



Office of Statewide Health
Planning and Development

FORMAT and FILE SPECIFICATIONS

**California Coronary Artery Bypass Graft (CABG)
Outcomes Reporting Program
(CCORP)**

Version 7.0

Released on May 31, 2017

**Effective for DISCHARGES occurring
on or after July 1, 2017**



FORMAT AND FILE SPECIFICATIONS V 7.0
FOR ONLINE TRANSMISSION

CCCORRP

FORMAT AND FILE SPECIFICATIONS V 7.0 FOR ONLINE TRANSMISSION

MINIMUM PC CONFIGURATION

1. Access to a personal computer (with the following minimum configuration)
 - 1 GHz processor, 1GB RAM, 40 GB hard drive (at least 200MB free)
 - High speed Internet connection (preferred)
 - Microsoft Internet Explorer version 9.0 (or higher) with 256K encryption
 - Adobe Acrobat Reader version 7.0 (or higher)
 - Virus Checking Software
 - File Size
2. Internet access (ISP)
3. E-mail

STANDARD RECORD FORMAT

Deviation from the format will not be accepted

- One reporting facility and time period per file
- Standard ASCII character coding
- Record length 219 characters

ADDITIONAL REQUIREMENTS

- The data file *must* be a text file with the extension of ".txt"
- No packed or binary data

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Standard Record Format

Data Element	Start	End	Type	& Size
Medical Record Number	1	12	A/N	(12)
Type of CABG	13	13	N	(1)
Date of Surgery	14	21	N	(8)
Date of Birth	22	29	N	(8)
Patient Age	30	32	N	(3)
Sex	33	33	N	(1)
Race Documented	34	34	N	(1)
Race - White	35	35	N	(1)
Race - Black/African American	36	36	N	(1)
Race - Asian	37	37	N	(1)
Race - American Indian/Alaskan Native	38	38	N	(1)
Race - Native Hawaiian/Pacific Islander	39	39	N	(1)
Race - Other	40	40	N	(1)
Hispanic or Latino or Spanish Ethnicity	41	41	N	(1)
Date of Discharge	42	49	N	(8)
Discharge/Mortality Status	50	50	N	(1)
Mortality Date	51	58	N	(8)
Responsible Surgeon Name:				
Last Name	59	83	A	(25)
First Name	84	103	A	(20)
Middle Initial	104	104	A	(1)
Responsible Surgeon CA License Number	105	113	A/N	(9)
Height (cm)	114	117	N	(4)
Weight (kg)	118	121	N	(4)
Diabetes	122	122	N	(1)
Diabetes Control	123	123	N	(1)
Dialysis	124	124	N	(1)
Hypertension	125	125	N	(1)
Endocarditis	126	126	N	(1)
Infectious Endocarditis Type	127	127	N	(1)
Chronic Lung Disease	128	128	N	(1)
Liver Disease	129	129	N	(1)
Immunocompromise	130	130	N	(1)
Peripheral Arterial Disease (PVD)	131	131	N	(1)
Cerebrovascular Disease	132	132	N	(1)
Prior CVA	133	133	N	(1)
Prior CVA - When	134	134	N	(1)
CVD TIA	135	135	N	(1)
CVD Carotid Stenosis	136	136	N	(1)
CVD Carotid Stenosis – Right	137	137	N	(1)
CVD Carotid Stenosis – Left	138	138	N	(1)
CVD Prior Carotid Surgery	139	139	N	(1)
Last Creatinine Level	140	143	N	(4)
Total Albumin	144	147	N	(4)
Total Bilirubin	148	151	N	(4)
INR	152	155	N	(4)
Previous CABG	156	156	N	(1)
Previous Valve	157	157	N	(1)

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Data Element (cont'd)	Start	End	Type	& Size
Previous PCI	158	158	N	(1)
Previous PCI - Interval	159	159	N	(1)
Prior MI	160	160	N	(1)
MI – When	161	161	N	(1)
Heart Failure	162	162	N	(1)
Heart Failure Timing	163	163	N	(1)
Classification - NYHA	164	164	N	(1)
Cardiogenic Shock	165	165	N	(1)
Resuscitation	166	166	N	(1)
Cardiac Arrhythmia	167	167	N	(1)
Cardiac Arrhythmia – VTach/VFib	168	168	N	(1)
CardiacArrhythmia – AFlutter	169	169	N	(1)
Cardiac Arrhythmia – Third Degree Heart Block	170	170	N	(1)
Cardiac Arrhythmia – Atrial Fibrillation	171	171	N	(1)
Cardiac Arrhythmia – Atrial Fibrillation- Type	172	172	N	(1)
Warfarin Use (within 5 days)	173	173	N	(1)
Coronary Anatomy/Disease Known	174	174	N	(1)
Number of Diseased Vessels	175	175	N	(1)
Percent Native Artery Stenosis Known	176	176	N	(1)
Percent Stenosis – Left Main	177	179	N	(3)
Ejection Fraction Done	180	180	N	(1)
Ejection Fraction (%)	181	183	N	(3)
PA Systolic Pressure Measured	184	184	N	(1)
PA Systolic Pressure	185	188	N	(4)
Insufficiency - Mitral	189	189	N	(1)
Incidence	190	190	N	(1)
Status	191	191	N	(1)
Urgent or Emergent Reason	192	193	N	(2)
CPB Utilization	194	194	N	(1)
CPB Utilization-Combination Plan	195	195	N	(1)
IMA Used	196	196	N	(1)
Reason for No IMA	197	197	N	(1)
Valve	198	198	N	(1)
Aortic Valve	199	199	N	(1)
Aortic Valve Procedure	200	200	N	(1)
Mitral Valve	201	201	N	(1)
Mitral Valve Procedure	202	202	N	(1)
Tricuspid Valve	203	203	N	(1)
Pulmonic Valve	204	204	N	(1)
Reoperation for Bleed	205	205	N	(1)
Reintervention –Myocardial Ischemia	206	206	N	(1)
Reintervention –Myocardial Ischemia –Vessel	207	207	N	(1)
Deep Sternal Infection/ Mediastinitis	208	208	N	(1)
Neuro – Stroke Permanent	209	209	N	(1)
Pulm – Ventilation Prolonged	210	210	N	(1)
Renal – Renal Failure	211	211	N	(1)
Renal – Dialysis Requirement	212	212	N	(1)
Other – A Fib	213	213	N	(1)
Facility Identification Number	214	219	N	(6)

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FOOTNOTES

1. Type & Size indicate data type and length (in parentheses). Data type is defined as:
A = Alpha
N = Numeric
A/N = Alphanumeric

CCCORP

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Data Fields

MEDICAL RECORD NUMBER

Record Position: 1 through 12
Data Length: 12
Data Type: Alphanumeric
Harvest Codes: N/A
Special Instructions: 1. This field *must not* be blank
2. **Duplicate MRNs:** DO NOT submit a 2nd CABG case when 2nd CABG surgery was due to a complication of the initial CABG surgery

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: **85**
Coding Classification: Demographics

TYPE OF CABG

Record Position: 13
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Isolated; 3 = CABG + Valve; 4 = Other Non-Isolated CABG
Special Instructions: 1. This field *must not* be blank

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: N/A; **CCORP-specific variable**
Coding Classification: Operative

DATE OF SURGERY

Record Position: 14 through 21
Data Length: 8
Data Type: Numeric
Harvest Codes: 09 09 9999
Month Day Year
Special Instructions: 1. This field *must not* be blank
2. Single-digit months and days *must* include a preceding zero

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: **310**
Coding Classification: Hospitalization

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DATE OF BIRTH

Record Position: 22 through 29
Data Length: 8
Data Type: Numeric
Harvest Codes: 09 09 9999
Month Day Year

Special Instructions: 1. Single-digit months and days must include a preceding zero
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 65
Coding Classification: Demographics

PATIENT AGE

Record Position: 30 through 32
Data Length: 3
Data Type: Numeric
Harvest Codes: N/A
Special Instructions: **Do not submit CABG for patients <18 yrs old**
Range: 18 – 100; low = 1, high = 110
Parent/Child Relationship: N/A
STS Sequence Number: 70
Coding Classification: Demographics

SEX

Record Position: 33
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Male; 2 = Female
Special Instructions: 1. This field must not be blank
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 75
Coding Classification: Demographics

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RACE DOCUMENTED

Record Position: 34
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Patient declined to disclose
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 150
Coding Classification: Demographics

RACE – WHITE

Record Position: 35
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Race Documented" = 1 (Yes); sequence #150
STS Sequence Number: 155
Coding Classification: Demographics

RACE – BLACK/AFRICAN AMERICAN

Record Position: 36
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Race Documented" = 1 (Yes); sequence #150
STS Sequence Number: 160
Coding Classification: Demographics

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RACE – ASIAN

Record Position: 37
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Race Documented" = 1 (Yes); sequence #150
STS Sequence Number: 165
Coding Classification: Demographics

RACE – AMERICAN INDIAN/ALASKAN NATIVE

Record Position: 38
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Race Documented" = 1 (Yes); sequence #150
STS Sequence Number: 170
Coding Classification: Demographics

RACE – NATIVE HAWAIIAN/PACIFIC ISLANDER

Record Position: 39
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Race Documented" = 1 (Yes); sequence #150
STS Sequence Number: 175
Coding Classification: Demographics

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RACE – OTHER

Record Position: 40
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Race Documented" = 1 (Yes); sequence #150
STS Sequence Number: 180
Coding Classification: Demographics

HISPANIC OR LATINO OR SPANISH ETHNICITY

Record Position: 41
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Not Documented
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 185
Coding Classification: Demographics

DATE OF DISCHARGE

Record Position: 42 through 49
Data Length: 8
Data Type: Numeric
Harvest Codes: 99 99 9999
Month Day Year
Special Instructions: 1. This field *must not* be blank
2. Single-digit months and days *must* include a preceding zero
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 7008
Coding Classification: Discharge / Mortality

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DISCHARGE/ MORTALITY STATUS

Record Position: 50
Data Length: 1
Data Type: Numeric
Harvest Codes: 2 = Died in Hospital;
3 = Discharged alive, last known status alive;
4 = Discharged alive, died after discharge

Special Instructions: 1. This field *must not* be blank
2. 1 = In hospital alive is not valid for CCORP. Only records discharged during report period should be entered in CCORP.

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: **7005**
Coding Classification: Discharge / Mortality

MORTALITY DATE

Record Position: 51 through 58
Data Length: 8
Data Type: Numeric
Harvest Codes: 09 09 9999
Month Day Year

Special Instructions: 1. Single-digit months and days *must* include a preceding zero
Range: N/A
Parent/Child Relationship: Parent is "Discharge/ Mortality Status" = 2 (Died in Hospital); STS sequence #7005
STS Sequence Number: **7121**
Coding Classification: Discharge / Mortality

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RESPONSIBLE SURGEON NAME – LAST

Record Position: 59 through 83
Data Length: 25
Data Type: Alpha
Harvest Codes: N/A

Special Instructions: 1. This field *must not* be blank
2. Do not code titles such as “Junior”, “Jr.”, or “II”
3. Do not use special characters except hyphen (-)

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: N/A; **CCORP-specific variable**
Coding Classification: Operative

RESPONSIBLE SURGEON NAME – FIRST

Record Position: 84 through 103
Data Length: 20
Data Type: Alpha
Harvest Codes: N/A

Special Instructions: 1. This field *must not* be blank

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: N/A; **CCORP-specific variable**
Coding Classification: Operative

RESPONSIBLE SURGEON NAME – MIDDLE INITIAL

Record Position: 104
Data Length: 1
Data Type: Alpha
Harvest Codes: N/A

Special Instructions: 1. *Must be provided* if middle name is noted on license issued from California Medical Board
2. No special characters ex: (.)
3. To verify a middle initial go to:
www.mbc.ca.gov/Breeze/License_Lookup.aspx

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: N/A; **CCORP-specific variable**
Coding Classification: Operative

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RESPONSIBLE SURGEON CA LICENSE NUMBER

Record Position: 105 through 113
Data Length: 9
Data Type: Alphanumeric
Harvest Codes: N/A

Special Instructions: 1. This field *must not* be blank
2. To verify a license go to:
www.mbc.ca.gov/Breeze/License_Lookup.aspx

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: N/A; **CCORP-specific variable**
Coding Classification: Operative

HEIGHT (cm)

Record Position: 114 through 117
Data Length: 4
Data Type: Numeric
Harvest Codes: N/A

Special Instructions: 1. Measured in centimeters
2. Do not code decimal (implied)

Range: 122.0 – 213.0; low = 20.0, high = 251.0

Parent/Child Relationship: N/A
STS Sequence Number: 330
Coding Classification: Risk Factors

WEIGHT (kg)

Record Position: 118 through 121
Data Length: 4
Data Type: Numeric
Harvest Codes: N/A

Special Instructions: 1. Measured in kilograms
2. Do not code decimal (implied)

Range: 30.0 – 181.1; low = 10.0, high = 250.0
Parent/Child Relationship: N/A
STS Sequence Number: 335
Coding Classification: Risk Factors

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DIABETES

Record Position: 122
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 360
Coding Classification: Risk Factors

DIABETES CONTROL

Record Position: 123
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = None;
2 = Diet only;
3 = Oral;
4 = Insulin;
5 = Other;
6 = Other subcutaneous medication;
7 = Unknown
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Diabetes" = 1 (Yes); sequence #360
STS Sequence Number: 365
Coding Classification: Risk Factors

DIALYSIS

Record Position: 124
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown
Special Instructions: 1. This field *must not* be blank
2. If 'Yes', Postop Renal– Dialysis Requirement field must be coded 2 (No)
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 375
Coding Classification: Risk Factors

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HYPERTENSION

Record Position: 125
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 380
Coding Classification: Risk Factors

ENDOCARDITIS

Record Position: 126
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 385
Coding Classification: Risk Factors

INFECTIOUS ENDOCARDITIS TYPE

Record Position: 127
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Treated; 2 = Active
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Endocarditis" = 1 (Yes); sequence #385
STS Sequence Number: 390
Coding Classification: Risk Factors

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CHRONIC LUNG DISEASE

Record Position: 128
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = No;
2 = Mild;
3 = Moderate;
4 = Severe;
5 = Lung disease documented, severity unknown;
6 = Unknown
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 405
Coding Classification: Risk Factors

LIVER DISEASE

Record Position: 129
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 485
Coding Classification: Risk Factors

IMMUNOCOMPROMISE

Record Position: 130
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 490
Coding Classification: Risk Factors

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PERIPHERAL ARTERIAL DISEASE (PVD)

Record Position: 131
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 505
Coding Classification: Risk Factors

CVD

Record Position: 132
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown
Special Instructions: 1. If "2" then ALL CHILD fields *must* be blank.
2. If "1" then **at least one** of the CVD CHILD fields should be coded as 1=Yes: Prior CVA, CVD TIA, CVD Carotid Stenosis, CVD Prior Carotid Surgery.
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 525
Coding Classification: Risk Factors

PRIOR CVA

Record Position: 133
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown
Special Instructions: 1. If "1" then Prior CVA – When *must* be specified
Range: N/A
Parent/Child Relationship: "CVD" = 1 (Yes); sequence #525
STS Sequence Number: 530
Coding Classification: Risk Factors

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PRIOR CVA – WHEN

Record Position: 134
Data Length: 1
Data Type: Numeric
Harvest Codes: 3 = Recent (<= 30 days); 4 = Remote (> 30 days)
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Prior CVA" = 1 (Yes); sequence #530
STS Sequence Number: 535
Coding Classification: Risk Factors

CVD TIA

Record Position: 135
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "CVD" = 1 (Yes); sequence #525
STS Sequence Number: 540
Coding Classification: Risk Factors

CVD CAROTID STENOSIS

Record Position: 136
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = None; 2 = Right; 3 = Left; 4 = Both; 5 = Not Documented

Special Instructions: 1. If "2, 3 or 4", CVD Carotid Stenosis Right and/or Left fields *must* be specified
Range: N/A
Parent/Child Relationship: "CVD" = 1 (Yes); sequence #525
STS Sequence Number: 545
Coding Classification: Risk Factors

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CVD CAROTID STENOSIS – RIGHT

Record Position: 137
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = 80-99%
2 = 100%
3 = 50-79%
4 = Not Documented
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "CVD Carotid Stenosis" = 2 (Right) or 4 (Both); sequence #545
STS Sequence Number: 550
Coding Classification: Risk Factors

CVD CAROTID STENOSIS – LEFT

Record Position: 138
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = 80-99%
2 = 100%
3 = 50-79%
4 = Not Documented
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "CVD Carotid Stenosis" = 3 (Left) or 4 (Both); sequence #545
STS Sequence Number: 555
Coding Classification: Risk Factors

CVD PRIOR CAROTID SURGERY

Record Position: 139
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "CVD" = 1 (Yes); sequence #525
STS Sequence Number: 560
Coding Classification: Risk Factors

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LAST CREATININE LEVEL

Record Position: 140 through 143
Data Length: 4
Data Type: Numeric
Harvest Codes: N/A

Special Instructions: 1. Do not code decimal
2. if Liver disease is present, Creatinine cannot be blank.
Range: 0.10 – 12.00; low = 0.10, high = 30.00
Parent/Child Relationship: N/A
STS Sequence Number: 585
Coding Classification: Risk Factors

TOTAL ALBUMIN

Record Position: 144 through 147
Data Length: 4
Data Type: Numeric
Harvest Codes: N/A

Special Instructions: 1. Do not code decimal (implied)
Range: 3.50 – 5.00; low = 1.00, high = 10.00
Parent/Child Relationship: N/A
STS Sequence Number: 590
Coding Classification: Risk Factors

TOTAL BILIRUBIN

Record Position: 148 through 151
Data Length: 4
Data Type: Numeric
Harvest Codes: N/A

Special Instructions: 1. Do not code decimal (implied)
2. if Liver disease is present, Bilirubin cannot be blank.
Range: 0.20 – 1.30; low = 0.10, high = 50.00
Parent/Child Relationship: N/A
STS Sequence Number: 595
Coding Classification: Risk Factors

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INR

Record Position: 152 through 155
Data Length: 4
Data Type: Numeric
Harvest Codes: N/A

Special Instructions: 1. Do not code decimal (implied)
2. if Liver disease is present, INR cannot be blank.
Range: 0.90 – 1.30; low = 0.50, high = 30.00
Parent/Child Relationship: N/A
STS Sequence Number: 610
Coding Classification: Risk Factors

PREVIOUS CABG

Record Position: 156
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No

Special Instructions: 1. Nulls must be filled with “2” (No)
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 670
Coding Classification: Previous Cardiac Interventions

PREVIOUS VALVE

Record Position: 157
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No

Special Instructions: 1. Nulls must be filled with “2” (No)
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 675
Coding Classification: Previous Cardiac Interventions

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PREVIOUS PCI

Record Position: 158
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No

Special Instructions: 1. This field must not be blank
2. Nulls must be filled with "2" (No)
3. If "1" Previous PCI Interval must be specified

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 775
Coding Classification: Previous Cardiac Interventions

PREVIOUS PCI – INTERVAL

Record Position: 159
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = <= 6 Hours; 2 = > 6 Hours

Special Instructions: 1. If Previous PCI is "2" then this field must be blank

Range: N/A
Parent/Child Relationship: "Previous PCI" = 1 (Yes); sequence #775
STS Sequence Number: 800
Coding Classification: Previous Cardiac Interventions

PRIOR MI

Record Position: 160
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown

Special Instructions: 1. If "1" MI When field must not be blank

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 885
Coding Classification: Preoperative Cardiac Status

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MI – WHEN

Record Position: 161
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = <=6 Hrs
2 = >6 Hrs but <24 Hrs
3 = 1 to 7 Days
4 = 8 to 21 Days
5 = >21 Days
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Prior MI" = 1; sequence #885
STS Sequence Number: **890**
Coding Classification: Preoperative Cardiac Status

HEART FAILURE

Record Position: 162
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown
Special Instructions: If "1" Classification – NYHA field must be specified
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: **911**
Coding Classification: Preoperative Cardiac Status

HEART FAILURE TIMING

Record Position: 163
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Acute; 2 = Chronic; 3 =Both
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Heart Failure" = 1; sequence #911
STS Sequence Number: **912**
Coding Classification: Preoperative Cardiac Status

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CLASSIFICATION – NYHA

Record Position: 164
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Class I
2 = Class II
3 = Class III
4 = Class IV
5 = Not Documented
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Heart Failure" = 1 (Yes); sequence #911
STS Sequence Number: 915
Coding Classification: Preoperative Cardiac Status

CARDIOGENIC SHOCK

Record Position: 165
Data Length: 1
Data Type: Numeric
Harvest Codes: 2 = No
3 = Yes, at the time of procedure
4 = Yes, not at the time of procedure, but within prior 24 hours
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 930
Coding Classification: Preoperative Cardiac Status

RESUSCITATION

Record Position: 166
Data Length: 1
Data Type: Numeric
Harvest Codes: 2 = No
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
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 935
Coding Classification: Preoperative Cardiac Status

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CARDIAC ARRHYTHMIA

Record Position: 167
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 945
Coding Classification: Preoperative Cardiac Status

CARDIAC ARRHYTHMIA – VTACH/VFIB

Record Position: 168
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = None; 2 = Remote; 3 = Recent
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: Parent is “Cardiac Arrhythmia” = 1 (Yes); STS sequence #945
STS Sequence Number: 950
Coding Classification: Preoperative Cardiac Status

CARDIAC ARRHYTHMIA – AFLUTTER

Record Position: 169
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = None; 2 = Remote; 3 = Recent
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: “Cardiac Arrhythmia” = 1 (Yes); sequence #945
STS Sequence Number: 960
Coding Classification: Preoperative Cardiac Status

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CARDIAC ARRHYTHMIA – THIRD DEGREE HEART BLOCK

Record Position: 170
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = None; 2 = Remote; 3 = Recent
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Cardiac Arrhythmia" = 1 (Yes); sequence #945
STS Sequence Number: 970
Coding Classification: Preoperative Cardiac Status

CARDIAC ARRHYTHMIA – ATRIAL FIBRILLATION

Record Position: 171
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = None; 2 = Remote (> 30 days); 3 = Recent (<=30 days)
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Cardiac Arrhythmia" = 1 (Yes); sequence #945
STS Sequence Number: 961
Coding Classification: Preoperative Cardiac Status

CARDIAC ARRHYTHMIA – ATRIAL FIBRILLATION- TYPE

Record Position: 172
Data Length: 1
Data Type: Numeric
Harvest Codes: 2 = Paroxysmal; 4 = Persistent; 5 = Longstanding Persistent;
6 = Permanent
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Cardiac Arrhythmia – Atrial Fibrillation" = 2 or 3; sequence #961
STS Sequence Number: 962
Coding Classification: Preoperative Cardiac Status

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WARFARIN USE (within 5 days)

Record Position: 173
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No; 3 = Unknown
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 1091
Coding Classification: Preoperative Medications

CORONARY ANATOMY/ DISEASE KNOWN

Record Position: 174
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 1155
Coding Classification: Hemodynamics / Cath / Echo

NUMBER OF DISEASED VESSELS

Record Position: 175
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = None
2 = One
3 = Two
4 = Three

Special Instructions: 1. Left main disease ($\geq 50\%$) is counted as Two vessels
(LAD and Circumflex)
Range: N/A
Parent/Child Relationship: "Coronary Anatomy/Disease Known" =1 (Yes); sequence 1155
STS Sequence Number: 1170
Coding Classification: Hemodynamics / Cath / Echo

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PERCENT NATIVE ARTERY STENOSIS KNOWN

Record Position 176
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship "Number Diseased Vessels" = 2 (One), 3 (Two), or 4 (Three);
sequence #1170
STS Sequence Number: 1175
Coding Classification: Hemodynamics / Cath / Echo

PERCENT STENOSIS – LEFT MAIN

Record Position: 177 through 179
Data Length: 3
Data Type: Numeric
Harvest Codes: N/A
Special Instructions: N/A

Range: 0 – 100; low = 0, high = 100
Parent/Child Relationship: "Percent Native Artery Stenosis Known" = 1 (Yes); sequence #1175
STS Sequence Number: 1195
Coding Classification: Hemodynamics / Cath / Echo

EJECTION FRACTION DONE

Record Position: 180
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 1540
Coding Classification: Hemodynamics / Cath / Echo

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EJECTION FRACTION (%)

Record Position: 181 through 183
Data Length: 3
Data Type: Numeric
Harvest Codes: N/A

Special Instructions: 1. Do not code decimal (implied)
Range: 5.0 – 90.0; low = 1.0, high = 99.0
Parent/Child Relationship: "Ejection Fraction Done" = 1 (Yes); sequence #1540
STS Sequence Number: 1545
Coding Classification: Hemodynamics / Cath / Echo

PA SYSTOLIC PRESSURE MEASURED

Record Position: 184
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 1570
Coding Classification: Hemodynamics / Cath / Echo

PA SYSTOLIC PRESSURE

Record Position: 185 through 188
Data Length: 4
Data Type: Numeric
Harvest Codes: N/A

Special Instructions: 1. Do not code decimal (implied)
Range: 15.0 – 40.0; low = 10.0, high = 150.0
Parent/Child Relationship: "PA Systolic Pressure Measured" = 1 (Yes); sequence #1570
STS Sequence Number: 1575
Coding Classification: Hemodynamics / Cath / Echo

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INSUFFICIENCY - MITRAL

Record Position: 189
Data Length: 1
Data Type: Numeric
Harvest Codes: 0 = None
1 = Trivial/Trace
2 = Mild
3 = Moderate
4 = Severe
5 = Not Documented
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 1680
Coding Classification: Hemodynamics / Cath / Echo

INCIDENCE

Record Position: 190
Data Length: 1
Data Type: Numeric
Harvest Codes: 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
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 1970
Coding Classification: Operative

STATUS

Record Position: 191
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Elective
2 = Urgent
3 = Emergent
4 = Emergent Salvage
Special Instructions: 1. This field must not be blank
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 1975
Coding Classification: Operative

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URGENT OR EMERGENT REASON

Record Position:	192 through 193
Data Length:	2
Data Type:	Numeric
Harvest Codes:	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
Special Instructions:	1. If Status is “2” (Urgent) or “3” (Emergent) this field <i>must</i> be specified
Range:	N/A
Parent/Child Relationship:	“Status” = 2 (Urgent) or 3 (Emergent); sequence #1975
STS Sequence Number:	1990
Coding Classification:	Operative

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CPB UTILIZATION

Record Position: 194
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = None
2 = Combination
3 = Full

Special Instructions: 1. If "2" CPB Utilization-Combination Plan must not be blank
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: **2325**
Coding Classification: Operative

CPB UTILIZATION-COMBINATION PLAN

Record Position: 195
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Planned
2 = Unplanned

Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "CPB Utilization" = 2 (Combination); sequence #2325
STS Sequence Number: **32330**
Coding Classification: Operative

IMA USED

Record Position: 196
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes
2 = No

Special Instructions: N/A
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: **2626**
Coding Classification: Coronary Bypass

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REASON FOR NO IMA

Record Position: 197
Data Length: 1
Data Type: Numeric
Harvest Codes: 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
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "IMA Used" = 4 (No IMA); sequence #2655
STS Sequence Number: 2627
Coding Classification: Coronary Bypass

VALVE

Record Position: 198
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Type of CABG" = 2 (CABG + Valve)
STS Sequence Number: 2125
Coding Classification: Operative

AORTIC VALVE

Record Position: 199
Data Length: 1
Data Type: Numeric
Harvest Codes: 2 = No
3 = Yes, planned
4 = Yes, unplanned due to surgical complication
5 = Yes, unplanned due to unsuspected disease or anatomy
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Valve" = 1 (Yes); sequence #2125
STS Sequence Number: 3390
Coding Classification: Valve Surgery

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AORTIC VALVE PROCEDURE

Record Position: 200
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Replacement
2 = Repair/Reconstruction

Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Aortic Valve" = 3 (Yes, planned), 4 (Yes, unplanned due to surgical complication), or 5 (Yes, unplanned due to unsuspected disease or anatomy); sequence #3390

STS Sequence Number: **3395**
Coding Classification: Valve Surgery

MITRAL VALVE

Record Position: 201
Data Length: 1
Data Type: Numeric
Harvest Codes: 2 = No
3 = Yes, planned
4 = Yes, unplanned due to surgical complication
5 = Yes, unplanned due to unsuspected disease or anatomy

Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Valve" = 1 (Yes); sequence #2125

STS Sequence Number: **3495**
Coding Classification: Valve Surgery

MITRAL VALVE PROCEDURE

Record Position: 202
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Repair
2 = Replacement

Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Mitral Valve" = 3 (Yes, planned), 4 (Yes, unplanned due to surgical complication), or 5 (Yes, unplanned due to unsuspected disease or anatomy); sequence #3495

STS Sequence Number: **3500**
Coding Classification: Valve Surgery

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TRICUSPID VALVE

Record Position: 203
Data Length: 1
Data Type: Numeric
Harvest Codes: 2 = No
3 = Yes, planned
4 = Yes, unplanned due to surgical complication
5 = Yes, unplanned due to unsuspected disease or anatomy
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Valve" = 1 (Yes); sequence #2125
STS Sequence Number: 3640
Coding Classification: Valve Surgery

PULMONIC VALVE

Record Position: 204
Data Length: 1
Data Type: Numeric
Harvest Codes: 2 = No
3 = Yes, planned
4 = Yes, unplanned due to surgical complication
5 = Yes, unplanned due to unsuspected disease or anatomy
Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Valve" = 1 (Yes); sequence #2125
STS Sequence Number: 3685
Coding Classification: Valve Surgery

REOPERATION FOR BLEED

Record Position: 205
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No
Special Instructions: 1. This field *must not* be blank
2. Nulls must be filled with "2" (No)
Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 6755
Coding Classification: Postoperative Events

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REINTERVENTION - MYOCARDIAL ISCHEMIA

Record Position: 206
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No

Special Instructions: 1. This field *must not* be blank
2. Nulls must be filled with "2" (No)

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 6771
Coding Classification: Postoperative Events

REINTERVENTION - MYOCARDIAL ISCHEMIA - VESSEL

Record Position: 207
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Native Coronary; 2 = Graft; 3 = Both

Special Instructions: N/A
Range: N/A
Parent/Child Relationship: "Reintervention – Myocardial Ischemia" = 1 (Yes); sequence #6771
STS Sequence Number: 6772
Coding Classification: Postoperative Events

DEEP STERNAL INFECTION/ MEDIASTITIS

Record Position: 208
Data Length: 1
Data Type: Numeric
Harvest Codes: 2 = No
3 = Yes, within 30 days of procedure
4 = Yes, >30 days after procedure, but during hospitalization for surgery

Special Instructions: 1. This field *must not* be blank
2. Nulls must be filled with "2" (No)

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 6700
Coding Classification: Postoperative Events

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NEURO – STROKE PERMANENT

Record Position: 209
Data Length: 1
Data Type: Numeric
Harvest Codes: 2 = No
3 = Yes, hemorrhagic
4 = Yes, ischemic
5 = Yes, undetermined type

Special Instructions: 1. This field *must not* be blank
2. Nulls must be filled with “2” (No)

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 6810
Coding Classification: Postoperative Events

PULM – VENTILATION PROLONGED

Record Position: 210
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No

Special Instructions: 1. This field *must not* be blank
2. Nulls must be filled with “2” (No)

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 6835
Coding Classification: Postoperative Events

RENAL – RENAL FAILURE

Record Position: 211
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No

Special Instructions: 1. This field *must not* be blank
2. Nulls must be filled with “2” (No)

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 6870
Coding Classification: Postoperative Events

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RENAL – DIALYSIS REQUIREMENT

Record Position: 212
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No

Special Instructions: 1. This field must not be blank
2. Nulls must be filled with “2” (No)
3. If DIALYSIS is “1” then this field must be “2” (No)

Range: N/A
Parent/Child Relationship: “Renal – Renal Failure” = 1 (Yes); sequence #6870
STS Sequence Number: 6875
Coding Classification: Postoperative Events

OTHER – A FIB

Record Position: 213
Data Length: 1
Data Type: Numeric
Harvest Codes: 1 = Yes; 2 = No

Special Instructions: 1. This field must not be blank
2. Nulls must be filled with “2” (No)

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: 6930
Coding Classification: Postoperative Events

FACILITY IDENTIFICATION NUMBER

Record Position: 214 through 219
Data Length: 6
Data Type: Numeric
Harvest Codes: N/A

Special Instructions: 1. This field must not be blank
2. *Must* use OSHPD-issued six-digit number

Range: N/A
Parent/Child Relationship: N/A
STS Sequence Number: N/A; **CCORP-specific variable**
Coding Classification: Hospitalization

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Questions about the content of this document can be directed to:

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