STATE OF CALIFORNIA--OFFICE OF ADMINISTRATIVE LAW

NOTICE PUBLICATION/REGULATIONS SUBMISSION

NONSUBSTANTIVE

(See instructions on reverse)

STD. 400 (REV. 01-2013)

For use by Secretary of State only

OAL FILE NUMBERS	NOTICE FILE NUMBER	REGULATORY ACTION NUMBER	EMERGENCY NUMBER
	Z-	2015-0706-01N	

For use by Office of Administrative Law (OAL) only

2015 JUL -6 PM 1:43
OFFICE OF ADMINISTRATIVE LAW

NOTICE

REGULATIONS

ENDORSED - FILED
in the office of the Secretary of State of the State of California
AUG 17 2015
2:06 PM

AGENCY WITH RULEMAKING AUTHORITY: Office of Statewide Health Planning and Development

AGENCY FILE NUMBER (If any)

A. PUBLICATION OF NOTICE (Complete for publication in Notice Register)

1. SUBJECT OF NOTICE
TITLE(S)
FIRST SECTION AFFECTED
2. REQUESTED PUBLICATION DATE

3. NOTICE TYPE
☐ Notice re Proposed Regulatory Action ☐ Other
4. AGENCY CONTACT PERSON
TELEPHONE NUMBER
FAX NUMBER (Optional)

OAL USE ONLY
ACTION ON PROPOSED NOTICE
☐ Approved as Submitted ☐ Approved as Modified ☐ Disapproved/ Withdrawn
NOTICE REGISTER NUMBER
PUBLICATION DATE

B. SUBMISSION OF REGULATIONS (Complete when submitting regulations)

1a. SUBJECT OF REGULATION(S): OSHPD CCORP Data Elements

1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S)

2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics related)

SECTION(S) AFFECTED (List all section number(s) individually. Attach additional sheet if needed.)

ADOPT

AMEND: 97174

REPEAL

TITLE(S): 22

3. TYPE OF FILING

☐ Regular Rulemaking (Gov. Code §11346)
☐ Resubmittal of disapproved or withdrawn nonemergency filing (Gov. Code §§11349.3, 11349.4)
☐ Emergency (Gov. Code, §11346.1(b))
☐ Certificate of Compliance: The agency officer named below certifies that this agency complied with the provisions of Gov. Code §§11346.2-11347.3 either before the emergency regulation was adopted or within the time period required by statute.
☐ Resubmittal of disapproved or withdrawn emergency filing (Gov. Code, §11346.1)
☐ Emergency Readopt (Gov. Code, §11346.1(h))
☐ File & Print
☐ Other (Specify)
☒ Changes Without Regulatory Effect (Cal. Code Regs., title 1, §100)
☐ Print Only

4. ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §44 and Gov. Code §11347.1)

5. EFFECTIVE DATE OF CHANGES (Gov. Code §§ 11343.4, 11346.1(d); Cal. Code Regs., title 1, §100)
☐ Effective January 1, April 1, July 1, or October 1 (Gov. Code §11343.4(a))
☐ Effective on filing with Secretary of State
☒ §100 Changes Without Regulatory Effect
☐ Effective other (Specify)

6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY
☐ Department of Finance (Form STD. 399) (SAM §6660)
☐ Fair Political Practices Commission
☐ State Fire Marshal
☐ Other (Specify)

per agency request 8/13/15

7. CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER (Optional)	E-MAIL ADDRESS (Optional)
Lisa Ann Christensen (Cook)	(916) 326-~~6867~~ 3867		lisa.cook@oshpd.ca.gov

8. **I certify that the attached copy of the regulation(s) is a true and correct copy of the regulation(s) identified on this form, that the information specified on this form is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification.**

SIGNATURE OF AGENCY HEAD OR DESIGNEE: Ronald Spingarn

DATE: 6/25/15 per agency request 8/13/15

TYPED NAME AND TITLE OF SIGNATORY: RONALD SPINGARN
Deputy Director, Healthcare Information Division, Office of Statewide Health Planning and Development

For use by Office of Administrative Law (OAL) only

ENDORSED APPROVED
AUG 17 2015
Office of Administrative Law

AMENDMENTS TO REGULATIONS

CALIFORNIA CODE OF REGULATIONS
TITLE 22, DIVISION 7, CHAPTER 10 – HEALTH FACILITY DATA

Article 7: CABG Data Reporting Requirements

97174. Required data elements.

(a) For patients discharged on or after July 01, 2014, a hospital shall submit the following data elements for each CABG surgery according to the format, valid value, category and definitions/descriptions listed herein. For all data elements categorized as postoperative events, with the exception of Deep Sternal Infection/Mediastinitis, report only if the postoperative event occurred during the hospitalization for CABG surgery.

(1) Medical Record Number:

(A) Format: Alphanumeric, length 12

(B) Valid Values: Free text

(C) Category: Demographics

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

(2) Isolated Coronary Artery Bypass Graft (CABG):

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Operative

(D) Definition/Description: Answer 'No' if any of the procedures listed in Subsection (a)(2)(D)(i) was performed during coronary artery bypass graft surgery.

(i) When any of the procedures listed in this Subsection is performed concurrently with the coronary artery bypass surgery, the surgery will be considered non-isolated and the data element coded 'No.' It is not possible to list all procedures because cases can be complex and clinical definitions are not always precise. When in doubt, the data abstractor should first seek an opinion from the responsible surgeon and then consult CCORP.

(a) Valve repairs or replacements

(b) Operations on structures adjacent to heart valves (papillary muscle, chordae tendineae, traebeculae carneae cordis, annuloplasty, infundibulectomy)

per agency UM request 8/13/15

(c) 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

(d) Repair of atrial and ventricular septa, excluding closure of patent foramen ovale

(e) Excision of aneurysm of heart

(f) Head and neck, intracranial endarterectomy

(g) Other open heart surgeries, such as aortic arch repair, pulmonary endarterectomy

(h) Endarterectomy of aorta

(i) Thoracic endarterectomy (endarterectomy on an artery outside the heart)

(j) Heart transplantation

(k) 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)

(l) Any aortic aneurysm repair (abdominal or thoracic)

(m) Aorta-subclavian-carotid bypass

(n) Aorta-renal bypass

(o) Aorta-iliac-femoral bypass

(p) Caval-pulmonary artery anastomosis

(q) Extracranial-intracranial (EC-IC) vascular bypass

(r) Coronary artery fistula

(s) 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.

(t) Pleural decortication

(u) Mastectomy for breast cancer (not simple breast biopsy)

(v) Amputation of any part of an extremity (e.g., foot or toe)

(w) Resection of LV aneurysm

(x) VAD as bridge to transplant

(y) Myomectomy

(ii) If a procedure listed in this subsection is performed concurrently with the coronary artery bypass surgery, the surgery will be considered an isolated CABG and the data element coded 'Yes,' unless a procedure listed in Subsection (a)(2)(D)(i) is performed during the same surgery. These particular procedures are listed because the Office has received frequent questions regarding their coding.

(a) Transmyocardial laser revascularization (TMR)

(b) Pericardiectomy and excision of lesions of heart

(c) Repair/restoration of the heart or pericardium

(d) Coronary endarterectomy

(e) Pacemakers

(f) Internal cardiac defibrillators (ICDs)

(g) Fem-fem cardiopulmonary bypass (a form of cardiopulmonary bypass that should not be confused with aortofemoral bypass surgery listed in Subsection (a)(2)(D)(i)

(h) Thymectomy

(i) Thyroidectomy

(j) All Maze procedures

(k) Plication of LV aneurysm

(l) Impella

(3) Date of Surgery:

(A) Format: Numeric, length 8

(B) Valid Values: mmddyyyy

(C) Category: Hospitalization

(D) Definition/Description: Indicate the date of index cardiac surgical procedure. Index cardiac surgical procedure is defined as the initial major cardiac surgical procedure of the hospitalization.

(4) Date of Birth:

(A) Format: Numeric, length 8

(B) Valid Values: mmddyyyy

(C) Category: Demographics

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

(5) Patient Age:

(A) Format: Numeric, length 3

(B) Valid Values: 18 - 110

(C) Category: Demographics

(D) 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:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Male; 2 = Female

(C) Category: Demographics

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

(7) Race Documented:

(A) Format: Numeric, length 1

(B)Valid Values: 1 = Yes; 2 = No; 3 = Patient declined to disclose

(C) Category: Demographics

(D) Definition/Description: Indicate whether the race is documented.

(8) Race - White:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) 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.

(9) Race - Black/African American:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) 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.

(10) Race - Asian:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) 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.

(11) Race - American Indian/Alaskan Native:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) 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.

(12) Race - Native Hawaiian/Pacific Islander:

(A)Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) 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.

(13) Race - Other:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) 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.

(14)Hispanic or Latino or Spanish Ethnicity:

(A) Format: Numeric, length 1

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

(C) Category: Demographics

(D) 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.

(15) Date of Discharge:

(A) Format: Numeric, length 8

(B) Valid Values: mmddyyyy

(C) Category: Hospitalization

(D) 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.

(16)Discharge Status:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Alive; 2 = Dead

(C) Category: Mortality

(D) Definition/Description: Indicate whether the patient was alive or dead AT discharge from the hospitalization in which surgery occurred.

(17) Date of Death:

(A) Format: Numeric, length 8

(B) Valid Values: mmddyyyy

(C) Category: Mortality

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

(18) Responsible Surgeon Name (3 separate fields):

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

(B) Valid Values: Free Text

(C) Category: Operative

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

(19) Responsible Surgeon CA License Number:

(A) Format: Alphanumeric, length 9

(B) Valid Values: Free text

(C) Category: Operative

(D) Definition/Description: California physician license number of responsible surgeon, assigned by the Medical Board of California of the Department of Consumer Affairs.

(20) Height (cm):

(A) Format: Numeric, length 4

(B) Valid Values: 20.0-251.0 cm

(C) Category: Risk Factors

(D) Definition/Description: Indicate height nearest to the date of surgery in centeimeters.

(21) Weight (kg):

(A) Format: Numeric, length 4

(B) Valid Values: 10.0 - 250.0 kg

(C) Category: Risk Factors

(D) Definition/Description: Indicate hweight closest to the date of surgery in kilograms.

(22) Diabetes:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 3=Unknown

(C) Category: Risk Factors

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

(i) A1c >=6.5%;

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

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

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

1. This does not include gestational diabetes.

(23) Diabetes Control:

(A) Format: Numeric, length 1

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

(C) Category: Risk Factors

(D) Definitions/Descriptions: Indicate the patient's control method as presented on admission. Patients placed on a preprocedure 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

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

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

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

(iv) Diet only: Treatment with diet only

(v) None: no treatment for diabetes

(vi) Other: other adjunctive treatment, non-oral/insulin/diet

(vii) Unknown

(24) Dialysis:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 3 = Unknown

(C) Category: Risk Factors

(D) 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.

(25) Hypertension:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 3 = Unknown

(C) Category: Risk Factors

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

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

(ii) 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;

(iii) Currently undergoing pharmacologic therapy for treatment of hypertension.

(26) Endocarditis:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether the patient has a history of endocarditis: Endocarditis must meet at least 1 of the following criteria:

(i) Patient has organisms cultured from valve or vegetation;

(ii) 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:

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

(27) Infectious Endocarditis Type:

(A) Format: Numeric, Length 1

(B) Valid Values: 1 = Treated; 2 = Active

(C) Category: Risk Factors

(D) 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, then the infection is considered treated.

(28) Chronic Lung Disease:

(A) Format: Numeric, length 1

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

(C) Category: Risk Factors

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

(i) No;

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

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

(iv) Severe: FEV1 <50% and/or Room Air pO <60 or pCO2 > 50.

(v) Chronic Lung Disease present, severity not documented

(vi) Unknown

(29) Liver Disease

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 3 = Unknown

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether the patient has a history of hepatitis B, hepatitis C, cirrhosis, portal hypertension, esophageal varices, chronic alcohol abuse or congestive hepatopathy. Exclude NASH in the absence of cirrhosis.

(30) Immunocompromise:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 3 = Unknown

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether immunocompromise is present due to immunosuppressive medication therapy within 30 days preceding the operative procedure or existing medical condition (see training manual). This includes, but is not limited to systemic steroid therapy, anti-rejection medications and chemotherapy. This does not include topical steroid applications, one time systemic therapy, inhaled steroid therapy or preoperative protocol.

(31) Peripheral Arterial Disease:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 3 = Unknown

(C) Category: Risk Factors

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

(i) claudication, either with exertion or at rest;

(ii) amputation for arterial vascular insufficiency;

(iii) vascular reconstruction, bypass surgery, or percutaneous intervention to the extremities (excluding dialysis fistulas and vein stripping);

(iv) documented abdominal aortic aneurysm with or without repair;

(v) positive noninvasive test (e.g., ankle brachial index =< 0.9, ultrasound, magnetic resonance or computed tomography imaging of > 50% diameter stenosis in any peripheral artery, i.e., renal, subclavian, femoral, iliac) or angiographic imaging.

Peripheral arterial disease excludes disease in the carotid or cerebrovascular arteries or thoracic aorta. PVD does not include DVT

(32) Cerebrovascular Disease:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 3 = Unknown

(C) Category: Risk Factors

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

(i) 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.

(ii) 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.

(iii) Noninvasive or invasive arterial imaging test demonstrating >=50% stenosis of any of the major extracranial or intracranial vessels to the brain

(i) Previous cervical or cerebral artery revascularization surgery or percutaneous intervention. This does not include chronic

(nonvascular) neurological diseases or other acute neurological insults such as metabolic and anoxic ischemic encephalopathy.

(33) Prior CVA:

(A) Format: Numeric, length 1

(B) Valid Values:1 = Yes; 2 = No; 3 = Unknown

(C) Category: Risk Factors

(D) 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.

(34) Prior CVA - When:

(A) Format: Numeric, length 1

(B) Valid Values: 3 = <=30 days; 4= >30 days

(C) Category: Risk Factors

(D) 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.

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(35)CVD TIA:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 3 = Unknown

(C) Category: Risk Factors

(D) 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.

(36) CVD Carotid Stenosis:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = None; 2 = Right; 3 = Left; 4 = Both

(C) Category: Risk Factors

(D) Definition/Description: Indicate which carotid artery was determined from any diagnostic test to be >=50% stenotic.

(37) CVD Carotid Stenosis - Right:

(A) Format: Numeric, length 1

(B) Valid Values: 3 = 50% to 79%; 1 = 80% to 99%; 2 = 100%; 4 = Not documented

(C) Category: Risk Factors

(D) Definition/Description: Indicate the severity of stenosis reported on the right carotid artery.

(38) CVD Carotid Stenosis – Left:

(A) Format: Numeric, length 1

(B) Valid Values: 3 = 50% to 79%; 1 = 80% to 99%; 2 = 100%; 4 = Not documented

(C) Category: Risk Factors

(D) Definition/Description: Indicate the severity of stenosis reported on the left carotid artery.

(39) CVD Prior Carotid Surgery:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether the patient has a history of previous carotid artery surgery and/or stenting.

(40) Last Creatinine Level:

(A) Format: Numeric, length 4

(B) Valid Values: 0.10 - 30.00

(C) Category: Risk Factors

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

(41) Total Albumin:

(A) Format: Numeric, length 4

(B) Valid Values: 1.00 - 10.00

(C) Category: Risk Factors

(D) 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).

(42) Total Bilirubin:

(A) Format: Numeric, length 4

(B) Valid Values: 0.10 - 50.00

(C) Category: Risk Factors

(D) 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).

(43) INR:

(A) Format: Numeric, length 4

(B) Valid Values: 0.50 - 30.00

(C) Category: Risk Factors

(D) 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).

(44) Previous CABG:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Previous Cardiac Interventions

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

(45) Previous Valve:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Previous Cardiac Interventions

(D) 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.

(46) Previous PCI:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Previous Cardiac Interventions

(D) 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.

(47) Previous PCI - Interval:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = <=6 Hours; 2 = > 6 Hours

(C) Category: Previous Cardiac Interventions

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

(48) Prior MI:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 3 = Unknown

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate if the patient has had at least one documented previous myocardial infarction at any time prior to this surgery. An acute myocardial infarction is evidenced by any of the following:

(49) MI - When:

(A) Format: Numeric, length 1

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

(C) Category: Preoperative Cardiac Status

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

(50) Heart Failure within 2 weeks:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 3 = Unknown

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate if there is physician documentation or report that the patient has been in a state of heart failure within the past 2 weeks.

(i) Heart failure is defined as physician documentation or report of any of the following clinical symptoms of heart failure described as unusual dyspnea on light exertion, recurrent dyspnea occurring in the supine position, fluid retention; or the description of rales, jugular venous distension, pulmonary edema on physical exam, or pulmonary edema on chest x-ray presumed to be cardiac dysfunction. A low ejection fraction alone, without clinical evidence of heart failure does not qualify as heart failure.

(51) Classification - NYHA:

(A) Format: Numeric, length 1

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

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate the patient's worst dyspnea or functional class, coded as the New York Heart Association (NYHA) classification within the past 2 weeks. This is to be used for heart failure only, is not intended to classify angina.

(i) 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.

(ii) 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).

(iii) 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.

(iv) Class IV: Patient has cardiac disease resulting in inability to perform any physical activity without discomfort. Symptoms may be present even at rest or minimal exertion. If any physical activity is undertaken, discomfort is increased.

(52) Cardiogenic Shock:

(A) Format: Numeric, length 1

(B) 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

(C) Category: Preoperative Cardiac Status

(D) 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. Note: Transient episodes of hypotension reversed with IV fluid or atropine do not constitute cardiogenic shock. The hemodynamic compromise (with or without extraordinary supportive therapy) must persist for at least 30 min.

(53) Resuscitation:

(A) Format: Numeric, length 1

(B) 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

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate whether the patient required cardiopulmonary resuscitation before the start of the operative procedure which includes the institution of anesthetic management. Capture resuscitation timeframe: within 1 hour or 1-24 hours pre-op.

(54) Cardiac Arrhythmia:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 3 = Unknown

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate whether the patient has a history of a cardiac rhythm disturbance before the start of the operative procedure which includes the institution of anesthetic management.

(55) Cardiac Arrhythmia - Vtach/Vfib:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = None; 2 = Remote (more than 30 days prior to procedure); 3 = Recent (within 30 days prior to procedure)

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate whether arrhythmia was VTach or VFib

(56) Cardiac Arrhythmia - Aflutter:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = None; 2 = Remote (more than 30 days prior to procedure); 3 = Recent (within 30 days prior to procedure)

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate whether arrhythmia was atrial flutter.

(57) Cardiac Arrhythmia – Third Degree Heart Block:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = None; 2 = Remote (more than 30 days prior to procedure); 3 = Recent (within 30 days prior to procedure)

(C) Category: Preoperative Cardiac Status

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

(58) Cardiac Arrhythmia – Atrial fibrillation:

(A) Format: Numeric, length 1

(B) Valid Values: 1= None; 2= Paroxysmal; 3= Continuous/persistent

(C) Category: Preoperative Cardiac Status

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

(59) Meds – Coumadin:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No; 4 = Unknown

(C) Category: Preoperative Medications

(D) Definition/Description: Indicate whether the patient received Coumadin within 24 hours preceding surgery.

(60) Warfarin Use (within 5 days):

(A) Format: Numeric, Length 1

(B) Valid Values: 1 = Yes; 2 = No; 4 = Unknown

(C) Category: Preoperative Medications

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

(61) Coronary Anatomy/Disease Known:

(A) Format: Numeric, Length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Hemodynamics / Cath / Echo

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

(62) Number of Diseased Vessels:

(A) Format: Numeric, length 1

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

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate the number of diseased major native coronary vessel systems: LAD system, Circumflex system, and/or Right system with >= 50% narrowing of any vessel preoperatively.

(i) NOTE: Left main disease (>=50%) is counted as TWO vessels (LAD and Circumflex, which may include a Ramus Intermedius). For example, left main and RCA would count as three total. A vessel that has ever been considered diseased should always be considered diseased.

(63) Percent Native Artery Stenosis Known:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate whether the percent stenosis of native coronary stenosis is known.

(64) Percent Stenosis - Left Main:

(A) Format: Numeric, length 3

(B) Valid Values: 0 - 100

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate the highest percent stenosis in this vessel at the time of surgery.

(65) Ejection Fraction Done:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Hemodynamics / Cath / Echo

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

(66) Ejection Fraction (%):

(A) Format: Numeric, length 3

(B) Valid Values: 1.0 - 99.0

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate the percentage of the blood emptied from the left ventricle at the end of the contraction. Use the most recent determination prior to the surgical intervention documented on a diagnostic report.

(i) 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%). Values reported as:

1. Hyperdynamic: > 70%

2. Normal: 50% ~~0~~ -70% (midpoint 60%)

3. Mild dysfunction: 40% - 49% (midpoint 45%)

4. Moderate dysfunction: 30% -39% (midpoint 35%)

5. Severe dysfunction: <30%

a. NOTE: If no diagnostic report is in the medical record, a value documented in the progress record is acceptable.

(67) PA Systolic Pressure Measured:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate whether the PA systolic pressure was measured prior to incision.

(68) PA Systolic Pressure:

(A) Format: Numeric, length 4

(B) Valid Values: 10.0 - 150.0

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Capture the highest PA systolic pressure recorded prior to incision.

(69) Insufficiency - Mitral:

(A) Format: Numeric, length 1

(B) Valid Values: 0 = None; 1 = Trivial/Trace; 2 = Mild; 3 = Moderate; 4 = Severe; 5 = Not documented

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate whether there is evidence of Mitral valve regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

(i) Enter the highest level recorded in the chart. "Moderately severe" should be coded as "Severe".

(70) Incidence:

(A) Format: Numeric, length 1

(B) 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

(C) Category: Operative

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

(i) First surgery;

(ii) First re-op surgery;

(iii) Second re-op surgery;

(iv) Third re-op surgery;

(v) Fourth or more re-op surgery

1. Surgery is defined as cardiothoracic operations (heart or great vessels) surgical procedures performed with or without cardiopulmonary bypass (CPB). Also include lung procedures utilizing CPB or tracheal procedures utilizing CPB. Reoperation increases risk due to the presence of scar tissue and adhesions.

(71) Status:

(A) Format: Numeric, length 1

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

(C) Category: Operative

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

(i) 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.

(ii) 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.

(iii) 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.

per agency UM request 6/13/15

(iv) Emergent Salvage: The patient is undergoing CPR en route to the OR or prior to anesthesia induction or has ongoing ECMO to maintain life.

(72) Urgent Or Emergent Reason:

(A) Format: Numeric, length 2

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(B) Valid Values: 1 = AMI; 2 = Anatomy; 3 = Aortic Aneurysm; 4 = Aortic Dissection; 5 = CHF; 6 = Device Failure; 7 = Diagnostic/Interventional Procedure Complication; 8 = Endocarditis; 9 = Failed Transcatheter Valve Therapy; 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

(C) Category: Operative

(D) Definition/Description: Choose one reason from the list below that best describes why this operation was considered urgent or emergent.

(73) CPB Utilization:

(A) Format: Numeric, length 1
(B) Valid Values: 1 = None; 2 = Combination; 3 = Full

(C) Category: Operative

(D) Definition/Description: Indicate the level of CPB or coronary perfusion used during the procedure:

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

(ii) 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):

1. At start of procedure: No CPB/No Coronary Perfusion -> conversion to -> CPB,

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

3. At start of procedure: No CPB/No Coronary Perfusion -> conversion to -> Coronary perfusion -> conversion to -> CPB.

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

(74) CPB Utilization-Combination Plan:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Planned; 2 = Unplanned

(C) Category: Operative

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

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

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

(75) IMA Artery Used:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Left IMA; 2 = Right IMA; 3 = Both IMAs; 4 = No IMA

(C) Category: Coronary Bypass
(D) Definition/Description: Indicate which, if any, Internal Mammary

Artery(ies) (IMA) were used for grafts

(76) Reason for No IMA:

(A) Format: Numeric, length 1

(B) Valid Values: 2 = Subclavian Stenosis; 3 = Previous cardiac or thoracic surgery; 4 = Previous mediastinal radiation; 5 = Emergent or salvage procedure; 6 = No LAD disease (includes LAD with no bypassable disease); 7 = Other

(C) Category: Coronary Bypass

(D) Definition/Description: Indicate the primary reason Internal Mammary Artery was not used as documented in the medical record:

(77) Valve:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Operative

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

(78) Aortic Valve:

(A) Format: Numeric, length 1

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

(C) Category: Valve Surgery

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

(79) Aortic Valve Procedure:

(A) Format: Numeric, length 2

(B) Valid Values: 1 = Replacement; 2 = Repair/Reconstruction; 3 = Root Reconstruction with valved conduit (Bentall); 13 = Replacement AV and insertion aortic non-valved conduit in supra-coronary position; 14 = Replacement AV and major root reconstruction/debridement with valved conduit; 5 = Resuspension AV without replacement of

ascending aorta; 6 = Resuspension AV with replacement of ascending aorta; 7 = Apico-aortic conduit (Aortic valve bypass); 8 = Autograft with pulmonary valve (Ross procedure); 9 = Homograft root replacement; 10 = Valve sparing root reimplementation (David); 11 = Valve sparing root remodeling (Yacoub); 15 = Valve sparing root reconstruction (Florida Sleeve)

(C) Category: Valve Surgery

(D) Definition/Description: Indicate procedure performed on aortic valve and/or ascending aorta.

(80) Mitral Valve:

(A) Format: Numeric, length 1

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

(C) Category: Valve Surgery

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

(81) Mitral Valve Procedure:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Repair; 2 = Replacement

(C) Category: Valve Surgery

(D) Definition/Description: Indicate the type of procedure that was performed on the mitral valve

(82) Tricuspid Valve:

(A) Format: Numeric, length 1

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

(C) Category: Valve Surgery

(D) Definition/Description: Indicate whether a surgical procedure was done or not done on the Tricuspid Valve.

(83) Tricuspid Procedure:

(A) Format: Numeric, length 1

(B) Valid Values: 2 = Annuloplasty Only; 3 = Replacement; 4 = Reconstruction with Annuloplasty; 5 = Reconstruction without Annuloplasty; 6 = Valvectomy

(C) Category: Valve Surgery

(D) Definition/Description: Indicate procedure done on the Tricuspid Valve.

(84) Pulmonic Valve:

(A) Format: Numeric, length 1

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

(C) Category: Valve Surgery

(D) Definition/Description: Indicate whether a surgical procedure was done or not done on the Pulmonic Valve.

(85) Pulmonic Procedure:

(A) Format: Numeric, length 1

(B) Valid Values: 2 = Replacement; 3 = Reconstruction;

(C) Category: Valve Surgery

(D) Definition/Description: Indicate the type of procedure done on the Pulmonic Valve.

(86) Reoperation for Bleed:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Postoperative Events

(D) 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.

(87) Reintervention - Graft Occlusion:

(A) Format: Numeric, length 1

(B) Valid Values: 3 = Yes, surgical; 4 = Yes, PCI; 2 = No

(C) Category: Postoperative Events

(D) Definition/Description: Indicate whether the patient returned to the operating room or the cath lab for intervention of coronary graft occlusion due to acute closure, thrombosis, technical or embolic origin.

(88) Deep Sternal Infection/Mediastinitis:

(A) Format: Numeric, length 1

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

(C) Category: Postoperative Events

(D) Definition/Description: Indicate whether a Deep Sternal Wound Infection or Mediastinitis occurred within 30 days following the surgery.

(89) Neuro – Stroke Permanent:

(A) Format: Numeric, length 1

(B) Valid Values: 3 = Yes, hemorrhagic; 4 = Yes, embolic; 5 = Yes, undetermined type; 2 = No

(C) Category: Postoperative Events

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

(90) Pulm - Ventilation Prolonged:

(A) Format: Numeric, length 1

(B) Valid Values:1 = Yes; 2 = No

(C) Category: Postoperative Events

(D) Definition/Description: Indicate whether the patient had prolonged pulmonary ventilator > 24 hours. The hours of postoperative ventilation time include OR exit until extubation, plus any additional hours following reintubation. Include (but not limited to) causes such as ARDS, pulmonary edema, and/or any patient requiring mechanical ventilation > 24 hours postoperatively.

(91) Renal - Renal Failure:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Postoperative Events

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

(i) 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.

(ii) A new requirement for dialysis postoperatively.

(92) Renal - Dialysis Requirement:

(A) Format: Numeric, length 1

(B) Valid Values:1 = Yes; 2 = No

(C) Category: Postoperative Events

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

(93) Other – A Fib:

(A) Format: Numeric, length 1

(B) Valid Values:1 = Yes; 2 = No

(C) Category: Postoperative Events

(D) Definition/Description: Indicate whether the patient experienced atrial fibrillation/flutter (AF) requiring treatment. Exclude patients who were in afib at the start of surgery.

(94) Facility Identification Number:

(A) Format: Numeric, length 6

(B)Valid Values: Free Text

(C) Category: Hospitalization

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

(b) If a value for a data element, other than data elements specified in Subsection (b)(1), is unknown or not applicable, a hospital may submit the record without a value for that data element.

(1) A valid value must be submitted for the following data elements: Medical Record Number, Isolated Coronary Artery Bypass Graft (CABG), Date of Surgery, Sex, Date of Discharge, Discharge Status, Responsible Surgeon Name, Responsible Surgeon CA License Number, Dialysis, Previous PCI, Status, Reoperation for Bleed, Reintervention - Graft Occlusion, Deep Sternal Infection/Mediastinitis, Neuro – Stroke Permanent, Pulm - Ventilation Prolonged, Renal - Renal Failure, Renal - Dialysis Requirement, Other - A Fib, and Facility Identification Number.

(c) For patients discharged on or after July 01, 2011 and on or before June 30, 2014, a hospital shall submit the following data elements for each CABG surgery according to the format, valid value, category and definitions/descriptions listed herein. For all data elements categorized as postoperative events, report only if the postoperative event occurred during the hospitalization for CABG surgery.

(1) Medical Record Number:

(A) Format: Alphanumeric, length 12

(B) Valid Values: Free text

(C) Category: Demographics

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

(2) Isolated Coronary Artery Bypass Graft (CABG):

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Operative

(D) Definition/Description: Answer 'No' if any of the procedures listed in Subsection (a)(2)(D)(i) was performed during coronary artery bypass graft surgery.

(i) When any of the procedures listed in this Subsection is performed concurrently with the coronary artery bypass surgery, the surgery will be considered non-isolated and the data element coded 'No.' It is not possible to list all procedures because cases can be complex

and clinical definitions are not always precise. When in doubt, the data abstractor should first seek an opinion from the responsible surgeon and then consult CCORP.

(a) Valve repairs or replacements

(b) Operations on structures adjacent to heart valves (papillary muscle, chordae tendineae, traebeculae carneae cordis, annuloplasty, infundibulectomy)

(c) 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

(d) Repair of atrial and ventricular septa, excluding closure of patent foramen ovale

(e) Excision of aneurysm of heart

(f) Head and neck, intracranial endarterectomy

(g) Other open heart surgeries, such as aortic arch repair, pulmonary endarterectomy

(h) Endarterectomy of aorta

(i) Thoracic endarterectomy (endarterectomy on an artery outside the heart)

(j) Heart transplantation

(k) 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)

(l) Implantation of cardiomyostimulation system (Note: Refers to cardiomyoplasty systems only; not other heart-assist systems such as pacemakers or internal cardiac defibrillators)

(m) Any aortic aneurysm repair (abdominal or thoracic)

(n) Aorta-subclavian-carotid bypass

(o) Aorta-renal bypass

(p) Aorta-iliac-femoral bypass

(q) Caval-pulmonary artery anastomosis

(r) Extracranial-intracranial (EC-IC) vascular bypass

(s) Coronary artery fistula

(t) 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.

(u) Pleural decortication

(v) Mastectomy for breast cancer (not simple breast biopsy)

(w) Amputation of any part of an extremity (e.g., foot or toe)

(ii) If a procedure listed in this subsection is performed concurrently with the coronary artery bypass surgery, the surgery will be considered an isolated CABG and the data element coded 'Yes,' unless a procedure listed in Subsection (a)(2)(D)(i) is performed during the same surgery. These particular procedures are listed because the Office has received frequent questions regarding their coding.

(a) Transmyocardial laser revascularization (TMR)

(b) Pericardiectomy and excision of lesions of heart

(c) Repair/restoration of the heart or pericardium

(d) Coronary endarterectomy

(e) Pacemakers

(f) Internal cardiac defibrillators (ICDs)

(g) Fem-fem cardiopulmonary bypass (a form of cardiopulmonary bypass that should not be confused with aortofemoral bypass surgery listed in Subsection (a)(2)(D)(i)

(h) Thymectomy

(i) Thyroidectomy

(j) All Maze procedures.

(3) Date of Surgery:

(A) Format: Numeric, length 8

(B) Valid Values: mmddyyyy

(C) Category: Hospitalization

(D) Definition/Description: Indicate the date of index cardiac surgical procedure. Index cardiac surgical procedure is defined as the initial major cardiac surgical procedure of the hospitalization.

(4) Date of Birth:

(A) Format: Numeric, length 8

(B) Valid Values: mmddyyyy

(C) Category: Demographics

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

(5) Patient Age:

(A) Format: Numeric, length 3

(B) Valid Values: 18 - 110

(C) Category: Demographics

(D) 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:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Male; 2 = Female

(C) Category: Demographics

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

(7) Race - White:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) Definition/Description: Indicate whether the patient's race, as determined by the patient or family, includes White. This includes a person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

(8) Race - Black/African American:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) Definition/Description: Indicate whether the patient's race, as determined by the patient or family, includes Black / African American. This includes a person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American."

(9) Race - Asian:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) Definition/Description: Indicate whether the patient's race, as determined by the patient or family, includes Asian. This includes 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.

(10) Race - American Indian/Alaskan Native:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) Definition/Description: Indicate whether the patient's race, as determined by the patient or family, includes American Indian / Alaskan Native. This includes 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.

(11) Race - Native Hawaiian/Pacific Islander:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) Definition/Description: Indicate whether the patient's race, as determined by the patient or family, includes Native Hawaiian / Pacific Islander. This includes a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

(12) Race - Other:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) Definition/Description: Indicate whether the patient's race, as determined by the patient or family, includes any other race.

(13) Race - Hispanic or Latino or Spanish Ethnicity:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Demographics

(D) Definition/Description: Indicate if the patient is of Hispanic, Latino or Spanish ethnicity as reported by the patient / family.

(14) Date of Discharge:

(A) Format: Numeric, length 8

(B) Valid Values: mmddyyyy

(C) Category: Hospitalization

(D) 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.

(15) Discharge Status:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Alive; 2 = Dead

(C) Category: Mortality

(D) Definition/Description: Indicate whether the patient was alive or dead AT discharge from the hospitalization in which surgery occurred.

(16) Date of Death:

(A) Format: Numeric, length 8

(B) Valid Values: mmddyyyy

(C) Category: Mortality

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

(17) Responsible Surgeon Name (3 separate fields):

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

(B) Valid Values: Free Text

(C) Category: Operative

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

(18) Responsible Surgeon CA License Number:

(A) Format: Alphanumeric, length 8

(B) Valid Values: Free text

(C) Category: Operative

(D) Definition/Description: California physician license number of responsible surgeon, assigned by the Medical Board of California of the Department of Consumer Affairs.

(19) Weight (kg):

(A) Format: Numeric, length 4

(B) Valid Values: 10.0-250.0 kg

(C) Category: Risk Factors

(D) Definition/Description: Indicate the weight of the patient in kilograms closest to the date of procedure.

(20) Height (cm):

(A) Format: Numeric, length 4

(B) Valid Values: 20.0 - 251.0 cm

(C) Category: Risk Factors

(D) Definition/Description: Indicate the height of the patient in centimeters.

(21) INR:

(A) Format: Numeric, length 3

(B) Valid Values: 0.5 - 30.0

(C) Category: Risk Factors

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

(22) Total Bilirubin:

(A) Format: Numeric, length 3

(B) Valid Values: 0.1 - 50.0

(C) Category: Risk Factors

(D) 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).

(23) Total Albumin:

(A) Format: Numeric, length 3

(B) Valid Values: 1.0 - 10.0

(C) Category: Risk Factors

(D) 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).

(24) Last Creatinine Level:

(A) Format: Numeric, length 3

(B) Valid Values: 0.1 - 30.0

(C) Category: Risk Factors

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

(i) A creatinine level should be collected on all patients, even if they have no prior history. A creatinine value is a high predictor of a patient's outcome and is used in the predicted risk models.

(25) Diabetes:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether patient has a history of diabetes diagnosed and/or treated by a physician. The American Diabetes Association criteria include documentation of the following:

(i) A1c >=6.5%;

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

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

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

1. It does not include gestational diabetes.

(26) Diabetes Control:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = None; 2 = Diet; 3 = Oral; 4 = Insulin; 5 = Other

(C) Category: Risk Factors

(D) Definitions/Descriptions: Indicate the control method the patient presented with on admission. Patients placed on a preprocedure diabetic pathway of insulin drip at admission but were previously controlled by diet or oral method are not coded as insulin treated. Choose the most aggressive therapy used prior to admission.

(27) Dialysis:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether the patient is currently undergoing dialysis.

(28) Hypertension:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether the patient has a diagnosis of hypertension, documented by one of the following:

(i) documented history of hypertension diagnosed and treated with medication, diet and/or exercise;

(ii) 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;

(iii) currently on pharmacologic therapy to control hypertension.

(29) Infectious Endocarditis:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether the patient has a history of infectious endocarditis documented by one of the following:

(i) positive blood cultures;

(ii) vegetation on echocardiography and/or other diagnostic modality;

(iii) documented history of infectious endocarditis

(30) Infectious Endocarditis Type:

(A) Format: Numeric, Length 1

(B) Valid Values: 1 = Treated; 2 = Active

(C) Category: Risk Factors

(D) 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, then the infection is considered treated.

(31) Chronic Lung Disease:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = No; 2 = Mild; 3 = Moderate; 4 = Severe

(C) Category: Risk Factors

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

(i) No;

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

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

(iv) Severe: FEV1 <50% predicted, and/or Room Air pO2 < 60 or Room Air pCO2 > 50.

(32) Liver Disease

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether the patient has a history of hepatitis B, hepatitis C, cirrhosis, portal hypertension, esophageal varices, chronic alcohol abuse or congestive hepatopathy.

(33) Immunocompromise:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether immunocompromise is present due to immunosuppressive medication therapy within 30 days preceding the operative procedure or existing medical condition (see training manual). This includes, but is not limited to systemic steroid therapy, anti-rejection medications and chemotherapy. This does not include topical steroid applications, one time systemic therapy, inhaled steroid therapy or preoperative protocol.

(34) Peripheral Arterial Disease:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

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

(i) claudication, either with exertion or at rest;

(ii) amputation for arterial vascular insufficiency;

(iii) vascular reconstruction, bypass surgery, or percutaneous intervention to the extremities (excluding dialysis fistulas and vein stripping);

(iv) documented aortic aneurysm with or without repair;

(v) positive noninvasive test (e.g., ankle brachial index =< 0.9, ultrasound, magnetic resonance or computed tomography imaging of > 50% diameter stenosis in any peripheral artery, i.e., renal, subclavian, femoral, iliac) or angiographic imaging.

1. Peripheral arterial disease excludes disease in the carotid or cerebrovascular arteries.

(35) Cerebrovascular Disease:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether the patient has Cerebro-Vascular Disease, documented by any one of the following: CVA (symptoms > 24 hrs after onset, presumed to be from vascular etiology); TIA (recovery within 24 hrs); Non-invasive carotid test with > 79% diameter occlusion.; or Prior carotid surgery or stenting or prior cerebral aneurysm clipping or coil. Does not include neurological disease processes such as metabolic and/or anoxic ischemic encephalopathy.

(36) Prior Cerebrovascular Accident:

(A) Format: Numeric, length 1

(B) Valid Values:1 = Yes; 2 = No

(C) Category: Risk Factors

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

(37) Prior Cerebrovascular Accident When:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Recent (<=2 wk.); 2= Remote (>2 wk.)

(C) Category: Risk Factors

(D) Definition/Description: Indicate when the CVA events occurred. Those events occurring within two weeks of the surgical procedure are considered recent, while all others are considered remote.

(38) CVD - TIA:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether the patient has a history of a Transient Ischemic Attack (TIA): Patient has a history of loss of neurological function that was abrupt in onset but with complete return of function within 24 hours.

(39) CVD - Carotid Stenosis:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = None; 2 = Right; 3 = Left; 4 = Both

(C) Category: Risk Factors

(D) Definition/Description: Indicate which carotid artery was determined from any diagnostic test to be more than 79% stenotic.

(40) CVD - Prior Carotid Surgery:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Risk Factors

(D) Definition/Description: Indicate whether the patient has a history of previous carotid artery surgery and/or stenting.

(41) Previous Coronary Artery Bypass Graft

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Previous Cardiac Interventions

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

(42) Previous Valve:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Previous Cardiac Interventions

(D) 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.

(43) Previous PCI:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Previous Cardiac Interventions

(D) Definition/Description: Indicate whether a previous Percutaneous Cardiac Intervention (PCI) was performed any time prior to this surgical procedure. PCI refers to those treatment procedures that unblock narrowed coronary arteries without performing surgery. PCI may include, but is not limited to:

(i) Balloon Catheter Angioplasty, Percutaneous Transluminal Coronary Angioplasty (PTCA);

(ii) Rotational Atherectomy;

(iii) Directional Atherectomy;

(iv) Extraction Atherectomy;

(v) Laser Atherectomy;

(vi) Intracoronary Stent Placement

(44) Previous PCI - Interval:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = <=6 Hours; 2 = > 6 Hours

(C) Category: Previous Cardiac Interventions

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

(45) Prior Myocardial Infarction:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate if the patient has had at least one documented previous myocardial infarction at any time prior to this surgery. An acute myocardial infarction is evidenced by any of the following:

(46) Myocardial Infarction When:

(A) Format: Numeric, length 1

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

(C) Category: Preoperative Cardiac Status

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

(47) Heart Failure within 2 weeks:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate if there is physician documentation or report that the patient has been in a state of heart failure within the past 2 weeks.

(i) Heart failure is defined as physician documentation or report of any of the following clinical symptoms of heart failure described as unusual dyspnea on light exertion, recurrent dyspnea occurring in the supine position, fluid retention; or the description of rales, jugular venous distension, pulmonary edema on physical exam, or pulmonary edema on chest x-ray presumed to be cardiac dysfunction. A low ejection fraction alone, without clinical evidence of heart failure does not qualify as heart failure.

(48) Classification - NYHA:

(A) Format: Numeric, length 1

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

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate the patient's worst dyspnea or functional class, coded as the New York Heart Association (NYHA) classification within the past 2 weeks.

(i) 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, dyspnea, or anginal pain. Limiting symptoms may occur with marked exertion.

(ii) 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, dyspnea, or anginal pain).

(iii) 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, dyspnea, or anginal pain.

(iv) Class IV: Patient has dyspnea at rest that increases with any physical activity. Patient has cardiac disease resulting in inability to perform any physical activity without discomfort. Symptoms may be present even at rest. If any physical activity is undertaken, discomfort is increased.

(49) Cardiogenic Shock:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate whether the patient was, at the time of procedure, in a clinical state of end organ hypoperfusion due to cardiac failure according to the following criteria: persistent hypotension (Systolic BP < 80-90 or mean arterial pressure 30 mmhg lower than baseline) and severe reduction in Cardiac Index (< 1.8 without support or <2.2 with support).

(50) Resuscitation:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate whether the patient required cardiopulmonary resuscitation within one hour before the start of the

operative procedure which includes the institution of anesthetic management.

(51) Arrhythmia When:

(A) Format: Numeric, length 1

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

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate when the patient had a preoperative history of arrhythmia (sustained ventricular tachycardia, ventricular fibrillation, or sudden cardiac death presumed to be lethal arrhythmia, atrial fibrillation, atrial flutter, third degree heart block, second degree heart block, sick sinus syndrome) that has been treated with any of the following modalities:

(i) ablation therapy;

(ii) AICD;

(iii) pacemaker;

(iv) pharmacological treatment;

(v) electrocardioversion;

(vi) defibrillation

(52) Arrhythmia Type - Vtach/Vfib:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate whether sustained ventricular tachycardia or fibrillation was present within thirty days of the procedure.

(53) Arrhythmia Type – 3rd Degree Heart Block:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate whether third degree heart block was present within thirty days of the procedure.

(54) Arrhythmia Type - Afib/Aflutter:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Preoperative Cardiac Status

(D) Definition/Description: Indicate whether atrial fibrillation or flutter was present within thirty days of the procedure.

(55) Meds – Coumadin (within 24 hours):

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Preoperative Medications

(D) Definition/Description: Indicate whether the patient received Coumadin within 24 hours preceding surgery.

(56) Warfarin Use (within 5 days):

(A) Format: Numeric, Length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Preoperative Medications

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

(57) Number of Diseased Coronary Vessels:

(A) Format: Numeric, length 1

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

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate the number of diseased major native coronary vessel systems: LAD system, Circumflex system, and/or Right system with >= 50% narrowing of any vessel preoperatively.

(i) NOTE: Left main disease (>=50%) is counted as TWO vessels (LAD and Circumflex, which may include a Ramus Intermedius). For example, left main and RCA would count as three total..

(58) Left Main Disease:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate whether the patient has Left Main Coronary Disease. Left Main Coronary Disease is present when there is >= 50% compromise of vessel diameter preoperatively.

(59) Ejection Fraction Done:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Hemodynamics / Cath / Echo

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

(60) Ejection Fraction (%):

(A) Format: Numeric, length 3

(B) Valid Values: 1.0 - 99.0

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate the percentage of the blood emptied from the left ventricle at the end of the contraction. Use the most recent determination prior to the surgical intervention documented on a diagnostic report.

(i) 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%). Values reported as:

1. Normal = 60%;

2. Good function = 50%;

3. Mildly reduced = 45%;

4. Fair function = 40%;

5. Moderately reduced = 30%;

6. Poor function = 25%;

7. Severely reduced = 20%.

   a. NOTE: If no diagnostic report is in the medical record, a value documented in the progress record is acceptable.

(61) Ejection Fraction Method:

(A) Format: Numeric, length 1

(B) Valid Values: 2 = LV Gram; 3 = Radionucleotide; 4 = Estimate; 5 = ECHO; 6 = MRI/CT; 9 = Other

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate how the Ejection Fraction measurement information was obtained preoperatively.

(62) PA Systolic Pressure Measured:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate whether the PA systolicpressure was measured prior to incision.

(63) PA Systolic Pressure:

(A) Format: Numeric, length 4

(B) Valid Values: 1.0 - 150.0

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Capture the highest PA systolic pressure recorded prior to incision.

(64) Insufficiency - Mitral:

(A) Format: Numeric, length 1

(B) Valid Values: 0 = None; 1 = Trivial/Trace; 2 = Mild; 3 = Moderate; 4 = Severe

(C) Category: Hemodynamics / Cath / Echo

(D) Definition/Description: Indicate whether there is evidence of Mitral valve regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

(i) Enter the highest level recorded in the chart. "Moderately severe" should be coded as "Severe".

(65) Incidence:

(A) Format: Numeric, length 1

(B) 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

(C) Category: Operative

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

(i) First cardiovascular surgery;

(ii) First re-op cardiovascular surgery;

(iii) Second re-op cardiovascular surgery;

(iv) Third re-op cardiovascular surgery;

(v) Fourth or more re-op cardiovascular surgery

(66) Status:

(A) Format: Numeric, length 1

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

(C) Category: Operative

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

(i) 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.

(ii) 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.

(iii) 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.

(iv) Emergent Salvage: The patient is undergoing CPR en route to the OR or prior to anesthesia induction or has ongoing ECMO to maintain life.

(67) Emergent Reason:

(A) Format: Numeric, length 2

(B) Valid Values: 1 = Shock with Circulatory Support; 2 = Shock without Circulatory Support; 3 = Pulmonary Edema; 4 = AEMI; 5 = Ongoing Ischemia; 6 = Valve Dysfunction; 7 = Aortic Dissection; 8 = Angiographic Accident; 9 = Cardiac Trauma; 10 = Infected Device; 11 = Syncope; 12 = PIC/CABG Hybrid; 13 = Anatomy

(C) Category: Operative

(D) Definition/Description: Indicate the PRIMARY reason why the patient had Emergent Status.

(i) 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.

(68) CPB Utilization:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = None; 2 = Combination; 3 = Full

(C) Category: Operative

(D) Definition/Description: Indicate the level of CPB or coronary perfusion used during the procedure:

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

(ii) 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):

1. At start of procedure: No CPB/No Coronary Perfusion -> conversion to -> CPB,

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

3. At start of procedure: No CPB/No Coronary Perfusion -> conversion to -> Coronary perfusion -> conversion to -> CPB.

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

(69) CPB Utilization-Combination Plan:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Planned; 2 = Unplanned

(C) Category: Operative

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

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

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

(70) Internal Mammary Artery (IMA) Used:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Left IMA; 2 = Right IMA; 3 = Both IMAs; 4 = No IMA

(C) Category: Coronary Bypass

(D) Definition/Description: Indicate which, if any, Internal Mammary Artery(ies) (IMA) were used for grafts

(71) Left Anterior Descending (LAD) Artery Bypassed:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Coronary Bypass

(D) Definition/Description: Indicate whether any part of the Left Anterior Descending artery (Proximal; Mid; Distal; Diagonal) was bypassed for this surgical intervention.

(72) Valve Procedure:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Operative

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

(73) Aortic Valve:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Valve Surgery

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

(74) Aortic Valve Procedure:

(A) Format: Numeric, length 2

(B) Valid Values: 1 = Replacement; 2 = Repair/Reconstruction; 3 = Root Reconstruction with Valved Conduit; 4 = Replacement and Insertion Aortic Non-Valved Conduit; 5 = Resuspension AV without Replacement of Ascending Aorta; 6 = Resuspension with Replacement of Ascending Aorta; 7 = Apico-Aortic Conduit (Aortic Valve Bypass); 8 = Autograft with pulmonary valve – Ross Procedure; 9 = Homograft; 10 = Valve Sparing Root Reimplementation; 11 = Valve Sparing Root Remodeling (Yacoub)

(C) Category: Valve Surgery

(D) Definition/Description: Indicate procedure performed on aortic valve and/or ascending aorta.

(75) Mitral Valve:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Valve Surgery

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

(76) Mitral Valve Procedure:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Repair; 2 = Replacement

(C) Category: Valve Surgery

(D) Definition/Description: Indicate the type of procedure that was performed on the mitral valve

(77) Tricuspid Procedure:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = No; 2 = Annuloplasty Only; 3 = Replacement; 4 = Reconstruction with Annuloplasty; 5 = Reconstruction without Annuloplasty; 6 = Valvectomy

(C) Category: Valve Surgery

(D) Definition/Description: Indicate whether a surgical procedure was done or not done on the Tricuspid Valve.

(78) Pulmonic Procedure:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = No; 2 = Replacement; 3 = Reconstruction; 4 = Valvectomy

(C) Category: Valve Surgery

(D) Definition/Description: Indicate whether a surgical procedure was done or not done on the Pulmonic Valve.

(79) Reoperation for Bleed:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Postoperative Events

(D) 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.

(80) Reintervention - Graft Occlusion:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Postoperative Events

(D) Definition/Description: Indicate whether the patient returned to the operating room or the cath lab for intervention of coronary graft occlusion due to acute closure, thrombosis, technical or embolic origin.

(81) Deep Sternal Infection

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Postoperative Events

(D) Definition/Description: Indicate whether the patient, within 30 days postoperatively, had a deep sternal infection involving muscle, bone, and/or mediastinum REQUIRING OPERATIVE INTERVENTION.

(i) Must have ALL of the following conditions:

1. Wound opened with excision of tissue (I&D) or re-exploration of mediastinum;

2. Positive culture unless patient on antibiotics at time of culture or no culture obtained;

3. Treatment with antibiotics beyond perioperative prophylaxis.

(82) Neuro – Stroke Permanent:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Postoperative Events

(D) 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 did not resolve within 24 hours.

(83) Pulm - Ventilation Prolonged:

(A) Format: Numeric, length 1

(B) Valid Values:1 = Yes; 2 = No

(C) Category: Postoperative Events

(D) Definition/Description: Indicate whether the patient had prolonged pulmonary ventilator > 24 hours.

(i) Include (but not limited to) causes such as ARDS, pulmonary edema, and/or any patient requiring mechanical ventilation > 24 hours postoperatively.

(84) Renal - Renal Failure:

(A) Format: Numeric, length 1

(B) Valid Values: 1 = Yes; 2 = No

(C) Category: Postoperative Events

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

(i) Increase of serum creatinine to >=4.0 or 3X baseline.

(ii) A new requirement for dialysis postoperatively.

(85) Renal - Dialysis Requirement:

(A) Format: Numeric, length 1

(B) Valid Values:1 = Yes; 2 = No

(C) Category: Postoperative Events

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

(86) Other - Atrial Fib:

(A) Format: Numeric, length 1

(B) Valid Values:1 = Yes; 2 = No

(C) Category: Postoperative Events

(D) Definition/Description: Indicate whether the patient had a new onset of atrial fibrillation/flutter (AF) requiring treatment. Does not include recurrence of previously documented AF which had been present preoperatively.

(87) Facility Identification Number:

(A) Format: Numeric, length 6

(B) Valid Values: Free Text

(C) Category: Hospitalization

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

(d) If a value for a data element, other than data elements specified in Subsection (d) (1), is unknown or not applicable, a hospital may submit the record without a value for that data element.

(1) A valid value must be submitted for the following data elements: Medical Record Number, Isolated Coronary Artery Bypass Graft (CABG), Date of Surgery, Sex, Date of Discharge, Discharge Status, Responsible Surgeon Name, Responsible Surgeon CA License Number, Dialysis, Previous PCI, Status, Reoperation for Bleed, Reintervention - Graft Occlusion, Deep Sternal Infection, Neuro – Stroke Permanent, Pulm - Ventilation Prolonged, Renal - Renal Failure, Renal - Dialysis Requirement, Other - Atrial Fib, and Facility Identification Number.

Authority cited: Section 128810, Health and Safety Code
Reference: Section 128745, Health and Safety Code