therapy within 30 days preceding the operative procedure or existing medical condition.

37. COVID-19

Format: Numeric, length 2

Valid Values: 10 = No; 11 = Yes, prior to hospitalization for this surgery; 12 = Yes, in hospital prior to surgery; 13 = Yes, in hospital after surgery
Category: TempCode

Definition/Description: Did the patient have a laboratory confirmed diagnosis of COVID-19?

38. Cancer Within 5 Years

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Unknown

Category: Risk Factors

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

39. Peripheral Artery Disease:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Unknown

Category: Risk Factors

Definition/Description: Indicate whether the patient has a documented history of peripheral arterial disease (includes upper and lower extremity, renal, mesenteric, and abdominal aortic systems). This can include:

1. Claudication, either with exertion or at rest,
2. Amputation for arterial vascular insufficiency,
3. Vascular reconstruction, bypass surgery, or percutaneous intervention to the extremities (excluding dialysis fistulas and vein stripping),
4. Documented abdominal aortic aneurysm with or without repair.
5. Documented subclavian artery stenosis.

Peripheral arterial disease excludes disease in the carotid, cerebrovascular arteries or thoracic aorta. PVD does not include DVT, pulmonary artery aneurysm, Raynaud's Disease or AVM.

40. Cerebrovascular Disease:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Unknown

Category: Risk Factors

Definition/Description: Indicate whether the patient has a current or previous history of any of the following:

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

B. TIA: is defined as a transient episode of focal neurological dysfunction caused by brain, spinal cord, or retinal ischemia, without acute infarction, where the neurological dysfunction resolves within 24 hours. C. Noninvasive or invasive arterial imaging test demonstrating >=50% stenosis of any of the major extracranial or intracranial vessels to the brain

D. Vertebral artery and internal carotid and intercranial consistent with atherosclerotic disease with document presence as CVD. External carotid disease is excluded.

E. Previous cervical or cerebral artery revascularization surgery or percutaneous intervention

F. Brain/cerebral aneurysm.

G. Occlusion of vertebral artery, internal carotid artery, and intercranial due to dissection.

This does not include chronic (nonvascular) neurological diseases or other acute neurological insults such as metabolic and anoxic ischemic encephalopathy. Subdural hematoma or AVM is not cerebral vascular disease.

41. Prior CVA:

Format: Numeric, length 1

Valid Values:1 = Yes; 2 = No; 3 = Unknown

Category: Risk Factors

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

42. Prior CVA - When:

Format: Numeric, length 1

Valid Values: 3 = Recent <=30 days; 4=Remote >30 days

Category: Risk Factors

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

43. CVD TIA:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Unknown

Category: Risk Factors

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

44. CVD Carotid Stenosis:

Format: Numeric, length 1

Valid Values: 1 = None; 2 = Right; 3 = Left; 4 = Both; 5 = Not Documented

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

45. CVD Carotid Stenosis - Right:
Format: Numeric, length 1
Valid Values: 3 = 50% to 79%; 1 = 80% to 99%; 2 = 100%; 4 = Not documented
Category: Risk Factors
Definition/Description: Indicate the severity of stenosis reported on the right carotid artery.

46. CVD Carotid Stenosis – Left:
Format: Numeric, length 1
Valid Values: 3 = 50% to 79%; 1 = 80% to 99%; 2 = 100%; 4 = Not documented
Category: Risk Factors
Definition/Description: Indicate the severity of stenosis reported on the left carotid artery.

47. CVD Prior Carotid Surgery:
Format: Numeric, length 1
Valid Values: 1 = Yes; 2 = No
Category: Risk Factors
Definition/Description: Indicate whether the patient has a history of previous carotid artery surgery and/or stenting.

48. Last Creatinine Level:
Format: Numeric, length 4
Valid Values: 0.10 - 30.00
Category: Risk Factors
Definition/Description: Indicate the creatinine level closest to the date and time prior surgery but prior to anesthetic management (induction area or operating room).

49. Total Albumin
Format: Numeric, length 4
Valid Values: 1.00 - 10.00
Category: Risk Factors
Definition/Description: Indicate the total albumin closest to the date and time prior to surgery but prior to anesthetic management (induction area or operating room).

50. Total Bilirubin:
Format: Numeric, length 4
Valid Values: 0.10 - 50.00

Category: Risk Factors

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

51. INR:

Format: Numeric, length 4

Valid Values: 0.50 - 30.00

Category: Risk Factors

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

52. Sodium

Format: Numeric, length 4

Valid Values: 30.0 – 200.0

Category: Risk Factors

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

53. Previous CABG:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Previous Cardiac Interventions

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

54. Previous Valve:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Previous Cardiac Interventions

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

55. Previous PCI:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Previous Cardiac Interventions

Definition/Description: Indicate whether a previous Percutaneous Cardiac Intervention (PCI) was performed any time prior to this surgical procedure. Percutaneous Cardiac Intervention (PCI) is the placement of an angioplasty guide wire, balloon, or other devise (e.g. stent, atherectomy, brachytherapy, or thrombectomy catheter) into a native coronary artery or

coronary artery bypass graft for the purpose of mechanical coronary revascularization.

56. Previous PCI - Interval:

Format: Numeric, length 1

Valid Values: 1 = <=6 Hours; 2 = > 6 Hours

Category: Previous Cardiac Interventions

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

57. Prior MI:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Unknown

Category: Preoperative Cardiac Status

Definition/Description: Indicate if the patient has had at least one documented previous myocardial infarction at any time prior to this surgery.

58. MI - When:

Format: Numeric, length 1

Valid Values: 1 = <=6 Hrs.; 2 = >6 Hrs but <24 Hrs; 3 = 1 to 7 Days; 4 = 8 to 21 Days; 5 = >21 Days.

Category: Preoperative Cardiac Status

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

59. Heart Failure:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = Unknown

Category: Preoperative Cardiac Status

Definition/Description: Indicate if there is physician documentation or report that the patient has been in a state of heart failure.

60. Heart Failure Timing:

Format: Numeric, length 1

Valid Values: 1 = Acute; 2 = Chronic; 3 = Both

Category: Preoperative Cardiac Status

Definition/Description: Indicate whether heart failure is acute, chronic or both (acute or chronic).

- Acute: New onset or worsening heart failure within 2 weeks prior to this procedure.
- Chronic: More than 2 weeks prior to this procedure.
- Both: Worsening heart failure with 2 weeks prior to this procedure.

61. Classification - NYHA:

Format: Numeric, length 1

Valid Values: 1 = Class I; 2 = Class II; 3 = Class III; 4 = Class IV

Category: Preoperative Cardiac Status
Definition/Description: Indicate the patient's worst dyspnea or functional class, coded as the New York Heart Association (NYHA) classification documented by a MD/Provider within the past 2 weeks.

Select the highest level of heart failure within the two weeks leading up to episode of hospitalization or at the time of the procedure. The intent is to capture the highest level of failure. Physician documentation should be in the medical record.

Class I: Patient has cardiac disease but without resulting limitations of ordinary physical activity. Ordinary physical activity (e.g., walking several blocks or climbing stairs) does not cause undue fatigue, palpitation, or dyspnea.

Class II: Patient has cardiac disease resulting in slight limitation of ordinary physical activity. Patient is comfortable at rest. Ordinary physical activity such as walking more than two blocks or climbing more than one flight of stairs results in limiting symptoms (e.g., fatigue, palpitation, or dyspnea).

Class III: Patient has cardiac disease resulting in marked limitation of physical activity. Patient is comfortable at rest. Less than ordinary physical activity (e.g., walking one to two level blocks or climbing one flight of stairs) causes fatigue, palpitation, or dyspnea).

Class IV: Patient has cardiac disease resulting in inability to perform any physical activity without discomfort. Symptoms may be present. Patient has cardiac disease resulting in inability to perform any physical activity without discomfort. Symptoms may be present = Not Documented

62. Cardiogenic Shock:

Format: Numeric, length 1

Valid Values: 3 = Yes, at the time of the procedure; 4 = Yes, not at the time of the procedure, but within prior 24 hours; 2 = No

Category: Preoperative Cardiac Status
Definition/Description: Indicate if the patient developed cardiogenic shock. Cardiogenic shock is defined as a sustained

(>30 min) episode of hypoperfusion evidenced by systolic blood pressure <90 mm Hg and/or, if

available, cardiac index <2.2 L/min per square meter determined to be secondary to cardiac

dysfunction and/or the requirement for parenteral inotropic or vasopressor agents or mechanical support (e.g., IABP, extracorporeal circulation, VADs) to maintain blood pressure and cardiac index above those specified levels.

63. Resuscitation:

Format: Numeric, length 1

Valid Values: 3 = Yes, within 1 hour of the start of the procedure; 4 = Yes, more than 1 hour but less than 24 hours of the start of the procedure; 2 = No

Category: Preoperative Cardiac Status

Definition/Description: Indicate whether the patient required cardiopulmonary resuscitation before induction of anesthesia. Capture resuscitation timeframe: within 1 hour or 1-24 hours pre-op.

64. Cardiac Arrhythmia:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Preoperative Cardiac Status

Definition/Description Indicate whether the patient has a history of a cardiac rhythm disturbance prior to the induction of anesthesia.

65. Cardiac Arrhythmia - VTach/VFib:

Format: Numeric, length 1

Valid Values: 1= None; 2= Remote (>30 days); 3= Recent (<30days)

Category: Preoperative Cardiac Status

Definition/Description: Indicate whether arrhythmia was VTach or VFib.

66. Cardiac Arrhythmia - Aflutter:

Format: Numeric, length 1

Valid Values: 1= None; 2= Remote (>30 days); 3= Recent (<30days)

Category: Preoperative Cardiac Status

Definition/Description: Indicate whether arrhythmia was atrial flutter.

67. Cardiac Arrhythmia – Third Degree Heart Block:

Format: Numeric, length 1

Valid Values: 1= None; 2= Remote (>30 days); 3= Recent (<30days)

Category: Preoperative Cardiac Status

Definition/Description: Indicate whether arrhythmia was third degree heart block.

68. Cardiac Arrhythmia – Atrial fibrillation:

Format: Numeric, length 1

Valid Values: 1= None; 2= Remote (>30 days); 3= Recent (<30days)

Category: Preoperative Cardiac Status

Definition/Description: Indicate whether arrhythmia was atrial fibrillation.

69. Atrial fibrillation Type:

Format: Numeric, length 1

Valid Values: 2 = Paroxysmal; 4 = Persistent

Category: Preoperative Cardiac Status

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

70. Warfarin Use (within 5 days):

Format: Numeric, Length 1

Valid Values: 1 = Yes; 2 = No; 3 = Unknown

Category: Preoperative Medications

Definition/Description: Indicate whether the patient received warfarin (Coumadin) within 5 days preceding surgery.

71. Coronary Anatomy/Disease Known:

Format: Numeric, Length 1

Valid Values: 1 = Yes; 2 = No

Category: Hemodynamics / Cath / Echo

Definition/Description: Indicate whether coronary artery anatomy and/or disease is documented and available prior to surgery.

72. Number Diseased Vessels:

Format: Numeric, length 1

Valid Values: 1 = None; 2 = One; 3 = Two; 4 = Three

Category: Hemodynamics / Cath / Echo

Definition/Description: Indicate the number of diseased major native coronary vessel systems. A vessel that has ever been considered diseased, should always be considered diseased

73. Left Main Stenosis >= 50% Known:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No; 3 = N/A

Category: Hemodynamics / Cath / Echo

Definition/Description: Indicate if main stenosis greater or equal to 50% is known.

74. Hemo Data Ejection Fraction Done:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Hemodynamics / Cath / Echo

Definition/Description: Indicate whether the Ejection Fraction was measured prior to the induction of anesthesia.

75. Hem Data EF

Format: Numeric, length 3

Valid Values: 1.0 - 99.0

Category: Hemodynamics / Cath / Echo

Definition/Description: Indicate the Ejection Fraction (percentage of the blood emptied from the left ventricle at the end of the contraction). See TM for time frame and source document priority. Enter a percentage in the range of 1 - 99. If a percentage range is reported, report a whole number using the "mean" (i.e., 50-55% is reported as 53%).

- Hyperdynamic: >70%
- Normal: 50%–70% (midpoint 60%)
- Mild dysfunction: 40%–49% (midpoint 45%)
- Moderate dysfunction: 30%–39% (midpoint 35%)
- Severe dysfunction: <30%

Note: If no diagnostic report is in the medical record, a value documented in the medical record is acceptable. ACCF/AHA 2013

76. PA Systolic Pressure Measured:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Hemodynamics / Cath / Echo

Definition/Description: Indicate whether the PA systolic pressure was measured.

77. PA Systolic Pressure:

Format: Numeric, length 4

Valid Values: 10.0 - 150.0

Category: Hemodynamics / Cath / Echo

Definition/Description: Capture PA systolic pressure recorded

78. Mitral Valve Regurgitation:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Hemodynamics / Cath / Echo

Definition/Description: Indicate whether there is evidence of Mitral valve insufficiency/regurgitation.

79. Mitral Regurgitation

Format: Numeric, length 1

Valid Values: 1 = Trivial/Trace; 2 = Mild; 3 = Moderate; 4 = Severe; 5 = Not documented

Category: Hemodynamics / Cath / Echo

Definition/Description: Indicate whether there is evidence of Mitral valve insufficiency/regurgitation.

80. Incidence:

Format: Numeric, length 1

Valid Values:1 = First cardiovascular surgery; 2 = First re-op cardiovascular surgery; 3 = Second re-op cardiovascular surgery; 4 = Third re-op cardiovascular surgery; 5 = Fourth or more re-op cardiovascular surgery

Category: Operative

Definition/Description: Indicate if this is the patient's:

First surgery;

First re-op surgery;

Second re-op surgery;

Third re-op surgery;

Fourth or more re-op surgery

CV surgeries INCLUDE: CABG, valve replacement/repair, intracardiac repairs (ASD, VSD), ventricular aneurysmectomy, or surgery on the aortic arch. Use of CPB is not required.

-CV surgeries DO NOT INCLUDE: PCI's and non-cardiac vascular surgeries such as abdominal aortic aneurism repairs or fem-pop bypasses, percutaneous aortic stent grafts, percutaneous valves or pacemaker/ICD implantations.

The intent of this field is to capture the incidence of the procedure that the patient is about to go through during the current hospitalization, as compared to those procedures prior to this hospitalization. First operative means the patient has never had any procedure on the heart and/or great vessels...

81. Status:

Format: Numeric, length 1

Valid Values: 1 = Elective; 2 = Urgent; 3 = Emergent; 4 = Emergent Salvage

Category: Operative

Definition/Description: Indicate the clinical status of the patient prior to entering the operating room:

- Elective- The patient's cardiac function has been stable in the days or weeks prior to the operation. The procedure could be deferred without increased risk of compromised cardiac outcome.

- Urgent- Procedure required during same hospitalization in order to minimize chance of further clinical deterioration. Examples include but are not limited to: Worsening, sudden chest pain, CHF, acute myocardial infarction (AMI), anatomy, IABP, unstable angina (USA) with intravenous (IV) nitroglycerin (NTG) or rest angina.

- Emergent- Patients requiring emergency operations will have ongoing, refractory (difficult, complicated, and/or unmanageable) unrelenting cardiac compromise, with or without hemodynamic instability, and not responsive to any form of therapy except cardiac surgery. An emergency operation is one in which there should be no delay in providing operative intervention

- Emergent Savage- The patient is undergoing CPR en route to the OR or prior to anesthesia induction or has ongoing ECMO to maintain life.

82. Urgent / Emergent / Emergent Salvage Reason:

Format: Numeric, length 2

Valid Values: 1 = AMI; 2 = Anatomy; 3 = Aortic Aneurysm; 4 = Aortic Dissection; 5 = CHF; 6 = Device Failure; 7 = Diagnostic/Interventional Procedure Complication; 8 = Endocarditis; 10 = IABP; 11 = Infected Device; 12 = Intracardiac mass or thrombus; 13 = Ongoing Ischemia; 14 = PCI Incomplete without Clinical Deterioration; 15 = PCI or attempted PCI with Clinical Deterioration; 16 = Pulmonary Edema; 17 = Pulmonary Embolus; 18= Rest Angina; 19 = Shock Circulatory Support; 20 = Shock No Circulatory Support; 21 = Syncope; 22 = Transplant; 23 = Trauma; 24 = USA; 25 = Valve Dysfunction; 26 = Worsening CP; 27 = Other; 28 = Failed Transcatheter Valve Therapy – Acute, annular disruption; 29 = Failed Transcatheter Valve Therapy – Acute, device malposition; 30 = Failed Transcatheter Valve Therapy – Subacute, device dysfunction

Category: Operative

Definition/Description: Choose one reason from the list in (72)(B) above that best describes why this operation was considered urgent, emergent, or emergent salvage.

83. Perfusion Strategy:

Format: Numeric, length 1

Valid Values: 1 = None; 2 = Combination; 3 = Full; 4 = Left Heart Bypass

Category: Operative

Definition/Description: Indicate the perfusion strategy used during the procedure:

None: No CPB or coronary perfusion used during the procedure.

Combination: With or without CPB and/or with or without coronary perfusion at any time during the procedure (capture conversions from off-pump to on-pump only):

- At start of procedure: No CPB/No Coronary Perfusion -> conversion -> CPB
- At start of procedure: No CPB/No Coronary Perfusion -> Conversion to -> Coronary perfusion, or
- At start of procedure: No CPB/No Coronary Perfusion -> Conversion to -> Coronary perfusion -> conversion -> CPB

Full: CPB or coronary perfusion was used for the entire procedure.

84. CPB Utilization-Combination Plan:

Format: Numeric, length 1

Valid Values: 1 = Planned; 2 = Unplanned

Category: Operative

Definition/Description: Indicate whether the combination procedure from off-pump to on-pump was a planned or an unplanned conversion.

-Planned: The surgeon intended to treat with any of the combination options described in "CPB utilization".

-Unplanned: The surgeon did not intend to treat with any of the combination options described in "CPB utilization".

85. Internal Mammary Artery Used:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Coronary Bypass

Definition/Description: Indicate whether an internal mammary artery conduit was used.

86. Reason for No IMA:

Format: Numeric, length 1

Valid Values: 2 = Subclavian Stenosis; 3 = Previous cardiac or thoracic surgery; 4 = Previous mediastinal radiation; 5 = Emergent or salvage procedure; 6 = No (bypassable) LAD disease; 7 = Other Not Acceptable STS Provided Exclusion; 8 = Other-Acceptable STS Provided Exclusion

Category: Coronary Bypass

Definition/Description: Indicate the primary reason above that Internal Mammary Artery was not used as documented in the medical record.

87. Valve:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Operative

Definition/Description: Indicate whether a surgical procedure was done on the Aortic, Mitral, Tricuspid or Pulmonic valves.

88. Aortic Valve:

Format: Numeric, length 1

Valid Values: 3 = Yes, planned; 4 = Yes, unplanned due to surgical complication; 5 = Yes, unplanned due to unsuspected disease or anatomy; 2 = No

Category: Operative

Definition/Description: Indicate whether an aortic valve procedure was performed.

89. Aortic Valve Procedure:

Format: Numeric, length 1

Valid Values: 1 = Replacement; 2 = Repair/Reconstruction; 3 = Surgical Prosthetic Valve Intervention (not explant of valve)

Category: Valve Surgery

Definition/Description: Indicate procedure performed on aortic valve.

90. Mitral Valve:

Format: Numeric, length 1

Valid Values: 3 = Yes, planned; 4 = Yes, unplanned due to surgical complication; 5 = Yes, unplanned due to unsuspected disease or anatomy; 2 = No

Category: Operative

Definition/Description: Indicate whether a mitral valve procedure was performed.

91. Mitral Valve Procedure:

Format: Numeric, length 1

Valid Values: 1 = Repair; 2 = Replacement; 3 = Surgical Prosthetic Valve Intervention (Not explant of valve)

Category: Valve Surgery

Definition/Description: Indicate the type of procedure that was performed on the mitral valve.

92. Tricuspid Valve:

Format: Numeric, length 1

Valid Values: 3 = Yes, planned; 4 = Yes, unplanned due to surgical complication; 5 = Yes, unplanned due to unsuspected disease or anatomy; 2 = No

Category: Valve Surgery

Definition/Description: Indicate whether a tricuspid valve procedure was performed.

93. Pulmonic Valve:

Format: Numeric, length 1

Valid Values: 3 = Yes, planned; 4 = Yes, unplanned due to surgical complication; 5 = Yes, unplanned due to unsuspected disease or anatomy; 2 = No

Category: Valve Surgery

Definition/Description: Indicate whether a pulmonic valve procedure was performed.

94. Reoperation for Bleed/ Tampanade:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Postoperative Events

Definition/Description: Indicate whether the patient was reexplored for mediastinal bleeding with or without tamponade either in the ICU or returned to the operating room.

95. Unplanned Coronary Artery:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Postoperative Events

Definition/Description: Indicate if the patient had an unplanned coronary intervention (PCI) or

unplanned surgical intervention on a coronary artery.

96. Unplanned Coronary Artery Vessels:

Format: Numeric, length 1

Valid Values: 1 = Native Coronary; 2 = Graft; 3 = Both

Category: Postoperative Events

Definition/Description: Indicate the type of vessels that required post-operative reintervention.

97. Deep Sternal:

Format: Numeric, length 1

Valid Values: : 3 = Yes, within 30 days of procedure; 4 = Yes, >30 days after procedure but during hospitalization for surgery; 2 = No

Category: Postoperative Events

Definition/Description: Indicate whether a deep sternal wound infection or mediastinitis was diagnosed within 30 days of the OR date or at any time during the initial hospitalization.

98. Neuro – Stroke Permanent:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Postoperative Events

Definition/Description: Indicate whether the patient has a postoperative stroke (i.e., any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that was confirmed on imaging or did not resolve within 24 hours

99. Pulm - Ventilation Prolonged:

Format: Numeric, length 1

Valid Values:1 = Yes; 2 = No

Category: Postoperative Events

Definition/Description: Indicate whether the patient had prolonged post-operative pulmonary ventilation > 24.0 hours.

The hours of postoperative ventilation time include OR exit until extubation, plus any additional hours following reintubation.

100.Renal - Renal Failure:

Format: Numeric, length 1

Valid Values: 1 = Yes; 2 = No

Category: Postoperative Events

Definition/Description: Indicate whether the patient had acute renal failure or worsening renal function resulting in ONE OR BOTH of the following:

- Increase of serum creatinine level 3.0 X greater than baseline, or serum creatinine level >=4.0 mg/dl, Acute rise must be at least 0.5 mg/dl.

A new requirement for dialysis postoperatively.

101.Renal - Dialysis Requirement:

Format: Numeric, length 1

Valid Values:1 = Yes; 2 = No

Category: Postoperative Events

Definition/Description: Indicate whether the patient had a new requirement for dialysis postoperatively, which may include hemodialysis, peritoneal dialysis.

102.Other – A Fib:

Format: Numeric, length 1

Valid Values:1 = Yes; 2 = No

Category: Postoperative Events

Definition/Description: Indicate whether the patient experienced atrial fibrillation/flutter (AF) after OR Exit that a. last longer than one hour, or b. lasts less than one hour but requires medical or procedural intervention. Exclude patients who were in AFib at the start of surgery.

103.Facility Identification Number:

Format: Numeric, length 6

Valid Values: Free Text

Category: Hospitalization

Definition/Description: The six-digit facility identification number assigned by the Office, as defined in Section 97170.