STS Adult Cardiac Database Data Specifications

Version 2.73

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Note: - ALL fields defined in these specifications with "Core: Yes" are to be collected by all sites.

- A Data Collection Form must be created for each admission to the hospital.
- Fields indicated with a gray background are no longer being collected.

STS Adult Cardiac Database

Version: 2.73

Long Name: Software Vendor Identifier

Short Name: VendorID

Section Name: Administrative

DBTableName AdultData

Definition: Name (assigned by STS) given to identify software vendor (up to 8 characters). Vendors should use

Definition: Name (assigned by STS) given to identify software vendor (up to 8 characters). Vendors should use standard name identification across sites. Changes to Vendor Name Identification must be approved by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: Automatic

Long Name:Software VersionSeqNo:20Short Name:SoftVrsnCore:YesSection Name:AdministrativeHarvest:Yes

DBTableName AdultData

Definition: Vendor's software product name and version number identifying the software which created this

record. Vendor controls the value in this field. Version passing certification/harvest testing will be

noted at warehouse.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: Automatic

Version: 2.73

Long Name: STS Data Version SeqNo: 30

Short Name: DataVrsn Core: Yes
Section Name: Administrative Harvest: Yes

DBTableName AdultData

Definition: Version number of the STS Data Specifications/Dictionary, to which each record conforms. It will

identify which fields should have data, and what are the valid data for each field. This must be

entered into the record automatically by the software.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: Automatic

Long Name: On-Demand Files Version Number SeqNo: 31

Short Name: OnDemandVrsn Core: Yes Section Name: Administrative Harvest: Yes

DBTableName AdultData

Definition: The version number of the On-Demand lists in use at the time this data record was created or

edited. The value is inserted into the record at the time the record is created or is modified by the

user. The version numbers will be specified by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: Automatic

Long Name: Participant ID SeqNo: 40

Short Name: ParticID Core: Yes Section Name: Administrative Harvest: Yes

DBTableName AdultData

Definition: Participant ID is a unique number assigned to each database participant by the STS. A database

participant is defined as one entity that signs a Participation Agreement with the STS, submits one data file to the harvest, and gets back one report on their data. The participant ID must be entered

into each record.

Each participant's data if submitted to harvest must be in one data file. If one participant keeps their data in more than one file (e.g. at two sites), then the participant must combine them back into one file for harvest submission.

If two or more participants share a single purchased software, and enter cases into one database, then the data must be extracted into two different files, one for each participant ID, with each record having the correct participant ID number.

LowValue: 10000 UsualRangeLow: ACCField: Not mapped

HighValue: 39999 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text - Length exactly 5

ParentShortName: DataLength:

ParentValue: Data Source: User or Automatic

Long Name:Record IDSeqNo:50Short Name:RecordIDCore:YesSection Name:AdministrativeHarvest:Yes

DBTableName AdultData

Definition: An arbitrary, unique value generated by the software that permanently identifies each record in the

participant's database (note that unlike the PatID value, this does not identify the individual patient). The value of the identifier is a combination of a code assigned to the software developer by the STS, and a value generated by the software to create a unique value. Once assigned to a record, this value can never be changed or reused. The data warehouse will use this value to communicate issues about individual records with the participant. It may also be used by the data warehouse to

link this record to other clinical data.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: Automatic

Version: 2.73

Long Name:Cost LinkSeqNo:60Short Name:CostLinkCore:YesSection Name:AdministrativeHarvest:Optional

DBTableName AdultData

Definition: A participant specified alpha-numeric code that can be used to link this record's clinical data with

the participant's cost information for this patient admission. This information may be used in the future to perform procedure cost analysis (for which the actual cost data would have to be harvested separately). The value in this field must not be the patient's Medical Record Number, Social

Security Number or any other patient identifying value.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: STS Trial Link Number SeqNo: 70

Short Name: STSTLink Core: No Section Name: Administrative Harvest: No

DBTableName AdultData

Definition: Enter the number 1 (one) for a patient known to be in an IRB-approved clinical trial at the time of

the surgical procedure.

Enter the number 9 (nine) for a patient known NOT to be in an IRB-approved clinical trial at the

time of the surgical procedure.

Leave blank if it is not known whether or not the patient is enrolled in a clinical trial.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Patient known to be in an IRB-approved clinical trial

9 Patient known not to be in an IRB-approved clinical trial

Version: 2.73

Long Name:Patient IDSeqNo:80Short Name:PatIDCore:YesSection Name:AdministrativeHarvest:Yes

DBTableName AdultData

Definition: An arbitrary value (not a recognizable ID like Social Security Number or Medical Record Number)

that uniquely and permanently identifies each patient. The value of the identifier is a combination of a code assigned to the software developer by the STS, and a value generated by the software to create a unique value. Once assigned to a patient, this can never be changed or reused. If a patient is admitted to the hospital more than once, each record for that patient will have the same value in

this field.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: Automatic

Long Name: Patient Last Name SeqNo: 90

Short Name: PatLName Core: Yes Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the patient's last name documented in the medical record. This field should be collected in

compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

Version: 2.73

Long Name:Patient First NameSeqNo:100Short Name:PatFNameCore:Yes

Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the patient's first name documented in the medical record. This field should be collected in

compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Patient M.I. SeqNo: 110

Short Name: PatMInit Core: No Section Name: Demographics Harvest: No

DBTableName AdultData

Definition: Indicate the patient's middle initial documented in the medical record.

Leave "blank" if no middle name. This field should be collected in compliance with state/local

privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text - Length exactly 1

ParentShortName: DataLength:

Version: 2.73

Long Name: Patient Middle Name SeqNo: 120

Short Name: PatMName Core: Yes Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the patient's middle name as documented in the medical record.

Leave "blank" if no middle name. This field should be collected in compliance with state/local

privacy laws.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Date of Birth SeqNo: 130

Short Name: DOB Core: Yes Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the patient's date of birth using 4-digit format for year. This field should be collected in

compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Date mm/dd/yyyy

ParentShortName: DataLength:

Version: 2.73

Long Name:Patient AgeSeqNo:140Short Name:AgeCore:YesSection Name:DemographicsHarvest:Yes

DBTableName AdultData

Definition: 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). If age is less than 18, the data record will be accepted

into the database, but will not be included in the national analysis and report.

LowValue: 18 UsualRangeLow: 18 ACCField: Not mapped

HighValue: 110 UsualRangeHigh: 100 ReportField: Yes NQFField: No

ModelField: Yes PQRIField: Yes

Parent Long Name: Format: Integer

ParentShortName: DataLength:

ParentValue: Data Source: Calculated

Long Name: Sex SeqNo: 150

Short Name: Gender Core: Yes
Section Name: Demographics Harvest: Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Male
2 Female

Version: 2.73

Long Name: Social Security # SeqNo: 160

Short Name: SSN Core: Yes
Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the nine-digit patient's Social Security Number (SSN). Although this is the Social Security

Number in the USA, other countries may have a different National Patient Identifier Number. For example in Canada, this would be the Social Insurance Number. This field should be collected in

compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Medical Record Number SeqNo: 170

Short Name: MedRecN Core: Yes

Section Name: Demographics Harvest: Optional

DBTableName AdultData

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

should be collected in compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NOFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

Version: 2.73

Long Name: Patient's Street Address SeqNo: 180

Short Name: PatAddr Core: Yes
Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the street address at which the patient resides at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Patient's City SeqNo: 190

Short Name: PatCity Core: Yes
Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the city in which the patient resides at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text

ParentShortName: DataLength:

Version: 2.73

Long Name:Patient's RegionSeqNo:200Short Name:PatRegionCore:YesSection Name:DemographicsHarvest:Yes

DBTableName AdultData

Definition: Indicate the region of the country (i.e., state or province) in which the patient resides at time of

admission.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Patient's ZIP Code SeqNo: 210

Short Name: PatZIP Core: Yes
Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the ZIP Code of the patient's local residence. Outside the USA, this data may be known by

other names such as Postal Code (needing 6 characters). Software should allow sites to collect at

least up to 10 characters to allow for Zip+4 values.

This field should be collected in compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

Version: 2.73

Long Name: Patient's Country SeqNo: 220

Short Name: PatCountry Core: Yes Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the patient's country of residence at time of admission.

List of countries provided by the United Nations, which is the following URL:

United Nations Statistics Division, 15 April 2009

(http://unstats.un.org/unsd/methods/m49/m49alpha.htm)

This field should be collected in compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

- 1 AFGHANISTAN
- 2 ÅLAND ISLAND
- 3 ALBANIA
- 4 ALGERIA
- 5 AMERICAN SAMOA
- 6 ANDORRA
- 7 ANGOLA
- 8 ANGUILLA
- 9 ANTARCTICA
- 10 ANTIGUA AND BARBUDA
- 11 ARGENTINA
- 12 ARMENIA
- 13 ARUBA
- 14 AUSTRALIA
- 15 AUSTRIA
- 16 AZERBAIJAN
- 17 BAHAMAS
- 18 BAHRAIN
- 19 BANGLADESH

- 20 BARBADOS
- 21 BELARUS
- 22 BELGIUM
- 23 BELIZE
- 24 BENIN
- 25 BERMUDA
- 26 BHUTAN
- 27 BOLIVIA (PLURINATIONAL STATE OF)
- 28 BOSNIA AND HERZEGOVINA
- 29 BOTSWANA
- 30 BOUVET ISLAND
- 31 BRAZIL
- 32 BRITISH INDIAN OCEAN TERRITORY
- 33 BRITISH VIRGIN ISLANDS
- 34 BRUNEI DARUSSALAM
- 35 BULGARIA
- 36 BURKINA FASO
- 37 BURUNDI
- 38 CAMBODIA
- 39 CAMEROON
- 40 CANADA
- 41 CAPE VERDE
- 42 CAYMAN ISLANDS
- 43 CENTRAL AFRICAN REPUBLIC
- 44 CHAD
- 45 CHILE
- 46 CHINA
- 47 CHRISTMAS ISLAND
- 48 COCOS (KEELING) ISLANDS
- 49 COLOMBIA
- 50 COMOROS
- 51 CONGO
- 52 COOK ISLANDS
- 53 COSTA RICA

- 54 CÔTE D'IVOIRE
- 55 CROATIA
- 56 CUBA
- 57 CYPRUS
- 58 CZECH REPUBLIC
- 59 DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA
- 60 DEMOCRATIC REPUBLIC OF THE CONGO
- 61 DENMARK
- 62 DJIBOUTI
- 63 DOMINICA
- 64 DOMINICAN REPUBLIC
- 65 EAST TIMOR
- 66 ECUADOR
- 67 EGYPT
- 68 EL SALVADOR
- 69 EQUATORIAL GUINEA
- 70 ERITREA
- 71 ESTONIA
- 72 ETHIOPIA
- 73 FAEROE ISLANDS
- 74 FALKLAND ISLANDS (MALVINAS)
- 75 FIJI
- 76 FINLAND
- 77 FRANCE
- 78 FRANCE, METROPOLITAN
- 79 FRENCH GUIANA
- 80 FRENCH POLYNESIA
- 81 FRENCH SOUTHERN TERRITORIES
- 82 GABON
- 83 GAMBIA
- 84 GEORGIA
- 85 GERMANY
- 86 GHANA
- 87 GIBRALTAR
- 88 GREECE

- 89 GREENLAND
- 90 GRENADA
- 91 GUADELOUPE
- 92 GUAM
- 93 GUATEMALA
- 94 GUERNSE
- 95 GUINEA
- 96 GUINEA-BISSAU
- 97 GUYANA
- 98 HAITI
- 99 HEARD AND MC DONALD ISLANDS
- 100 HOLY SEE
- 101 HONDURAS
- 102 HONG KONG SPECIAL ADMINISTRATIVE REGION OF CHINA
- 103 HUNGARY
- 104 ICELAND
- 105 INDIA
- 106 INDONESIA
- 107 IRAN (ISLAMIC REPUBLIC OF)
- 108 IRAQ
- 109 IRELAND
- 110 ISLE OF MAN
- 111 ISRAEL
- 112 ITALY
- 113 JAMAICA
- 114 JAPAN
- 115 JERSEY
- 116 JORDAN
- 117 KAZAKHSTAN
- 118 KENYA
- 119 KIRIBATI
- 120 KUWAIT
- 121 KYRGYZSTAN
- 122 LAO PEOPLE'S DEMOCRATIC REPUBLIC

- 123 LATVIA
- 124 LEBANON
- 125 LESOTHO
- 126 LIBERIA
- 127 LIBYAN ARAB JAMAHIRIYA
- 128 LIECHTENSTEIN
- 129 LITHUANIA
- 130 LUXEMBOURG
- 131 MACAO SPECIAL ADMINISTRATIVE REGION OF CHINA
- 132 MADAGASCAR
- 133 MALAWI
- 134 MALAYSIA
- 135 MALDIVES
- 136 MALI
- 137 MALTA
- 138 MARSHALL ISLANDS
- 139 MARTINIQUE
- 140 MAURITANIA
- 141 MAURITIUS
- 142 MAYOTTE
- 143 MEXICO
- 144 MICRONESIA (FEDERATED STATES OF)
- 145 MONACO
- 146 MONGOLIA
- 147 MONTENEGRO
- 148 MONTSERRAT
- 149 MOROCCO
- 150 MOZAMBIQUE
- 151 MYANMAR
- 152 NAMIBIA
- 153 NAURU
- 154 NEPAL
- 155 NETHERLANDS
- 156 NETHERLANDS ANTILLES
- 157 NEW CALEDONIA

- 158 NEW ZEALAND
- 159 NICARAGUA
- 160 NIGER
- 161 NIGERIA
- 162 NIUE
- 163 NORFOLK ISLAND
- 164 NORTHERN MARIANA ISLANDS
- 165 NORWAY
- 166 OCCUPIED PALESTINIAN TERRITORY
- 167 OMAN
- 168 PAKISTAN
- 169 PALAU
- 170 PANAMA
- 171 PAPUA NEW GUINEA
- 172 PARAGUAY
- 173 PERU
- 174 PHILIPPINES
- 175 PITCAIRN
- 176 POLAND
- 177 PORTUGAL
- 178 PUERTO RICO
- 179 QATAR
- 180 REPUBLIC OF KOREA
- 181 REPUBLIC OF MOLDOVA
- 182 RÉUNION
- 183 ROMANIA
- 184 RUSSIAN FEDERATION
- 185 RWANDA
- 186 SAINT HELENA
- 187 SAINT KITTS AND NEVIS
- 188 SAINT LUCIA
- 189 SAINT PIERRE AND MIQUELON
- 190 SAINT VINCENT AND THE GRENADINES
- 191 SAINT-BARTHÉLEM
- 192 SAINT-MARTIN (FRENCH

PART)

- 193 SAMOA
- 194 SAN MARINO
- 195 SAO TOME AND PRINCIPE
- 196 SAUDI ARABIA
- 197 SENEGAL
- 198 SERBIA
- 199 SEYCHELLES
- 200 SIERRA LEONE
- 201 SINGAPORE
- 202 SLOVAKIA
- 203 SLOVENIA
- 204 SOLOMON ISLANDS
- 205 SOMALIA
- 206 SOUTH AFRICA
- 207 SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS
- 208 SPAIN
- 209 SRI LANKA
- 210 SUDAN
- 211 SURINAME
- 212 SVALBARD AND JAN MAYEN ISLANDS
- 213 SWAZILAND
- 214 SWEDEN
- 215 SWITZERLAND
- 216 SYRIAN ARAB REPUBLIC
- 217 TAIWAN, PROVINCE OF CHINA
- 218 TAJIKISTAN
- 219 THAILAND
- 220 THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA
- 221 TIMOR-LEST
- 222 TOGO
- 223 TOKELAU
- 224 TONGA
- 225 TRINIDAD AND TOBAGO

- 226 TUNISIA
- 227 TURKEY
- 228 TURKMENISTAN
- 229 TURKS AND CAICOS ISLANDS
- 230 TUVALU
- 231 UGANDA
- 232 UKRAINE
- 233 UNITED ARAB EMIRATES
- 234 UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
- 235 UNITED REPUBLIC OF TANZANIA
- 236 UNITED STATES MINOR OUTLYING ISLANDS
- 237 UNITED STATES OF AMERICA
- 238 UNITED STATES VIRGIN ISLANDS
- 239 URUGUAY
- 240 UZBEKISTAN
- 241 VANUATU
- 242 VENEZUELA (BOLIVARIAN REPUBLIC OF)
- 243 VIET NAM
- 244 WALLIS AND FUTUNA ISLANDS
- 245 WESTERN SAHARA
- 246 YEMEN
- 247 YUGOSLAVIA
- 248 ZAIRE
- 249 ZAMBIA
- 250 ZIMBABWE
- 999 OTHER

Version: 2.73

Long Name: Permanent Address SeqNo: 230

Short Name: PermAddr Core: Yes
Section Name: Demographics Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient considers the given address to be their permanent address.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Patient's Permanent Street Address

SeqNo: 240

Short Name: PatPermAddr Core: Yes

Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the street address at which the patient permanently resides at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Permanent Address Format: Text

ParentShortName: PermAddr DataLength:

ParentValue: = "No" Data Source: User

Long Name: Patient's Permanent Address City SeqNo: 250

Short Name: PatPermCity Core: Yes
Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the city in which the patient permanently resides at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Permanent Address Format: Text

ParentShortName: PermAddr DataLength:

ParentValue: = "No" Data Source: User

Long Name: Patient's Permanent Address Region SeqNo: 260

Short Name: PatPermRegion Core: Yes
Section Name: Demographics Harvest: Yes

DBTableName AdultData

Definition: Indicate the region of the country (i.e., state or province) in which the patient permanently resides at

time of admission.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Permanent Address Format: Text

ParentShortName: PermAddr DataLength:

ParentValue: = "No" Data Source: User

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Long Name: Patient's Permanent Address ZIP Code SeqNo: 270

Short Name: PatPermZIP Core: Yes
Section Name: Demographics Harvest: Optional

DBTableName AdultData

Definition: Indicate the ZIP Code of the patient's permanent residence. Outside the USA, this data may be

known by other names such as Postal Code (needing 6 characters). Software should allow sites to

collect at least up to 10 characters to allow for Zip+4 values.

This field should be collected in compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Permanent Address Format: Text

ParentShortName: PermAddr DataLength:

ParentValue: = "No" Data Source: User

Long Name: Patient's Permanent Address Country SeqNo: 280

Short Name: PatPermCountry Core: Yes Section Name: Demographics Harvest: Yes

DBTableName AdultData

Definition: Indicate the patient's country of permanent residence at time of admission.

List of countries provided by the United Nations, which is the following URL:

United Nations Statistics Division, 15 April 2009

(http://unstats.un.org/unsd/methods/m49/m49alpha.htm).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Permanent Address Format: Text (categorical values

specified by STS)

ParentShortName: PermAddr DataLength:

ParentValue: = "No" Data Source: User

Harvest Codes:

Code: Value:

1 AFGHANISTAN

2 ÅLAND ISLAND

3 ALBANIA

4 ALGERIA

5 AMERICAN SAMOA

- 6 ANDORRA
- 7 ANGOLA
- 8 ANGUILLA
- 9 ANTARCTICA
- 10 ANTIGUA AND BARBUDA
- 11 ARGENTINA
- 12 ARMENIA
- 13 ARUBA
- 14 AUSTRALIA
- 15 AUSTRIA
- 16 AZERBAIJAN
- 17 BAHAMAS
- 18 BAHRAIN
- 19 BANGLADESH
- 20 BARBADOS
- 21 BELARUS
- 22 BELGIUM
- 23 BELIZE
- 24 BENIN
- 25 BERMUDA
- 26 BHUTAN
- 27 BOLIVIA (PLURINATIONAL STATE OF)
- 28 BOSNIA AND HERZEGOVINA
- 29 BOTSWANA
- 30 BOUVET ISLAND
- 31 BRAZIL
- 32 BRITISH INDIAN OCEAN TERRITORY
- 33 BRITISH VIRGIN ISLANDS
- 34 BRUNEI DARUSSALAM
- 35 BULGARIA
- 36 BURKINA FASO
- 37 BURUNDI
- 38 CAMBODIA
- 39 CAMEROON
- 40 CANADA

- 41 CAPE VERDE
- 42 CAYMAN ISLANDS
- 43 CENTRAL AFRICAN REPUBLIC
- 44 CHAD
- 45 CHILE
- 46 CHINA
- 47 CHRISTMAS ISLAND
- 48 COCOS (KEELING) ISLANDS
- 49 COLOMBIA
- 50 COMOROS
- 51 CONGO
- 52 COOK ISLANDS
- 53 COSTA RICA
- 54 CÔTE D'IVOIRE
- 55 CROATIA
- 56 CUBA
- 57 CYPRUS
- 58 CZECH REPUBLIC
- 59 DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA
- 60 DEMOCRATIC REPUBLIC OF THE CONGO
- 61 DENMARK
- 62 DJIBOUTI
- 63 DOMINICA
- 64 DOMINICAN REPUBLIC
- 65 EAST TIMOR
- 66 ECUADOR
- 67 EGYPT
- 68 EL SALVADOR
- 69 EQUATORIAL GUINEA
- 70 ERITREA
- 71 ESTONIA
- 72 ETHIOPIA
- 73 FAEROE ISLANDS
- 74 FALKLAND ISLANDS (MALVINAS)

- 75 FIJI
- 76 FINLAND
- 77 FRANCE
- 78 FRANCE, METROPOLITAN
- 79 FRENCH GUIANA
- 80 FRENCH POLYNESIA
- 81 FRENCH SOUTHERN TERRITORIES
- 82 GABON
- 83 GAMBIA
- 84 GEORGIA
- 85 GERMANY
- 86 GHANA
- 87 GIBRALTAR
- 88 GREECE
- 89 GREENLAND
- 90 GRENADA
- 91 GUADELOUPE
- 92 GUAM
- 93 GUATEMALA
- 94 GUERNSE
- 95 GUINEA
- 96 GUINEA-BISSAU
- 97 GUYANA
- 98 HAITI
- 99 HEARD AND MC DONALD ISLANDS
- 100 HOLY SEE
- 101 HONDURAS
- 102 HONG KONG SPECIAL ADMINISTRATIVE REGION OF CHINA
- 103 HUNGARY
- 104 ICELAND
- 105 INDIA
- 106 INDONESIA
- 107 IRAN (ISLAMIC REPUBLIC OF)
- 108 IRAQ

- 109 IRELAND
- 110 ISLE OF MAN
- 111 ISRAEL
- 112 ITALY
- 113 JAMAICA
- 114 JAPAN
- 115 JERSEY
- 116 JORDAN
- 117 KAZAKHSTAN
- 118 KENYA
- 119 KIRIBATI
- 120 KUWAIT
- 121 KYRGYZSTAN
- 122 LAO PEOPLE'S DEMOCRATIC REPUBLIC
- 123 LATVIA
- 124 LEBANON
- 125 LESOTHO
- 126 LIBERIA
- 127 LIBYAN ARAB JAMAHIRIYA
- 128 LIECHTENSTEIN
- 129 LITHUANIA
- 130 LUXEMBOURG
- 131 MACAO SPECIAL ADMINISTRATIVE REGION OF CHINA
- 132 MADAGASCAR
- 133 MALAWI
- 134 MALAYSIA
- 135 MALDIVES
- 136 MALI
- 137 MALTA
- 138 MARSHALL ISLANDS
- 139 MARTINIQUE
- 140 MAURITANIA
- 141 MAURITIUS
- 142 MAYOTTE
- 143 MEXICO

- 144 MICRONESIA (FEDERATED STATES OF)
- 145 MONACO
- 146 MONGOLIA
- 147 MONTENEGRO
- 148 MONTSERRAT
- 149 MOROCCO
- 150 MOZAMBIQUE
- 151 MYANMAR
- 152 NAMIBIA
- 153 NAURU
- 154 NEPAL
- 155 NETHERLANDS
- 156 NETHERLANDS ANTILLES
- 157 NEW CALEDONIA
- 158 NEW ZEALAND
- 159 NICARAGUA
- 160 NIGER
- 161 NIGERIA
- 162 NIUE
- 163 NORFOLK ISLAND
- 164 NORTHERN MARIANA ISLANDS
- 165 NORWAY
- 166 OCCUPIED PALESTINIAN TERRITORY
- 167 OMAN
- 168 PAKISTAN
- 169 PALAU
- 170 PANAMA
- 171 PAPUA NEW GUINEA
- 172 PARAGUAY
- 173 PERU
- 174 PHILIPPINES
- 175 PITCAIRN
- 176 POLAND
- 177 PORTUGAL
- 178 PUERTO RICO
- 179 QATAR

- 180 REPUBLIC OF KOREA
- 181 REPUBLIC OF MOLDOVA
- 182 RÉUNION
- 183 ROMANIA
- 184 RUSSIAN FEDERATION
- 185 RWANDA
- 186 SAINT HELENA
- 187 SAINT KITTS AND NEVIS
- 188 SAINT LUCIA
- 189 SAINT PIERRE AND MIQUELON
- 190 SAINT VINCENT AND THE GRENADINES
- 191 SAINT-BARTHÉLEM
- 192 SAINT-MARTIN (FRENCH PART)
- 193 SAMOA
- 194 SAN MARINO
- 195 SAO TOME AND PRINCIPE
- 196 SAUDI ARABIA
- 197 SENEGAL
- 198 SERBIA
- 199 SEYCHELLES
- 200 SIERRA LEONE
- 201 SINGAPORE
- 202 SLOVAKIA
- 203 SLOVENIA
- 204 SOLOMON ISLANDS
- 205 SOMALIA
- 206 SOUTH AFRICA
- 207 SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS
- 208 SPAIN
- 209 SRI LANKA
- 210 SUDAN
- 211 SURINAME
- 212 SVALBARD AND JAN MAYEN ISLANDS
- 213 SWAZILAND

- 214 SWEDEN
- 215 SWITZERLAND
- 216 SYRIAN ARAB REPUBLIC
- 217 TAIWAN, PROVINCE OF CHINA
- 218 TAJIKISTAN
- 219 THAILAND
- 220 THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA
- 221 TIMOR-LEST
- 222 TOGO
- 223 TOKELAU
- 224 TONGA
- 225 TRINIDAD AND TOBAGO
- 226 TUNISIA
- 227 TURKEY
- 228 TURKMENISTAN
- 229 TURKS AND CAICOS ISLANDS
- 230 TUVALU
- 231 UGANDA
- 232 UKRAINE
- 233 UNITED ARAB EMIRATES
- 234 UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
- 235 UNITED REPUBLIC OF TANZANIA
- 236 UNITED STATES MINOR OUTLYING ISLANDS
- 237 UNITED STATES OF AMERICA
- 238 UNITED STATES VIRGIN ISLANDS
- 239 URUGUAY
- 240 UZBEKISTAN
- 241 VANUATU
- 242 VENEZUELA (BOLIVARIAN REPUBLIC OF)

243 VIET NAM

244 WALLIS AND FUTUNA

ISLANDS

245 WESTERN SAHARA

246 YEMEN

247 YUGOSLAVIA

248 ZAIRE

249 ZAMBIA

250 ZIMBABWE

999 OTHER

Long Name:Race - WhiteSeqNo:290Short Name:RaceCaucasianCore:YesSection Name:DemographicsHarvest:Yes

DBTableName AdultData

Definition: 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.

Definition source: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity: The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting. (www.whitehouse.gov/omb/fedreg/1997standards.html).

LowValue: UsualRangeLow: ACCField: Mapped - Definition only HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Race - Black / African American SeqNo: 300

Short Name: RaceBlack Core: Yes Section Name: Demographics Harvest: Yes

DBTableName AdultData

Definition: 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."

Definition source: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity: The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting.

(www.whitehouse.gov/omb/fedreg/1997standards.html).

LowValue: UsualRangeLow: ACCField: Mapped - Definition only HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

Yes

2 No

Long Name:Race - AsianSeqNo:310Short Name:RaceAsianCore:YesSection Name:DemographicsHarvest:Yes

DBTableName AdultData

Definition: Ind

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.

Definition source: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity: The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting. (www.whitehouse.gov/omb/fedreg/1997standards.html).

LowValue: UsualRangeLow: ACCField: Mapped - Definition only HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Race - American Indian / Alaskan Native SeqNo: 320

Short Name: RaceNativeAm Core: Yes Section Name: Demographics Harvest: Yes

DBTableName AdultData

Definition: 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.

Definition source: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity: The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting. (www.whitehouse.gov/omb/fedreg/1997standards.html).

LowValue: UsualRangeLow: ACCField: Mapped - Definition only

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Version: 2.73

Long Name: Race - Native Hawaiian / Pacific Islander SeqNo: 330

Short Name: RacNativePacific Core: Yes Section Name: Demographics Harvest: Yes

DBTableName AdultData

Definition: 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.

Definition source: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity: The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting.

(www.whitehouse.gov/omb/fedreg/1997standards.html).

LowValue: UsualRangeLow: ACCField: Mapped - Definition only HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Race - Other

SeqNo: 340

Short Name: RaceOther Core: Yes
Section Name: Demographics Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes any other race.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Hispanic or Latino or Spanish Ethnicity SeqNo: 350

Short Name: Ethnicity Core: Yes
Section Name: Demographics Harvest: Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Referring Card-Cardiologist SeqNo: 360

Short Name: RefCard Core: Yes
Section Name: Demographics Harvest: No

DBTableName AdultData

Definition: Indicate the referring cardiologist's name.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by User)

ParentShortName: DataLength:

Version: 2.73

Long Name: Referring Physician SeqNo: 370

Short Name: RefPhys Core: Yes Section Name: Demographics Harvest: No

DBTableName AdultData

Definition: Indicate the primary referring physician's (PCP) name.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by User)

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name:Hospital NameSeqNo:380Short Name:HospNameCore:YesSection Name:HospitalizationHarvest:Yes

DBTableName AdultData

Definition: Indicate the full name of the facility where the procedure was performed. Values should be full,

official hospital names with no abbreviations or variations in spelling for a single hospital. Values

should also be in mixed-case.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by User)

ParentShortName: DataLength:

Version: 2.73

Long Name: Hospital ZIP Code SeqNo: 390

Short Name: HospZIP Core: Yes
Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate the ZIP Code of the hospital. Outside the USA, these data may be known by other names

such as Postal Code (needing 6 characters).

Software should allow sites to collect up to 10 characters to allow for Zip+4 values.

This field should be collected in compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Hospital Name Format: Text (categorical values

specified by User)

ParentShortName: HospName DataLength:

ParentValue: Is Not Missing Data Source: Lookup

Long Name: Hospital State SeqNo: 400

Short Name: HospStat Core: Yes
Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate the abbreviation of the state or province in which the hospital is located.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Hospital Name Format: Text - Length exactly 2

ParentShortName: HospName DataLength:

ParentValue: Is Not Missing Data Source: Lookup

Version: 2.73

Long Name: Hospital National Provider Identifier SeqNo: 410

Short Name: HospNPI Core: Yes
Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate the hospital's National Provider Identifier (NPI). This number, assigned by the Center for

Medicare and Medicaid Services (CMS), is used to uniquely identify facilities for Medicare billing

purposes.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Hospital Name Format: Text (categorical values

specified by User)

ParentShortName: HospName DataLength:

ParentValue: Is Not Missing Data Source: Lookup

Long Name: Payor - Government Health Insurance SeqNo: 420

Short Name: PayorGov Core: Yes Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate whether government insurance was used by the patient to pay for part or all of this

admission. Government insurance refers to patients who are covered by government-reimbursed care. This includes Medicare, Medicaid, Military Health Care (e.g. TriCare), State-Specific Plan,

and Indian Health Service.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

STS Adult Cardiac Database Version: 2.73

Long Name: Payor - Government Health Insurance - Medicare SeqNo: 430

Short Name:PayorGovMcareCore:YesSection Name:HospitalizationHarvest:Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this

admission included Medicare.

LowValue:UsualRangeLow:ACCField:Mapped - Definition onlyHighValue:UsualRangeHigh:ReportField:NoNQFField:No

ModelField: No PQRIField: No

Parent Long Name: Payor - Government Health For

Insurance

Format: Text (categorical values

specified by STS)

ParentShortName: PayorGov DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Health Insurance Claim Number SeqNo: 440

Short Name: HICNumber Core: Yes
Section Name: Hospitalization Harvest: Optional

DBTableName AdultData

Definition: Indicate the Health Insurance Claim (HIC) number of the primary beneficiary. This is an 11-digit

number that uniquely identifies an individual for a claim. This field should be collected in

compliance with state/local privacy laws.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Payor - Government Health Format: Text - Length exactly 11

Insurance - Medicare

ParentShortName: PayorGovMcare DataLength: 11
ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: Payor - Government Health Insurance - Medicare - Fee For Service SeqNo: 450

Short Name: PayorGovMcareFFS Core: Yes Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate if patient is covered by Medicare Fee for Service.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Payor - Government Health Format: Text (categorical values

Insurance - Medicare specified by STS)

ParentShortName: PayorGovMcare DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Payor - Government Health Insurance - Medicaid SegNo: 460

Short Name: PayorGovMcaid Core: Yes Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this

admission included Medicaid.

LowValue: UsualRangeLow: ACCField: Mapped - Definition only

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Payor - Government Health Format: Text (categorical values

Insurance specified by STS)

ParentShortName: PayorGov DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

l Yes

STS Adult Cardiac Database Version: 2.73

Long Name: Payor - Government Health Insurance - Military Health Care SeqNo: 470

Short Name: PayorGovMil Core: Yes
Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this

admission included Military Health Care.

LowValue: UsualRangeLow: ACCField: Mapped - Definition only HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Payor - Government Health Format:

Insurance

ormat: Text (categorical values

specified by STS)

ParentShortName: PayorGov DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Payor - Government Health Insurance - State-Specific Plan SeqNo: 480

Short Name: PayorGovState Core: Yes
Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this

admission included State-Specific Plan (e.g., MI Health, TennCare, Mass).

LowValue: UsualRangeLow: ACCField: Mapped - Definition only HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Payor - Government Health Format: Text (categorical values

Insurance specified by STS)

ParentShortName: PayorGov DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Long Name: Payor - Government Health Insurance - Indian Health Service SeqNo: 490

Short Name: PayorGovIHS Core: Yes
Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this

admission included Indian Health Service.

LowValue: UsualRangeLow: ACCField: Mapped - Definition only HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Payor - Government Health Format:

Insurance

ormat: Text (categorical values

specified by STS)

ParentShortName: PayorGov DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Payor - Government Health Insurance - Correctional Facility SegNo: 500

Short Name: PayorGovCor Core: Yes
Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this

admission included a state or federal correctional facility.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Payor - Government Health Format: Text (categorical values

Insurance specified by STS)

ParentShortName: PayorGov DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Payor - Commercial Health Insurance SeqNo: 510

Short Name: PayorCom Core: Yes Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate whether commercial insurance was used by the patient to pay for part or all of this

admission. Commercial insurance refers to all indemnity (fee-for-service) carriers and Preferred

Provider Organizations (PPOs), (e.g., Blue Cross and Blue Shield).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Payor - Health Maintenance Organization SeqNo: 520

Short Name: PayorHMO Core: Yes Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a Health Maintenance Organization (HMO) insurance was used by the patient to

pay for part or all of this admission. HMO refers to a Health Maintenance Organization characterized by coverage that provides health care services for members on a pre-paid basis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Version: 2.73

Long Name: Payor - Non-U.S. Insurance SeqNo: 530

Short Name: PayorNonUS Core: Yes Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate whether any non-U.S. insurance was used by the patient to pay for part or all of this

admission.

LowValue:UsualRangeLow:ACCField:Mapped - Definition onlyHighValue:UsualRangeHigh:ReportField:NoNQFField:No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Payor - None / Self SeqNo: 540

Short Name: PayorNS Core: Yes Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate whether no insurance was used by the patient to pay for this admission. None refers to

individuals with no or limited health insurance; thus, the individual is the payor regardless of ability to pay. Only mark "None" when "self" or "none" is denoted as the first insurance in the medical

record.

LowValue: UsualRangeLow: ACCField: Mapped - Definition only HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Arrival Date SeqNo: 550

Short Name: ArrivalDt Core: Yes Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: Indicate the date the patient arrived at your facility.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Date mm/dd/yyyy

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name:Arrival TimeSeqNo:560Short Name:ArrivalTmCore:YesSection Name:HospitalizationHarvest:Yes

DBTableName AdultData

Definition: Indicate the time the patient arrived at your facility.

If the patient came to your facility for an elective or outpatient procedure and the time was not

documented, code the scheduled time of arrival.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PORIField:

Parent Long Name: Format: Time in 24-hour hh:mm format

ParentShortName: DataLength:

ParentValue: Data Source: User

Version: 2.73

Long Name:Date of AdmissionSeqNo:570Short Name:AdmitDtCore:YesSection Name:HospitalizationHarvest:Yes

DBTableName AdultData

Definition: Indicate the Date of Admission. For those patients who originally enter the hospital in an out-

patient capacity (i.e., catheterization), the admit date is the date the patient's status changes to in-

patient.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Date mm/dd/yyyy

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name:Admit SourceSeqNo:580Short Name:AdmitSrcCore:YesSection Name:HospitalizationHarvest:Yes

DBTableName AdultData

Definition: Indicate the source of admission for the patient to your facility.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value:</u> <u>Definition:</u>

1 Elective Admission

2 Emergency Department The patient came to the facility for this episode of care

via the emergency department (excludes transfers from

other facilities).

3 Transfer in from another The patient was transferred from another acute care

acute care facility facility (even if he/she was transferred to the emergency

department) for this episode of care.

4 Other The patient came to the facility for this episode of care

by any other means. This includes transfers from non-

acute care facilities.

Version: 2.73

Other Hospital Performs Cardiac Surgery SeqNo: 590 Long Name:

Short Name: **OthHosCS** Core: Yes Section Name: Hospitalization Harvest: Yes

DBTableName AdultData

Definition: The transferring hospital or medical care facility has the necessary personnel and facilities to have

been able to perform the cardiac surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

> ModelField: PQRIField:

Parent Long Name: Admit Source Text (categorical values Format:

specified by STS)

ParentShortName: AdmitSrc DataLength:

ParentValue: = "Transfer in from another

acute care facility"

Data Source: User

Harvest Codes:

Code: Value: 1 Yes

> 2 No

Long Name: Date of Surgery SeqNo: 610

Short Name: SurgDt Core: Yes Yes Section Name: Hospitalization Harvest:

DBTableName AdultData

Definition: Indicate the date of index cardiac surgical procedure. Index cardiac surgical procedure is defined as

the initial major cardiac surgical procedure of the hospitalization.

UsualRangeLow: LowValue: ACCField: Not mapped

NOFField: No HighValue: UsualRangeHigh: ReportField: Yes

> PQRIField: No ModelField: No

Parent Long Name: Format: Date mm/dd/yyyy

ParentShortName: DataLength:

ParentValue: Data Source: User

Version: 2.73

Long Name:Date of DischargeSeqNo:620Short Name:DischDtCore:YesSection Name:HospitalizationHarvest:Yes

DBTableName AdultData

Definition: 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.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Date mm/dd/yyyy

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Weight (kg) SeqNo: 630

Short Name: WeightKg Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the weight of the patient in kilograms closest to the date of procedure.

LowValue: 10.0 UsualRangeLow: 40.0 ACCField: Mapped - Definition only HighValue: 250.0 UsualRangeHigh: 170.0 ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Version: 2.73

Long Name: Height (cm) SeqNo: 640

Short Name: HeightCm Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the height of the patient in centimeters.

LowValue:20.0UsualRangeLow:122.0ACCField:Mapped - Definition onlyHighValue:251.0UsualRangeHigh:213.0ReportField:YesNQFField:No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Cigarette Smoker SeqNo: 650

Short Name: CigSmoker Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient has smoked cigarettes anytime during the year prior to surgery.

LowValue: UsualRangeLow: ACCField: Mapped - Definition only HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Cigarette Smoker Current SeqNo: 660

Short Name: CigSmokerCurr Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient smoked cigarettes within two weeks prior to procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Cigarette Smoker Format: Text (categorical values

specified by STS)

ParentShortName: CigSmoker DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Other Tobacco Use SeqNo: 661

Short Name: OthTobUse Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Current or previous use of any tobacco product other than cigarettes, including cigars, pipes, and

chewing tobacco.

LowValue: UsualRangeLow: ACCField: Mapped - Definition only

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

Long Name: RF-Family History of Premature CAD SeqNo: 670

Short Name: FHCAD Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient has/had any direct blood relatives (parents, siblings, children) who have had

any of the following DIAGNOSED at age less than 55 years for male relatives or less than 65 years

for female relatives:

1. Coronary Artery Disease (angina, previous CABG or PCI)

2. MI

3. Sudden cardiac death without obvious cause.

If the patient is adopted, or the family history is unavailable, code "No".

LowValue: UsualRangeLow: ACCField: Mapped - Definition and Coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: RF-Last Hematocrit SeqNo: 680

Short Name: Hct Core: Yes

Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the pre-operative Hematocrit level at the date and time closest to surgery but prior to

anesthetic management (induction area or operating room).

LowValue: 1.0 UsualRangeLow: 39.0 ACCField: Not mapped

HighValue: 99.9 UsualRangeHigh: 53.0 ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Version: 2.73

Long Name: RF-Last WBC Count SeqNo: 690

Short Name: WBC Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the pre-operative White Blood Cell (WBC) count closest to the date and time prior to

surgery but prior to anesthetic management (induction area or operating room).

LowValue: 0.1 UsualRangeLow: 4.0 ACCField: Not mapped

HighValue: 99.9 UsualRangeHigh: 15.0 ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name:RF-PlateletsSeqNo:700Short Name:PlateletsCore:YesSection Name:Risk FactorsHarvest:Yes

DBTableName AdultData

Definition: Indicate the platelet count closest to the date and time prior to surgery but prior to anesthetic

management (induction area or operating room).

LowValue: 1000 UsualRangeLow: 150000 ACCField: Not mapped

HighValue: 900000 UsualRangeHigh: 400000 ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Integer

ParentShortName: DataLength:

ParentValue: Data Source: User

Version: 2.73

Long Name:RF-INRSeqNo:710Short Name:INRCore:YesSection Name:Risk FactorsHarvest:Yes

DBTableName AdultData

Definition: 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).

LowValue: 0.5 UsualRangeLow: 0.9 ACCField: Not mapped

HighValue: 30.0 UsualRangeHigh: 1.3 ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name:RF-HIT AntibodiesSeqNo:711Short Name:HITAntiCore:YesSection Name:Risk FactorsHarvest:Yes

DBTableName AdultData

Definition: Indicate whether Heparin Induced Thrombocytopenia (HIT) is confirmed by antibody testing.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

Yes Positive antibody testing
 No Negative antibody testing

3 Not Applicable Antibody testing not performed

Version: 2.73

Long Name: RF-Total Bilirubin SeqNo: 720

Short Name: TotBlrbn Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the total Bilirubin closest to the date and time prior to surgery but prior to anesthetic

management (induction area or operating room).

LowValue: 0.1 UsualRangeLow: 0.2 ACCField: Not mapped

HighValue: 50.0 UsualRangeHigh: 1.3 ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: RF-Total Albumin SeqNo: 730

Short Name: TotAlbumin Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the total albumin closest to the date and time prior to surgery but prior to anesthetic

management (induction area or operating room).

LowValue: 1.0 UsualRangeLow: 3.5 ACCField: Not mapped

HighValue: 10.0 UsualRangeHigh: 5.0 ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Version: 2.73

Long Name: RF-Last A1c Level SeqNo: 740

Short Name: A1cLvl Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the pre-operative HbA1c level closest to the date and time prior surgery but prior to

anesthetic management (induction area or operating room).

LowValue: 1.0 UsualRangeLow: 4.0 ACCField: Not mapped

HighValue: 20.0 UsualRangeHigh: 8.0 ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name:RF-Last Creat LevelSeqNo:750Short Name:CreatLstCore:YesSection Name:Risk FactorsHarvest:Yes

DBTableName AdultData

Definition: Indicate the creatinine level closest to the date and time prior surgery but prior to anesthetic

management (induction area or operating room).

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.

LowValue: 0.1 UsualRangeLow: 0.1 ACCField: Not mapped

HighValue: 30.0 UsualRangeHigh: 9.0 ReportField: Yes NQFField: Yes

ModelField: Yes PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name:RF-DiabetesSeqNo:780Short Name:DiabetesCore:YesSection Name:Risk FactorsHarvest:Yes

DBTableName AdultData

Definition: 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:

- 1. A1c >=6.5%: or
- 2. Fasting plasma glucose >=126 mg/dl (7.0 mmol/l); or
- 3. Two-hour plasma glucose >=200 mg/dl (11.1 mmol/l) during an oral glucose tolerance test; or
- 4. In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis, a random plasma glucose >=200 mg/dl (11.1 mmol/l)

It does not include gestational diabetes.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: RF-Diabetes-Control SeqNo: 790

Short Name: DiabCtrl Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: 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.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: RF-Diabetes Format: Text (categorical values

specified by STS)

ParentShortName: Diabetes DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

1 None No treatment for diabetes.

2 Diet Diet treatment only.

3 Oral Oral agent treatment (includes oral agent with/without

diet treatment).

4 Insulin Insulin treatment (includes any combination with

insulin).

5 Other Other adjunctive therapy

Version: 2.73

Long Name: RF-Dyslipidemia SeqNo: 800

Short Name: Dyslip Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Current or previous diagnosis of dyslipidemia per the National Cholesterol Education Program

criteria, defined as any 1 of the following:

- Total cholesterol greater than 200 mg/dl (5.18 mmol/l)

- Low-density lipoprotein (LDL) greater than or equal to 130 mg/dl (3.37 mmol/l)

- High-density lipoprotein (HDL) less than 40 mg/dl (1.04 mmol/l) in men and less than 50 mg/dl

(1.30 mmol/l) in women

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: RF-Renal Fail-Dialysis SegNo: 810

Short Name: Dialysis Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient is currently undergoing dialysis.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: RF-MELD Score SeqNo: 815

Short Name: MELDScr Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: MELD score value calculated by software to indicate liver disease.

LowValue: -50.0 UsualRangeLow: ACCField: Not mapped

HighValue: 150.0 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: Calculated

Long Name: RF-Hypertension SeqNo: 820

Short Name: Hypertn Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient has a diagnosis of hypertension, documented by one of the following:

a. Documented history of hypertension diagnosed and treated with medication, diet and/or exercise

b. 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

c. Currently on pharmacologic therapy to control hypertension.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Long Name: RF-Infect Endocard SeqNo: 830

Short Name: InfEndo Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of infectious endocarditis documented by one of the

following:

1. positive blood cultures

2. vegetation on echocardiography and/or other diagnostic modality

3. documented history of infectious endocarditis

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: RF-Infect Endocard Type SegNo: 840

Short Name: InfEndTy Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: 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.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: RF-Infect Endocard Format: Text (categorical values

specified by STS)

ParentShortName: InfEndo DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Treated

2 Active

Long Name: RF-Infect Endocard Culture SeqNo: 850

Short Name: InfEndCult Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate culture results.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: RF-Infect Endocard Format: Text (categorical values

specified by STS)

ParentShortName: InfEndo DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Culture negative

2 Staphylococcus aureus

3 Streptococcus species

4 Coagulase negative staphylococcus

5 Enterococcus species

6 Fungal

7 Other

Version: 2.73

Long Name: RF-Chronic Lung Dis SeqNo: 860

Short Name: ChrLungD Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

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

following classification:

No:

Mild: FEV1 60% to 75% of predicted, and/or on chronic inhaled or oral bronchodilator therapy. Moderate: FEV1 50% to 59% of predicted, and/or on chronic steroid therapy aimed at lung disease.

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Mild

3 Moderate

4 Severe

Long Name: RF-Pulmonary Function Test SegNo: 880

Short Name: PFT Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether pulmonary function tests were performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: RF-Forced Expiratory Volume Predicted SeqNo: 890

Short Name: FEV1 Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the FEV1 % predicted from the most recent pulmonary function test prior to procedure.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 100 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: RF-Pulmonary Function Test Format: Integer

ParentShortName: PFT DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: DLCO Test Performed SeqNo: 892

Short Name: DLCO Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a lung diffusion test (DLCO) was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: RF-Pulmonary Function Test Format: Text (categorical values

specified by STS)

ParentShortName: PFT DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

Version: 2.73

Long Name: DLCO Predicted SeqNo: 893

Short Name: DLCOPred Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the % predicted DLCO value obtained for the patient.

LowValue: 10 UsualRangeLow: ACCField: Not mapped

HighValue: 150 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: DLCO Test Performed Format: Integer

ParentShortName: DLCO DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: RF-Arterial Blood Gas SeqNo: 900

Short Name: ABG Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a room-air arterial blood gas was performed prior to surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Version: 2.73

Long Name: RF-Oxygen Level SeqNo: 910

Short Name: PO2 Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate PO2 result on most recent room air arterial blood gas prior to procedure.

LowValue: 40.0 UsualRangeLow: ACCField: Not mapped

HighValue: 500.0 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: RF-Arterial Blood Gas Format: Real

ParentShortName: ABG DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: RF-Carbon Dioxide Level SeqNo: 920

Short Name: PCO2 Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate PCO2 on most recent room air blood gas prior to procedure.

LowValue: 20.0 UsualRangeLow: ACCField: Not mapped

HighValue: 90.0 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: RF-Arterial Blood Gas Format: Real

ParentShortName: ABG DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: RF-Home Oxygen SeqNo: 930

Short Name: HmO2 Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient uses supplemental oxygen at home.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: RF-Inhaled Medication or Oral Bronchodilator Therapy SeqNo: 940

Short Name: BDTx Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether oral and/or inhaled bronchodilator or inhaled (not oral or IV) steroid medications

were in use by the patient routinely prior to this procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Version: 2.73

SeqNo: 950 Long Name: RF-Sleep Apnea

Short Name: SlpApn Core: Yes Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient has a diagnosis of sleep apnea and uses BiPAP (Bilevel Positive Airway

Pressure) therapy.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: Text (categorical values Format:

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value: 1 Yes 2 No

960 Long Name: RF-Liver Disease SeqNo:

LiverDis Core: Short Name: Yes Harvest: Yes

Section Name: Risk Factors

DBTableName AdultData

Indicate whether the patient has a history of hepatitis B, hepatitis C, cirrhosis, portal hypertension, Definition:

esophageal varices, chronic alcohol abuse or congestive hepatopathy.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

Data Source: User ParentValue:

Harvest Codes:

Code: Value:

Yes

Long Name: RF-Immunocompromise SeqNo: 970

Short Name: ImmSupp Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: 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.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: RF-Peripheral Arterial Disease SeqNo: 980

Short Name: PVD Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: 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:

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

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

Long Name: RF-Coma SeqNo: 990

Short Name: CVDComa Core: No
Section Name: Risk Factors Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient has a history of Unresponsive Coma greater than 24 hours: Patient

experienced complete mental unresponsiveness and no evidence of psychological or physiologically

appropriate responses to stimulation.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: RF-Cerebrovascular Dis Format: Text (categorical values

specified by STS)

ParentShortName: CVD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: RF-Unresponsive Neurologic State SeqNo: 1000

Short Name: UnrespStat Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of non-medically induced, unresponsive state within 24

hours of the time of surgery. Patient experienced complete mental unresponsiveness and no evidence of psychological or physiologically appropriate responses to stimulation, includes patients

who experience sudden cardiac death.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name:RF-SyncopeSeqNo:1001Short Name:SyncopeCore:YesSection Name:Risk FactorsHarvest:Yes

DBTableName AdultData

Definition: Indicate whether the patient had a sudden loss of consciousness with loss of postural tone, not

related to anesthesia, with spontaneous recovery and believed to be related to cardiac condition. Capture events occurring within the past one year as reported by patient or observer. Patient may

experience syncope when supine.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: RF-Cerebrovascular Dis SeqNo: 1010

Short Name: CVD Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: 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.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: RF-Prior CVA SeqNo: 1020

Short Name: CVA Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: 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.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: RF-Cerebrovascular Dis Format: Text (categorical values

specified by STS)

ParentShortName: CVD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: RF-Prior CVA-When SeqNo: 1030

Short Name: CVAWhen Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: 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.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: RF-Prior CVA Format: Text (categorical values

specified by STS)

ParentShortName: CVA DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Recent (<=2 wk.)

2 Remote (>2 wk.)

Long Name: RF-CVD RIND SeqNo: 1040

Short Name: CVDRIND Core: No Section Name: Risk Factors Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient has a history of a Reversible Ischemic Neurologic Deficit (RIND):

Patient has a history of loss of neurological function with symptoms at least 24 hours after onset but

with complete return of function within 72 hours.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: RF-Cerebrovascular Dis Format: Text (categorical values

specified by STS)

ParentShortName: CVD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: RF-CVD TIA SeqNo: 1050 Short Name: CVDTIA Core: Yes

Section Name: Risk Factors

Harvest: Yes

DBTableName AdultData

Definition: 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.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: RF-Cerebrovascular Dis Format: Text (categorical values

specified by STS)

ParentShortName: CVD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: RF-CVD NonInvas >75% SeqNo: 1060

Short Name: CVDNInvas Core: No Section Name: Risk Factors Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient has a history of a Non-invasive/invasive carotid test with greater than

75% occlusion.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: RF-Cerebrovascular Dis Format: Text (categorical values

specified by STS)

ParentShortName: CVD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: RF-CVD Carotid Stenosis SeqNo: 1070

Short Name: CVDCarSten Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: RF-Cerebrovascular Dis Format: Text (categorical values

specified by STS)

ParentShortName: CVD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Right

3 Left

4 Both

Long Name: RF-CVD Carotid Stenosis - Right SeqNo: 1071

Short Name: CVDStenRt Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the severity of stenosis reported on the right carotid artery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: RF-CVD Carotid Stenosis Format: Text (categorical values

specified by STS)

ParentShortName: CVDCarSten DataLength:

ParentValue: = "Right" or "Both" Data Source: User

Harvest Codes:

Code: Value:

1 80% to 99%

2 100 %

Long Name: RF-CVD Carotid Stenosis - Left SeqNo: 1072

Short Name: CVDStenLft Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the severity of stenosis reported on the left carotid artery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: RF-CVD Carotid Stenosis Format: Text (categorical values

specified by STS)

ParentShortName: CVDCarSten DataLength:

ParentValue: = "Left" or "Both" Data Source: User

Harvest Codes:

Code: Value:

1 80% to 99%

2 100%

Version: 2.73

Version: 2.73

Long Name: RF-CVD Prior Carotid Surgery SeqNo: 1080

Short Name: CVDPCarSurg Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: RF-Cerebrovascular Dis Format: Text (categorical values

specified by STS)

ParentShortName: CVD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: RF-Illicit Drug Use SeqNo: 1130

Short Name: IVDrugAb Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient has a history of illicit drug use such as heroin, marijuana, cocaine, or meth,

regardless of route of administration. Do not include rare historical use.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: RF-Alcohol Use SeqNo: 1131

Short Name: Alcohol Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Specify alcohol consumption history.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 <= 1 drink/week

2 2-7 drinks/week

3 >= 8 drinks/week

Long Name: RF-Pneumonia SeqNo: 1140

Short Name: Pneumonia Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient has a recent or remote history of pneumonia.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 No

2 Recent Within 1 month of procedure

3 Remote More than 1 month prior to procedure

Version: 2.73

Long Name: RF-Mediastinal Radiation SeqNo: 1150

Short Name: MediastRad Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient has a history of radiation therapy to the mediastinum or chest.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: RF-Cancer Within 5 Years SeqNo: 1160

Short Name: Cancer Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of cancer diagnosed within 5 years of procedure. Do not

capture low grade skin cancers such as basal cell or squamous cell carcinoma.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: RF-Five Meter Walk Test Done SeqNo: 1161

Short Name: FiveMWalkTest Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the five meter walk test was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: RF-Five Meter Walk Time 1 SeqNo: 1170

Short Name: FiveMWalk1 Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the time in seconds it takes the patient to walk 5 meters for the first of three tests.

LowValue: 1 UsualRangeLow: 2 ACCField: Not mapped

HighValue: 100 UsualRangeHigh: 20 ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: RF-Five Meter Walk Test

Done

Format: Integer

ParentShortName: FiveMWalkTest DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: RF-Five Meter Walk Time 2 SeqNo: 1180

Short Name: FiveMWalk2 Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the time in seconds it takes the patient to walk 5 meters for the second of three tests.

LowValue: 1 UsualRangeLow: 2 ACCField: Not mapped

HighValue: 100 UsualRangeHigh: 20 ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: RF-Five Meter Walk Test Format: Integer

Done

ParentShortName: FiveMWalkTest DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: RF-Five Meter Walk Time 3 SeqNo: 1190

Short Name: FiveMWalk3 Core: Yes
Section Name: Risk Factors Harvest: Yes

DBTableName AdultData

Definition: Indicate the time in seconds it takes the patient to walk 5 meters for the third of three tests.

LowValue: 1 UsualRangeLow: 2 ACCField: Not mapped

HighValue: 100 UsualRangeHigh: 20 ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: RF-Five Meter Walk Test Format: Integer

Done

ParentShortName: FiveMWalkTest DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: Prev Cardiac Intervent SeqNo: 1200

Short Name: PrCVInt Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient has undergone any previous cardiovascular intervention, either surgical

or non-surgical, which may include those done during the current admission. This may include

hybrid procedures.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Prev CAB SeqNo: 1215

Short Name: PrCAB Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: Yes PQRIField: Yes

Parent Long Name: Prev Cardiac Intervent Format: Text (categorical values

specified by STS)

ParentShortName: PrCVInt DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Prev Valve SeqNo: 1216
Short Name: PrValve Core: Yes

Section Name: Previous Cardiac Interventions

Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a previous surgical replacement and/or surgical repair of a cardiac

valve. This may also include percutaneous valve procedures.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: Yes

Parent Long Name: Prev Cardiac Intervent Format: Text (categorical values

specified by STS)

ParentShortName: PrCVInt DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous procedure - Aortic Valve Replacement - Surgical SeqNo: 1220

Short Name: PrevProcAVReplace Core: Yes

Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical aortic valve replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Previous procedure - Aortic Valve Repair - Surgical SeqNo: 1230

Short Name: PrevProcAVRepair Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical aortic valve repair.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous procedure - Mitral Valve Replacement - Surgical SeqNo: 1240

Short Name: PrevProcMVReplace Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical mitral valve replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Previous procedure - Mitral Valve Repair - Surgical SeqNo: 1250

Short Name: PrevProcMVRepair Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical mitral valve repair.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous procedure - Tricuspid Valve Replacement - Surgical SeqNo: 1260

Short Name: PrevProcTVReplace Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical tricuspid valve replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Previous procedure - Tricuspid Valve Repair - Surgical 1270 Long Name: SeqNo:

Short Name: PrevProcTVRepair Core: Yes Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical tricuspid valve repair.

ACCField: LowValue: UsualRangeLow: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

= "Yes" ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Previous procedure - Pulmonic Valve Repair / Replacement - Surgical 1280 Long Name: SeqNo:

Short Name: **PrevProcPV** Core: Yes Harvest: Yes

Section Name: Previous Cardiac Interventions

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical pulmonic valve repair or replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

= "Yes" Data Source: User ParentValue:

Harvest Codes:

Code: Value:

Yes

Long Name: Previous Procedure - Aortic Valve Balloon Valvuloplasty SeqNo: 1285

Short Name: PrevProcAVBall Core: Yes Harvest: Yes

Section Name: Previous Cardiac Interventions

DBTableName AdultData

Definition: Indicate whether a previous procedure included an aortic balloon valvuloplasty.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

= "Yes" Data Source: User ParentValue:

Harvest Codes:

Code: Value:

1 Yes

2 No

Previous Procedure - Mitral Valve Balloon Valvuloplasty 1290 Long Name: SegNo:

Short Name: PrevProcMVBall Core: Yes

Section Name: Previous Cardiac Interventions Yes Harvest:

DBTableName AdultData

Definition: Indicate whether a previous procedure included a mitral valve balloon valvuloplasty.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

= "Yes" Data Source: User ParentValue:

Harvest Codes:

Code: Value:

1 Yes

2 No

Version: 2.73

Long Name: Previous Procedure - Transcatheter Valve Replacement SeqNo: 1300

Short Name: PrevProcTCVRep Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a transcatheter valve replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous Procedure - Percutaneous Valve Repair SeqNo: 1310

Short Name:PrevProcPercVRepairCore:YesSection Name:Previous Cardiac InterventionsHarvest:Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a percutaneous valve repair.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Indication for Reoperation SeqNo: 1340

Short Name:IndReopCore:YesSection Name:Previous Cardiac InterventionsHarvest:Yes

DBTableName AdultData

Definition: Indicate the primary reason for repeat valve procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

1 Structural Prosthetic Valve Wear, fracture, poppet escape, calcification, leaflet tear,

Deterioration stent creep

2 Non-structural prosthetic entrapment by pannus, paravalvular leak, obstruction,

valve dysfunction inappropriate sizing,

3 Prosthetic valve endocarditis Infection, active or treated

4 Valve Thrombosis

5 Failed Repair

6 Repeat valve procedure on a

different valve

7 Other

Long Name: Non-Structural Valve Dysfunction SeqNo: 1350

Short Name: NonStVDys Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate the primary type of nonstructural valve dysfunction.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Indication for Reoperation Format: Text (categorical values

specified by STS)

ParentShortName: IndReop DataLength:

ParentValue: = "Non-structural prosthetic Data Source: User

valve dysfunction"

Harvest Codes:

Code: Value:

1 Paravalvular Leak

2 Hemolysis

3 Entrapment by pannus, tissue,

or suture

4 Sizing or positioning issue

5 Other

Long Name: Exact Date of Previous Valve Procedure Known SeqNo: 1410

Short Name: PrValDtKnown Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the exact date of the previous valve procedure is known.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Prev Valve Format: Text (categorical values

specified by STS)

ParentShortName: PrValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Date of Previous Valve Procedure SeqNo: 1420

Short Name: PrValveDate Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate the date on which the previous valve procedure was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Exact Date of Previous Format: Date mm/dd/yyyy

Valve Procedure Known

ParentShortName: PrValDtKnown DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Estimate Number of Months Since Previous Valve Procedure SeqNo: 1430

Short Name: PrValveMonths Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate the best estimate of the number of months since the most recent prior valve procedure was

performed.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 240 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Exact Date of Previous Format: Integer

Valve Procedure Known

ParentShortName: PrValDtKnown DataLength:

ParentValue: = "No" Data Source: User

Version: 2.73

Long Name: Prev Oth Card SeqNo: 1440

Short Name:PrOthCarCore:YesSection Name:Previous Cardiac InterventionsHarvest:Yes

DBTableName AdultData

Definition: Indicate whether patient had a previous intrapericardial or great vessel (e.g., aorta, superior vena

cava, inferior vena cava, pulmonary arteries and veins) procedure performed. This may include, but

is not limited to LVA, acquired VSD, SVR, TMR, cardiac trauma, pericardial window,

pericardiectomy, cardiac tumor, myectomy or heart transplant.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Cardiac Intervent Format: Text (categorical values

specified by STS)

ParentShortName: PrCVInt DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Previous Arrhythmia Surgery SeqNo: 1445

Short Name: POArr Core: Yes

Section Name: Previous Cardiac Interventions

DBTableName AdultData

Definition: Indicate whether the patient had any other arrhythmia surgery (e.g., maze procedure).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Prev Oth Card Format: Text (categorical values

specified by STS)

ParentShortName: PrOthCar DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Harvest:

Yes

Version: 2.73

Long Name: Previous Congenital SeqNo: 1450

Short Name: PrOthCongen Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient had a previous congenital heart surgery and/or percutaneous procedure

performed. May include, but is not limited to VSD, ASD, TOF and PFO.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Cardiac Intervent Format: Text (categorical values

specified by STS)

ParentShortName: PrCVInt DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Prev Oth Card-ICD SeqNo: 1460

Short Name: ProCAICD Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a previous implant of an Implantable Cardioverter/Defibrillator.

This does not include lead placement only.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Cardiac Intervent Format: Text (categorical values

specified by STS)

ParentShortName: PrCVInt DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Prev Oth Card-Pacemaker SeqNo: 1470

Short Name:ProCPaceCore:YesSection Name:Previous Cardiac InterventionsHarvest:Yes

DBTableName AdultData

Definition: Indicate whether a previous permanent pacemaker was placed anytime prior to this surgical

procedure. This does not include lead placement only.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Cardiac Intervent Format: Text (categorical values

specified by STS)

ParentShortName: PrCVInt DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Prev Oth Card-PCI SeqNo: 1480

Short Name: POCPCI Core: Yes
Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Definition: 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:

1. Balloon Catheter Angioplasty, Percutaneous Transluminal Coronary Angioplasty (PTCA)

- 2. Rotational Atherectomy
- 3. Directional Atherectomy
- 4. Extraction Atherectomy
- 5. Laser Atherectomy
- 6. Intracoronary Stent Placement

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Prev Cardiac Intervent Format: Text (categorical values

specified by STS)

ParentShortName: PrCVInt DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Prev Oth Card-PCI-Within This Episode of Care SeqNo: 1481 Long Name:

Short Name: **POCPCIWhen** Core: Yes Section Name: Previous Cardiac Interventions Harvest: Yes

DBTableName AdultData

Indicate whether the previous Percutaneous Cardiac Intervention (PCI) was performed within this Definition:

episode of care.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

> ModelField: *PQRIField*:

Parent Long Name: Prev Oth Card-PCI Format: Text (categorical values

specified by STS)

ParentShortName: POCPCI DataLength:

= "Yes" ParentValue: Data Source: User

Harvest Codes:

DBTableName AdultData

Code: Value:

1 Yes, at this facility

Yes, at some other acute care

facility

3 No

Long Name: Prev Oth Card-PCI-Indication For Surgery SegNo: 1490

Short Name: **POCPCIndSurg** Core: Yes Harvest: Yes

Section Name: Previous Cardiac Interventions

Definition: Select the indication for surgery following the Percutaneous Cardiac Intervention (PCI).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: Prev Oth Card-PCI-Within

Format: Text (categorical values This Episode of Care

specified by STS)

ParentShortName: POCPCIWhen DataLength:

ParentValue: = "Yes, at this facility" or Data Source: User

"Yes, at some other acute

care facility"

Harvest Codes and Value Definitions:

Code: Value: **Definition:**

1 PCI Complication Complication during PCI necessitating surgical

intervention such as dissection or acute occlusion

Version: 2.73

2 PCI Failure without Clinical

PCI failed to yield expected and/or desired results,

Deterioration

patient condition did not deteriorate.

PCI/CABG Hybrid Procedure

Planned Hybrid Procedure

Long Name: Prev Oth Card-PCI-Stent SeqNo:

1500

Short Name: **POCPCISt**

Core: Yes Yes

Section Name: Previous Cardiac Interventions

Harvest:

DBTableName AdultData

Definition:

Indicate whether an intracoronary stent was used during the previous Percutaneous Cardiac

Intervention (PCI).

LowValue: HighValue:

ParentValue:

Long Name:

LowValue:

HighValue:

UsualRangeLow: UsualRangeHigh: ACCField:

Not mapped

ReportField: No

NQFField: No

ModelField: No

PQRIField: No

Parent Long Name: Prev Oth Card-PCI

Format:

Text (categorical values

specified by STS)

ParentShortName: POCPCI

= "Yes"

DataLength:

Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Prev Oth Card-PCI-Stent Type

SeqNo:

1510

Short Name: **POCPCIStTy**

Core: Harvest:

Yes Yes

Section Name: Previous Cardiac Interventions

DBTableName AdultData

Definition: Indicate type of intracoronary stent placed.

UsualRangeLow: UsualRangeHigh: ACCField: Not mapped

ReportField: No

NQFField: No

ModelField: No

PQRIField: No

Parent Long Name: Prev Oth Card-PCI-Stent

Format:

Text (categorical values

specified by STS)

ParentShortName: POCPCISt

DataLength:

= "Yes" ParentValue:

Data Source: User

Harvest Codes:

Code: Value:

Bare metal

Drug-eluting

3 Unknown

Long Name: Prev Oth Card-PCI-Interval SeqNo: 1520

POCPCIIn Yes Short Name: Core: Yes Harvest:

Section Name: Previous Cardiac Interventions

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

> ModelField: Yes PQRIField: No

Parent Long Name: Prev Oth Card-PCI Format: Text (categorical values

specified by STS)

ParentShortName: POCPCI DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 <= 6 Hours

2 > 6 Hours

Prev Oth Card-Other 1530 Long Name: SeqNo:

Short Name: **POCO** Core: Yes

Section Name: Previous Cardiac Interventions Yes Harvest:

DBTableName AdultData

Definition: Indicate whether the patient has undergone any other previous cardiovascular intervention.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

> ModelField: No PORIField: No

Parent Long Name: Prev Cardiac Intervent Format: Text (categorical values

specified by STS)

ParentShortName: PrCVInt DataLength:

= "Yes" Data Source: User ParentValue:

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name:Prior MISeqNo:1540Short Name:PrevMICore:YesSection Name:Preoperative Cardiac StatusHarvest:Yes

DBTableName AdultData

Definition: Indicate if the patient has had at least one documented previous myocardial infarction at any time

prior to this surgery. (Refer to training manual for MI definition.)

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: MI-When SeqNo: 1550

Short Name: MIWhen Core: Yes Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Prior MI Format: Text (categorical values

specified by STS)

ParentShortName: PrevMI DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 <=6 Hrs

2 >6 Hrs but <24 Hrs

3 1 to 7 Days

4 8 to 21 Days

5 >21 Days

Long Name:Anginal Classification within 2 weeksSeqNo:1570Short Name:Anginal ClassCore:Yes

Section Name: Preoperative Cardiac Status

Harvest: Yes

DBTableName AdultData

Definition: Indicate the patients anginal classification or symptom status within the past 2 weeks.

The anginal classification or symptom status is classified as the highest grade of angina or chest

pain by the Canadian Cardiovascular Angina Classification System (CCA).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

1 No Symptoms, No Angina The patient has no symptoms, no angina.

2 CCA I Ordinary physical activity does not cause angina; for

example walking or climbing stairs, angina occurs with strenuous or rapid or prolonged exertion at work or

recreation.

3 CCA II Slight limitation of ordinary activity; for example,

angina occurs walking or stair climbing after meals, in cold, in wind, under emotional stress or only during the few hours after awakening, walking more than two blocks on the level or climbing more than one flight of

ordinary stairs at a normal pace and in

normal conditions.

4 CCA III Marked limitation of ordinary activity; for example,

angina occurs walking one or two blocks on the level or

climbing one

flight of stairs in normal conditions and at a normal pace.

5 CCA IV Inability to carry on any physical activity

without discomfort - angina syndrome

may be present at rest.

Version: 2.73

Long Name: Heart Failure within 2 weeks SeqNo: 1580

Short Name: CHF Core: Yes
Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

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

failure within the past 2 weeks.

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.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Classification-NYHA SeqNo: 1585

Short Name: ClassNYH Core: Yes
Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

Definition: Indicate the patient's worst dyspnea or functional class, coded as the New York Heart Association

(NYHA) classification within the past 2 weeks.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Heart Failure within 2 weeks Format: Text (categorical values

specified by STS)

ParentShortName: CHF DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 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.

2 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).

3 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.

4 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.

Version: 2.73

Long Name: Prior Heart failure SeqNo: 1590

Short Name: PriorHF Core: Yes
Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

Definition: Indicate history of heart failure occurring more than 2 weeks prior to current episode of care.

A previous hospital admission with principal diagnosis of heart failure is considered evidence of

heart failure history but is not essential.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Cardiac Presentation on Admission SeqNo: 1610

Short Name: CardPres Core: Yes
Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

Definition: Indicate the type of angina present prior to this procedure.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

1 No Symptoms, no Angina No Symptoms, no angina.

2 Symptoms Unlikely to be

Ischemia

Pain, pressure or discomfort in the chest, neck or arms not clearly exertional or not otherwise consistent with pain or discomfort of myocardial ischemic origin. This includes patients with non-cardiac pain (e.g., pulmonary embolism, musculoskeletal, or esophageal discomfort),

1620

or cardiac pain not caused by myocardial ischemia (e.g.,

acute pericarditis).

3 Stable Angina Stable Angina: Angina without a change in frequency or

pattern for the six weeks prior to this surgical

intervention. Angina is controlled by rest and/or oral or

transcutaneous medications.

4 Unstable Angina Unstable Angina - There are three principal

presentations of unstable angina: 1) rest angina, 2) newonset (less than 2 months) angina, and 3) increasing angina (in intensity, duration and/or frequency).

5 Non-ST Elevation MI (Non-

STEMI)

Non-ST Elevation MI (Non-STEMI) - non-ST elevation myocardial infarction as documented in the medical

record.

6 ST Elevation MI (STEMI) STEMIs are characterized by the presence of both

criteria:

A. ECG evidence of STEMI B. Cardiac biomarkers

Cardiogenic Shock SeqNo:

Short Name: CarShock Core: Yes
Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

Long Name:

Definition: 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:

persistant 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).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name:ResuscitationSeqNo:1630Short Name:ResuscCore:YesSection Name:Preoperative Cardiac StatusHarvest:Yes

DBTableName AdultData

Definition: Indicate whether the patient required cardiopulmonary resuscitation within one hour before the start

of the operative procedure which includes the institution of anesthetic management.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Arrhythmia SeqNo: 1640

Short Name: Arrhyth Core: No
Section Name: Preoperative Cardiac Status Harvest: No

DBTableName AdultData

Definition: Indicate whether there is a history of preoperative arrhythmia (sustained ventricular tachycardia,

ventricular fibrillation, atrial fibrillation, atrial flutter, third degree heart block) that has been treated

with any of the following modalities:

1. ablation therapy

2. AICD

3. pacemaker

4. pharmacological treatment

5. electrocardioversion

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes2 No

Long Name: Arrhythmia When SeqNo: 1650

Short Name: ArrhythWhen Core: Yes
Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

Definition: 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:

1. ablation therapy

2. AICD

3. pacemaker

4. pharmacological treatment

5. electrocardioversion

6. defibrillation

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 None

2 Remote More than 30 days prior to procedure.

3 Recent Within 30 days prior to procedure.

Long Name: Arrhythmia Type-Vtach/Vfib SeqNo: 1660

Short Name: ArrhyVtach Core: Yes Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

Definition: Indicate whether sustained ventricular tachycardia or fibrillation was present within 30 days of the

procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Arrhythmia When Format: Text (categorical values

specified by STS)

ParentShortName: ArrhythWhen DataLength:

ParentValue: = "Recent" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

1670 Long Name: Arrhythmia Type-Second Degree Heart Block SeqNo:

Short Name: ArrhyVtachHrtBlk Core: Yes Harvest: Yes

Section Name: Preoperative Cardiac Status

DBTableName AdultData

Definition: Indicate whether Second Degree Heart Block was present within 30 days of the procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

> ModelField: PQRIField:

Parent Long Name: Arrhythmia When Format: Text (categorical values

specified by STS)

ParentShortName: ArrhythWhen DataLength:

ParentValue: = "Recent" Data Source: User

Harvest Codes:

Code: Value:

Yes

Long Name: Arrhythmia Type-Sick Sinus Syndrome SeqNo: 1680

Short Name: ArrhyVtachSicSinSyn Core: Yes
Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

Definition: Indicate whether Sick Sinus Syndrome was present within 30 days of the procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Arrhythmia When Format: Text (categorical values

specified by STS)

ParentShortName: ArrhythWhen DataLength:

ParentValue: = "Recent" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Arrhythmia Type-Third Degree Heart Block SeqNo: 1690

Short Name: ArrhyTHB Core: Yes

Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

Definition: Indicate whether third degree heart block was present within thirty days of the procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Arrhythmia When Format: Text (categorical values

specified by STS)

ParentShortName: ArrhythWhen DataLength:

ParentValue: = "Recent" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Arrhythmia Type-Afib/Aflutter SeqNo: 1700

Short Name: ArrhyAfib Core: Yes
Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

Definition: Indicate whether atrial fibrillation or flutter was present within thirty days of the procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Arrhythmia When Format: Text (categorical values

specified by STS)

ParentShortName: ArrhythWhen DataLength:

ParentValue: = "Recent" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Afib/Aflutter Type SeqNo: 1701

Short Name: ArrhyAfibTy Core: Yes
Section Name: Preoperative Cardiac Status Harvest: Yes

DBTableName AdultData

Definition: Indicate whether preoperative AFib/Aflutter is paroxysmal or continuous/persistent.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Arrhythmia Type- Format: Text (categorical values

Afib/Aflutter specified by STS)

ParentShortName: ArrhyAfib DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code:Value:Definition:1ParoxysmalI.e., sporadic

2 Continuous/persistent Persistent longstanding permanent or continuous

Version: 2.73

Long Name: Meds-Beta Blockers SeqNo: 1710

Short Name: MedBeta Core: Yes
Section Name: Preoperative Medications Harvest: Yes

DBTableName AdultData

Definition: Indicate whether or not the patient received beta blockers within 24 hours preceding surgery, or if

beta blocker was contraindicated. The contraindication must be documented in the medical record

by a physician, nurse practitioner, or physician assistant.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: Yes

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

3 Contraindicated

Long Name: Meds-ACE or ARB Inhibitors SeqNo: 1720

Short Name: MedACEI Core: No

Section Name: Preoperative Medications

Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient received ACE or ARB Inhibitors within 24 hours preceding surgery ,or

if ACE or ARB Inhibitor was contraindicated or not indicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, or physician assistant.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

3 Contraindicated / Not Indicated

Long Name: Meds-ACE Inhibitors or ARB Within 48 Hours SeqNo: 1730

Short Name: MedACEI48 Core: Yes

Section Name: Preoperative Medications Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient received ACE Inhibitors or ARB within 48 hours preceding surgery

(e.g., if indicated for LV dysfunction or acute MI).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: Usual Range High:NQFField: ReportField:

> ModelField: PORIField:

Parent Long Name: Text (categorical values Format:

specified by STS)

ParentShortName: DataLength:

Data Source: User ParentValue:

Harvest Codes:

Code: Value:

1 Yes

2 No

1740 Long Name: Meds-Nitrates-I.V. SeqNo:

Short Name: MedNitIV Core: Yes Yes

Section Name: Preoperative Medications Harvest:

DBTableName AdultData

Definition: Indicate whether the patient received IV Nitrates within 24 hours preceding surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Text (categorical values Format:

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

Yes

Version: 2.73

Long Name: Meds-Anticoagulants SeqNo: 1750

Short Name: MedACoag Core: Yes
Section Name: Preoperative Medications Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient received IV and/or subq anticoagulants within 48 hours preceding

surgery.

Do NOT include Coumadin or one-time boluses of Heparin.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Meds-Anticoagulants-Medication Name SeqNo: 1760

Short Name: MedACMN Core: Yes Section Name: Preoperative Medications Harvest: Yes

DBTableName AdultData

Definition: Indicate the name of the IV and/or subq anticoagulant the patient received within 48 hours

preceding surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Meds-Anticoagulants Format: Text (categorical values

specified by STS)

ParentShortName: MedACoag DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

1 Heparin (Unfractionated)

2 Heparin (Low Molecular)

3 Thrombin Inhibitors Thrombin inhibibitors include bivalhirudin or

argatroban.

9 Other

Long Name: Meds-Preoperative Antiarrhythmics SeqNo:

Short Name: MedAArrhy

Core:

Yes

1770

Yes

Section Name: Preoperative Medications

Harvest:

DBTableName AdultData

Definition: Indicate whether or not the patient was on antiarrhythmics preoperatively.

LowValue: UsualRangeLow: ACCField:

Not mapped

HighValue: UsualRangeHigh: ReportField: ModelField:

NOFField: PQRIField:

Format:

Text (categorical values

specified by STS)

ParentShortName:

Parent Long Name:

DataLength:

ParentValue:

Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Meds-Coumadin SeqNo:

1780

Short Name: MedCoum

Core:

Yes

Section Name: Preoperative Medications

Harvest:

Yes

DBTableName AdultData

Definition: Indicate whether the patient received Coumadin within 24 hours preceding surgery.

UsualRangeLow:

ACCField: Not mapped

LowValue: HighValue:

UsualRangeHigh:

ReportField: Yes

NQFField: No

ModelField: No

PQRIField: No

Parent Long Name:

Format:

Text (categorical values

specified by STS)

ParentShortName:

DataLength:

ParentValue:

Data Source: User

Harvest Codes:

Code: Value:

Yes

Version: 2.73

Long Name: Meds-Inotropes SeqNo: 1790

Short Name: MedInotr Core: Yes
Section Name: Preoperative Medications Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient received IV inotropic agents within 48 hours preceding surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Meds-Steroids SeqNo: 1800

Short Name: MedSter Core: Yes
Section Name: Preoperative Medications Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient was taking steroids within 24 hours of surgery. This does not include a

one time dose related to prophylaxis therapy (i.e. IV dye exposure for cath procedure or surgery preinduction period). Non-systemic medications are not included in this category (i.e., nasal sprays,

topical creams).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Meds-Aspirin SeqNo: 1820

Short Name: MedASA Core: Yes
Section Name: Preoperative Medications Harvest: Yes

DBTableName AdultData

Definition: Indicate whether or not the patient received Aspirin or Ecotrin within 5 days preceding surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Meds-Lipid Lowering SeqNo: 1830

Short Name: MedLipid Core: Yes

Section Name: Preoperative Medications

Harvest: Yes

DBTableName AdultData

Definition: Indicate whether or not the patient received lipid lowering medication within 24 hours preceding

surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

1840 Long Name: Meds-Lipid Lowering-Medication Type SeqNo:

Short Name: MedLipMN Core: Yes Section Name: Preoperative Medications Harvest: Yes

DBTableName AdultData

Definition: Indicate the type of lipid lowering medication the patient received within 24 hours preceding

surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Meds-Lipid Lowering Format: Text (categorical values

specified by STS)

ParentShortName: MedLipid DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Statin

2 Non-statin

3 Both

Meds-ADP Inhibitors Within Five Days 1850 Long Name: SeqNo:

MedADP5Days Core: Short Name: Yes Yes Harvest:

Section Name: Preoperative Medications

DBTableName AdultData

Definition: Indicate whether the patient has received ADP Inhibitors within 5 days preceding surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: NQFField: No ReportField: Yes

> ModelField: No PORIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

Data Source: User ParentValue:

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Meds-ADP Inhibitors Discontinuation SeqNo: 1860

Short Name: MedADPIDis Core: Yes
Section Name: Preoperative Medications Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of days prior to surgery ADP Inhibitor use was discontinued. If less than 24

hours, enter "0".

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 5 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Meds-ADP Inhibitors Format: Integer

Within Five Days

ParentShortName: MedADP5Days DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Meds-Antiplatelets Within 5 Days SeqNo: 1870

Short Name: MedAplt5Days Core: Yes

Section Name: Preoperative Medications

Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient has received Antiplatelets within 5 days preceding surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Meds-Glycoprotein IIb/IIIa Inhibitor SeqNo: 1880

Short Name: MedGP Core: Yes
Section Name: Preoperative Medications Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient received Glycoprotein IIb/IIIa inhibitors within 24 hours preceding

surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Meds-Glycoprotein IIbIIIa Inhibitor-Medication Name SeqNo: 1890

Short Name: MedGPMN Core: Yes
Section Name: Preoperative Medications Harvest: Yes

DBTableName AdultData

Definition: Indicate the name of the Glycoprotein IIb/IIIa Inhibitor the patient received within 24 hours

preceding surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Meds-Glycoprotein IIb/IIIa Format: Text (categorical values

Inhibitor specified by STS)

ParentShortName: MedGP DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Abciximab (ReoPro)

2 Eptifibatide (Integrilin)

3 Tirofiban (Aggrastat)

Version: 2.73

Long Name: Meds-Thrombolytics SeqNo: 1900

Short Name:MedThromCore:YesSection Name:Preoperative MedicationsHarvest:Yes

DBTableName AdultData

Definition: Indicate whether the patient received thrombolytics within 48 hours preoperatively.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

l Yes

2 No

Long Name: Cardiac Catheterization Performed SeqNo: 1910

Short Name: CarCathPer Core: Yes

Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether cardiac catheterization and/or CT angio was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Cardiac Catheterization Date SeqNo: 1920

Short Name: CarCathDt Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate the date cardiac catheterization was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Cardiac Catheterization Format: Date mm/dd/yyyy

Performed

ParentShortName: CarCathPer DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Num Dis Vessels SeqNo: 1930

Short Name: NumDisV Core: Yes Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: 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.

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.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

1 None No significant coronary obstructive disease.

2 One

3 Two

4 Three

Version: 2.73

Long Name: Left Main Dis >= 50% SeqNo: 1940

Short Name: LMainDis Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient has Left Main Coronary Disease. Left Main Coronary Disease is

present when there is >= 50% compromise of vessel diameter preoperatively.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Proximal LAD Disease >=70% SeqNo: 1941

Short Name: ProxLAD Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the percent luminal narrowing of the proximal left anterior descending artery at the

point of maximal stenosis is greater than or equal to 70%.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Hemo Data-EF Done SeqNo: 1950

Short Name: HDEFD Core: Yes Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Hemo Data-EF SeqNo: 1960

Short Name: HDEF Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: 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.

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:

Normal = 60%

Good function = 50% Mildly reduced = 45% Fair function = 40%

Moderately reduced = 30%

Poor function = 25% Severely reduced = 20%

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

LowValue: 1.0 UsualRangeLow: 5.0 ACCField: Not mapped

HighValue: 99.0 UsualRangeHigh: 90.0 ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Hemo Data-EF Done Format: Real

ParentShortName: HDEFD DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Hemo Data-EF Method SeqNo: 1970 Long Name:

Short Name: **HDEFMeth** Core: Yes Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate how the Ejection Fraction measurement information was obtained preoperatively.

UsualRangeLow: LowValue: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Hemo Data-EF Done Format: Text (categorical values

specified by STS)

ParentShortName: HDEFD DataLength:

= "Yes" Data Source: User ParentValue:

Harvest Codes and Value Definitions:

Code: Value: **Definition:**

2 LV Gram Left Ventriculogram

Radionucleotide MUGA Scan

Estimate From other calculations, based upon available clinical

ECHO Echocardiogram

MRI/CT 9 Other

Long Name: Hemo Data-LV Systolic Dimension SeqNo: 1980

Short Name: LVSD Core: Yes Harvest: Yes

Section Name: Hemodynamics/Cath/Echo

DBTableName AdultData

Definition: Indicate LV systolic dimension in mm as indicated on echo.

LowValue: 0.0 UsualRangeLow: 25.0 ACCField: Mapped - Definition and coding

HighValue: 90.0 ReportField: UsualRangeHigh: 35.0 NQFField:

> ModelField: PQRIField:

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Hemo Data-LV End-Diastolic Dimension SeqNo: 1990

Short Name: LVEDD Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate the Left Ventricular End-Diastolic Dimension in mm as indicated on echo.

LowValue: 20.0 UsualRangeLow: 45.0 ACCField: Mapped - Definition and coding

HighValue: 100.0 UsualRangeHigh: 54.0 ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Hemo Data - HDPA Mean Done SeqNo: 2000

Short Name: HDPAD Core: No Section Name: Hemodynamics/Cath/Echo Harvest: No

DBTableName AdultData

Definition: Indicate whether the mean pulmonary artery pressure in mm Hg, was recorded from catheterization

data or Swan-Ganz catheter BEFORE the induction of anesthesia.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Version: 2.73

Long Name: Hemo Data-PA Mean SeqNo: 2010

Short Name: HDPAMean Core: No Section Name: Hemodynamics/Cath/Echo Harvest: No

DBTableName AdultData

Definition: Indicate the mean pulmonary artery pressure in mm Hg, recorded from catheterization data or Swan-

Ganz catheter BEFORE the induction of anesthesia.

LowValue: 1.0 UsualRangeLow: ACCField: Not mapped

HighValue: 99.0 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Hemo Data - HDPA Mean Format: Real

Done

ParentShortName: HDPAD DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Hemo-PA Systolic Pressure Measured SeqNo: 2020

Short Name: PASYSMeas Core: Yes

Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the PA systolic pressure was measured prior to incision.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

SeqNo: 2030 Long Name: Hemo-PA Systolic Pressure

Short Name: **PASYS** Core: Yes Yes Section Name: Hemodynamics/Cath/Echo Harvest:

DBTableName AdultData

Definition: Capture highest PA systolic pressure recorded prior to incision.

LowValue: 10.0 UsualRangeLow: 15.0 ACCField: Not mapped

HighValue: 150.0 UsualRangeHigh: 30.0 ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: Hemo-PA Systolic Pressure Format: Real

Measured

ParentShortName: PASYSMeas DataLength:

ParentValue: = "Yes" Data Source: User

VD-Aortic 2040 Long Name: SeqNo:

Short Name: **VDAort** Yes Core: Harvest: Yes

Section Name: Hemodynamics/Cath/Echo

DBTableName AdultData

Definition: Indicate whether Aortic Valve disease is present.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

Data Source: User ParentValue:

Harvest Codes:

Code: Value:

Yes

Version: 2.73

Long Name: VD-Aortic Etiology SeqNo: 2090

Short Name:VDAoEtCore:YesSection Name:Hemodynamics/Cath/EchoHarvest:Yes

DBTableName AdultData

Definition: Indicate primary etiology of aortic valve disease.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Aortic Format: Text (categorical values

specified by STS)

ParentShortName: VDAort DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 Degenerative (senile) Includes calcific, senile, and leaflet prolapse.

2 Endocarditis

3 Congenital

4 Rheumatic

- 5 Primary Aortic Disease
- 6 LV Outflow Tract Obstruction
- 7 Supravalvular Aortic Stenosis
- 8 Tumor
- 9 Trauma
- 10 Other

Version: 2.73

Long Name: VD-Endocarditis Root Abscess SeqNo: 2110

Short Name: VDEndAB Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate if endocarditis is associated with an aortic root abscess.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Aortic Etiology Format: Text (categorical values

specified by STS)

ParentShortName: VDAoEt DataLength:

ParentValue: = "Endocarditis" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: VD-Congenital Type SeqNo: 2120

Short Name: VDCongenT Core: Yes

Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate type of congenital Aortic Valve disease.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Aortic Etiology Format: Text (categorical values

specified by STS)

ParentShortName: VDAoEt DataLength:

ParentValue: = "Congenital" Data Source: User

Harvest Codes:

Code: Value:

1 Bicuspid

2 Other

Long Name: VD-Primary aortic disease SeqNo: 2130

Short Name: VDPrimAo Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate type of Primary Aortic Disease.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Aortic Etiology Format: Text (categorical values

specified by STS)

ParentShortName: VDAoEt DataLength:

ParentValue: = "Primary Aortic Disease" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 Marfans

2 Other Connective tissue

disorder

3 Atherosclerotic Aneurysm

4 Inflammatory Syphilis, Takayasu

5 Aortic Dissection

6 Idiopathic Root Dilation

Long Name: VD-LV Outflow Tract Obstruction Type SeqNo: 2140

Short Name: VDLVOutOb Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate type of LV outflow tract obstruction.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Aortic Etiology Format: Text (categorical values

specified by STS)

ParentShortName: VDAoEt DataLength:

ParentValue: = "LV outflow tract Data Source: User

obstruction"

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 HOCM Hypertrophic Cardiomyopathy

Version: 2.73

2 Sub-aortic membrane

3 Sub-aortic Tunnel

Long Name: VD-Aortic Valve Tumor Type SeqNo: 2150

Short Name: VDAortTumor Core: Yes

Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate the type of cardiac tumor.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Aortic Etiology Format: Text (categorical values

specified by STS)

ParentShortName: VDAoEt DataLength:

ParentValue: = "Tumor" Data Source: User

Harvest Codes:

Code: Value:

1 Myxoma

2 Papillary fibroelastoma

3 Carcinoid

4 Other

Long Name: VD-Stenosis-Aortic SeqNo: 2152

Short Name: VDStenA Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether Aortic Stenosis is present.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: VD-Aortic Format: Text (categorical values

specified by STS)

ParentShortName: VDAort DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VD-AV Area SeqNo: 2153

Short Name: VDAoVA Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate the smallest aortic valve area (in cm squared) obtained from an echocardiogram or cath

report.

LowValue: 0.2 UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: 5.0 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Stenosis-Aortic Format: Real

ParentShortName: VDStenA DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: VD-Gradient-Aortic SeqNo: 2154

Short Name: VDGradA Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest MEAN gradient (in mmHg) across the aortic valve obtained from an

echocardiogram or angiogram preoperatively.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 200 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VD-Stenosis-Aortic Format: Integer

ParentShortName: VDStenA DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: VD-Insuff-Aortic SeqNo: 2155

Short Name: VDInsufA Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether there is evidence of Aortic valve regurgitation. Enter level of valve function

associated with highest risk (i.e., worst performance).

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

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VD-Aortic Format: Text (categorical values

specified by STS)

ParentShortName: VDAort DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

0 None

1 Trivial/Trace

2 Mild

3 Moderate

4 Severe

Long Name: VD-Mitral SeqNo: 2160

Short Name: VDMit Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether Mitral valve disease is present.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: VD-Mitral Valve Disease Etiology SeqNo: 2170

Short Name: VDMitET Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate primary etiology of mitral valve disease.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Mitral Format: Text (categorical values

specified by STS)

ParentShortName: VDMit DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Annular or Degenerative

Disease

2 Endocarditis

- 3 Rheumatic
- 4 Ischemic
- 5 Congenital
- 6 Hypertrophic Obstructive Cardiomyopathy (HOCM)
- 7 Tumor
- 8 Trauma
- 9 Non-ischemic cardiomyopathy
- 10 Other

STS Adult Cardiac Database Version: 2.73

Long Name: VD-Mitral Valve Disease Degenerative Location SeqNo: 2180

Short Name: VDMitDegLoc Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate the location of the degenerative mitral disease.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Mitral Valve Disease Format: Text (categorical values

Etiology specified by STS)

ParentShortName: VDMitET DataLength:

ParentValue: = "Annular or Degenerative Data Source: User

Disease"

Harvest Codes:

Code: Value:

Posterior Leaflet
 Anterior Leaflet

3 Bileaflet

Long Name: VD-Mitral Annular Disease Type SeqNo: 2190

Short Name: VDMitAnDegDis Core: Yes

Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate the type of mitral valve annular disease.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Mitral Valve Disease Format: Text (categorical values

Etiology specified by STS)

ParentShortName: VDMitET DataLength:

ParentValue: = "Annular or Degenerative Data Source: User

Disease"

Harvest Codes:

Code: Value:

1 Pure Annular Dilation

2 Mitral Annular Calcification

STS Adult Cardiac Database Version: 2.73

2210 Long Name: VD-Mitral Valve Disease Ischemic Type SeqNo:

Short Name: **VDMitIsTy** Core: Yes Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate type of ischemic mitral disease.

UsualRangeLow: LowValue: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: VD-Mitral Valve Disease Format: Text (categorical values

Etiology specified by STS)

ParentShortName: VDMitET DataLength:

= "Ischemic" Data Source: User ParentValue:

Harvest Codes and Value Definitions:

Code: Value: Definition:

1 Acute Within 30 days of MI

2 Chronic Greater than 30 days after MI

VD-Mitral Papillary Muscle Rupture 2220 Long Name: SegNo:

Short Name: **VDMitPMR** Core: Yes Yes Section Name: Hemodynamics/Cath/Echo Harvest:

DBTableName AdultData

Definition: Indicate whether papillary muscle rupture occurred.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: VD-Mitral Valve Disease Format:

Text (categorical values Ischemic Type

specified by STS)

ParentShortName: VDMitIsTy DataLength:

ParentValue: = "Acute" Data Source: User

Harvest Codes:

Code: Value: Yes 1

STS Adult Cardiac Database Version: 2.73

Long Name: VD-Mitral Valve Tumor Type SeqNo: 2221

Short Name: VDMitTumor Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate the type of cardiac tumor.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Mitral Valve Disease Format:

Etiology

Format: Text (categorical values

specified by STS)

ParentShortName: VDMitET DataLength:

ParentValue: = "Tumor" Data Source: User

Harvest Codes:

Code: Value:

1 Myxoma

2 2 111 611 1

2 Papillary fibroelastoma

3 Carcinoid4 Other

Long Name: VD-Mitral Valve Disease Functional Class SeqNo: 2230

Short Name: VDMitFC Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate Functional Class of Mitral Disease.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Mitral Format: Text (categorical values

specified by STS)

ParentShortName: VDMit DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

Type I
 Type II
 Normal leaflet motion
 Excess Leaflet Motion

3 Type IIIa Restricted leaflet motion systolic and diastolic

4 Type IIIb Restricted leaflet motion systolic

Long Name: VD-Stenosis-Mitral SeqNo: 2240

Short Name: VDStenM Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether Mitral Stenosis is present.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

ModelField: No PQRIField: No

Parent Long Name: VD-Mitral Format: Text (categorical values

specified by STS)

ParentShortName: VDMit DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: VD-Mitral Valve Area SeqNo: 2250

Short Name: VDMVA Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate the smallest Mitral Valve Area reported on cath or echo, in centimeters squared.

LowValue: 0.6 UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: 6.0 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Stenosis-Mitral Format: Real

ParentShortName: VDStenM DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: VD-Mitral Valve Gradient SeqNo: 2260

Short Name: VDGradM Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest mean gradient (in mm Hg) across the mitral valve obtained from an

echocardiogram or angiogram preoperatively.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 30 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Stenosis-Mitral Format: Integer

ParentShortName: VDStenM DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: VD-Insuff-Mitral SeqNo: 2270

Short Name: VDInsufM Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether there is evidence of Mitral valve regurgitation. Enter level of valve function

associated with highest risk (i.e., worst performance).

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

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

ModelField: Yes PQRIField: No

Parent Long Name: VD-Mitral Format: Text (categorical values

specified by STS)

ParentShortName: VDMit DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

0 None

1 Trivial/Trace

2 Mild

3 Moderate

4 Severe

Version: 2.73

Long Name: VD-Tricuspid SeqNo: 2280

Short Name: VDTr Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether Tricuspid Valve disease is present.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

l Yes

2 No

Long Name: VD-Tricuspid Etiology SeqNo: 2290

Short Name: VDTrEt Core: Yes

Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate primary etiology of tricuspid valve disease.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VD-Tricuspid Format: Text (categorical values

specified by STS)

ParentShortName: VDTr DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

1 Functional annular dilatation with or without leaflet tethering

2 Endocarditis

3 Congenital

4 Tumor

5 Trauma

6 Other

Long Name: VD-Stenosis-Tricuspid SeqNo: 2300

Short Name: VDStenT Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether Tricuspid Stenosis is present.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NOFField: No

ModelField: No PQRIField: No

Parent Long Name: VD-Tricuspid Format: Text (categorical values

specified by STS)

ParentShortName: VDTr DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VD-Insuff-Tricuspid SeqNo: 2320

Short Name: VDInsufT Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether there is evidence of Tricuspid valve regurgitation. Enter level of valve function

associated with highest risk (i.e., worst performance).

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: Yes PORIField: No

Parent Long Name: VD-Tricuspid Format: Text (categorical values

specified by STS)

ParentShortName: VDTr DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

0 None

1 Trivial/Trace

2 Mild

3 Moderate

4 Severe

Long Name: VD-Pulmonic SeqNo: 2321

Short Name: VDPulm Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether Pulmonic Valve disease is present.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

l Yes

2 No

Long Name: VD-Stenosis-Pulmonic SeqNo: 2330

Short Name: VDStenP Core: Yes

Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether Pulmonic Stenosis is present.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VD-Pulmonic Format: Text (categorical values

specified by STS)

ParentShortName: VDPulm DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: VD-Insuff-Pulmonic SeqNo: 2340

Short Name: VDInsufP Core: Yes
Section Name: Hemodynamics/Cath/Echo Harvest: Yes

DBTableName AdultData

Definition: Indicate whether there is evidence of Pulmonic valve regurgitation. Enter level of valve function

associated with highest risk (i.e., worst performance).

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: VD-Pulmonic Format: Text (categorical values

specified by STS)

ParentShortName: VDPulm DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

0 None

1 Trivial/Trace

2 Mild

3 Moderate

4 Severe

Long Name:SurgeonSeqNo:2350Short Name:SurgeonCore:Yes

Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the name of the surgeon responsible for the patient's care.

This field must have controlled data entry where a user selects the surgeon name from a user list.

This will remove variation in spelling, abbreviations and punctuation within the field.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by User)

ParentShortName: DataLength:

ParentValue: Data Source: User

Version: 2.73

Long Name: Surgeon's National Provider Identifier SeqNo: 2360

Short Name: SurgNPI Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the individual-level National Provider Identifier of the surgeon performing the procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Surgeon Format: Text (categorical values

specified by User)

ParentShortName: Surgeon DataLength:

ParentValue: Is Not Missing Data Source: Lookup

Long Name: Taxpayer Identification Number SeqNo: 2370

Short Name: TIN Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the group-level Taxpayer Identification Number for the Taxpayer holder of record for the

Surgeon's National Provider Identifier that performed the procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Format: Text (categorical values

specified by User)

ParentShortName: DataLength:

ParentValue: Data Source: Lookup

Version: 2.73

Long Name:IncidenceSeqNo:2380Short Name:IncidencCore:YesSection Name:OperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate if this is the patient's:

-first cardiovascular surgery -first re-op cardiovascular surgery -second re-op cardiovascular surgery -third re-op cardiovascular surgery

-fourth or more re-op cardiovascular surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 First cardiovascular surgery

2 First re-op cardiovascular surgery

3 Second re-op cardiovascular surgery

4 Third re-op cardiovascular surgery

Fourth or more re-op cardiovascular surgery

Long Name:StatusSeqNo:2390Short Name:StatusCore:YesSection Name:OperativeHarvest:Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 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.

2 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.

3 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.

4 Emergent Salvage The patient is undergoing CPR en route to the OR or

prior to anesthesia induction or has ongoing ECMO to

maintain life.

Long Name:Urgent ReasonSeqNo:2400Short Name:UrgntRsnCore:YesSection Name:OperativeHarvest:Yes

Section Name: Operative DBTableName AdultData

Definition: Indicate the PRIMARY reason why the patient had an urgent status.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Status Format: Text (categorical values

specified by STS)

ParentShortName: Status DataLength:

ParentValue: = "Urgent" Data Source: User

Harvest Codes:

Code: Value:

- 1 AMI
- 2 IABP
- 3 Worsening CP
- 4 CHF
- 5 Anatomy
- 6 USA (unstable angina)
- 7 Rest Angina
- 8 Valve Dysfunction
- 9 Aortic Dissection
- 10 Angiographic Accident
- 11 Cardiac Trauma
- 12 Infected Device
- 13 Syncope
- 14 PCI/CABG Hybrid
- 15 PCI Failure without clinical

deterioration

Long Name:Emergent ReasonSeqNo:2410Short Name:EmergRsnCore:Yes

Short Name: EmergRsn Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the PRIMARY reason why the patient had Emergent Status.

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.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Status Format: Text (categorical values

specified by STS)

ParentShortName: Status DataLength:

ParentValue: = "Emergent" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 Shock Circ Support

2 Shock No Circ Support

3 Pulmonary Edema

4 Acute Evolving Myocardial Acute Evolving Myocardial Infarction within 24 hours

Infarction (AEMI) before surgery

5 Ongoing Ischemia

6 Valve Dysfunction

7 Aortic Dissection

8 Angiographic Accident

9 Cardiac Trauma

10 Infected Device

11 Syncope

12 PCI/CABG Hybrid

13 Anatomy

Version: 2.73

Long Name: Previously Attempted Case Canceled SeqNo: 2415

Short Name: PCancCase Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether this case was previously attempted during this admission and canceled or aborted

after patient entered the operating room.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Previously Attempted Canceled Case Date SeqNo: 2416

Short Name: PCancCaseDt Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Enter date previously attempted case was canceled.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Previously Attempted Case Format: Date mm/dd/yyyy

Canceled

ParentShortName: PCancCase DataLength:

ParentValue: = "Yes" Data Source: User

STS Adult Cardiac Database Version: 2.73

Long Name: Previously Attempted Canceled Case Timing SeqNo: 2417

Short Name: PCancCaseTmg Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate at what point previously attempted case was canceled or aborted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Previously Attempted Case Format: Text (categorical values

Canceled specified by STS)

ParentShortName: PCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Prior to Induction of

Anesthesia

2 After Induction, Prior to

Incision

3 After Incision Made

Long Name: Previously Attempted Canceled Case Reason SegNo: 2418

Short Name: PCancCaseRsn Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the reason why the previously attempted case was canceled or aborted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

ModelField: PQRIField:

Parent Long Name: Previously Attempted Case Format: Text (categorical values

Canceled specified by STS)

ParentShortName: PCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

1 Anesthesiology event Includes airway, line insertion and medication issues

encountered during induction

2 Cardiac arrest Patient deterioration unrelated to induction

3 Equipment/supply issue Device malfunction or supply issue including devices

and blood products

4 Unanticipated tumor

5 Other

Long Name: Previously Attempted Canceled Case Procedure - CABG SeqNo: 2419

Short Name: PCancCaseCAB Core: Yes

Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included coronary artery bypass

grafting.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Previously Attempted Case Format: Text (categorical values

Canceled specified by STS)

ParentShortName: PCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Previously Attempted Canceled Case Procedure - Valve SeqNo: 2420

Short Name: PCancCaseVal Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included a valve repair or

replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Previously Attempted Case Format: Text (categorical values

Canceled specified by STS)

ParentShortName: PCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2421

2 No

Long Name: Previously Attempted Canceled Case Procedure - Mechanical Assist SeqNo:

Device

Short Name: PCancCaseMech Core: Yes

Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included implanting or explanting

a mechanical assist device.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Previously Attempted Case Format: Text (categorical values

Canceled specified by STS)

ParentShortName: PCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Previously Attempted Canceled Case Procedure - Other Cardiac SeqNo: 2422

Short Name: PCancCaseOC Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included any other cardiac

procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Previously Attempted Case Format: Text (categorical values

Canceled specified by STS)

ParentShortName: PCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Version: 2.73

Long Name: Previously Attempted Canceled Case Procedure - Other Non-Cardiac SeqNo: 2423

Short Name: PCancCaseONC Section Name: Operative Core: Yes
Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included any other non-cardiac

procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Previously Attempted Case Format: Text (categorical values

Canceled specified by STS)

ParentShortName: PCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Current Case Canceled SeqNo: 2424

Short Name: CCancCase Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the current case was canceled or aborted after patient entered the operating room.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Long Name: Current Case Canceled Timing SeqNo: 2425

Short Name: CCancCaseTmg Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate at what point the current case was canceled or aborted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Current Case Canceled Format: Text (categorical values

specified by STS)

ParentShortName: CCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Prior to Induction of

Anesthesia

2 After Induction, Prior to

Incision

3 After Incision Made

Long Name: Current Case Canceled Reason SegNo: 2426

Short Name: CCancCaseRsn Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the reason why the current case was canceled or aborted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

ModelField: PQRIField:

Parent Long Name: Current Case Canceled Format: Text (categorical values

specified by STS)

ParentShortName: CCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value:</u> <u>Definition:</u>

1 Anesthesiology event Includes airway, line insertion and medication issues

encountered during induction

2 Cardiac arrest Patient deterioration unrelated to induction

3 Equipment/supply issue Device malfunction or supply issue including devices

and blood products

4 Unanticipated tumor

5 Other

Long Name: Current Case Canceled Procedure - CABG SeqNo: 2427

Short Name: CCancCaseCAB Core: Yes

Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included coronary artery bypass grafting.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Current Case Canceled Format: Text (categorical values

specified by STS)

ParentShortName: CCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Current Case Canceled Procedure - Valve SeqNo: 2428

Short Name: CCancCaseVal Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included a valve repair or replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Current Case Canceled Format: Text (categorical values

specified by STS)

ParentShortName: CCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Current Case Canceled Procedure - Mechanical Assist Device SeqNo: 2429

Short Name: CCancCaseMech Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included implanting or explanting a mechanical

assist device.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Current Case Canceled Format: Text (categorical values

specified by STS)

ParentShortName: CCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Current Case Canceled Procedure - Other Cardiac SeqNo: 2430

Short Name: CCancCaseOC Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included any other cardiac procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Current Case Canceled Format: Text (categorical values

specified by STS)

ParentShortName: CCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Current Case Canceled Procedure - Other Non-cardiac SeqNo: 2431

Short Name: CCancCaseONC Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included any other non-cardiac procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Current Case Canceled Format: Text (categorical values

specified by STS)

ParentShortName: CCancCase DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Operative Approach SeqNo: 2435

Short Name: OPApp Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the operative approach.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Full conventional sternotomy

2 Partial sternotomy

3 RIGHT OR LEFT parasternal

incision

4 Left Thoracotomy

5 Right Thoracotomy

6 Transverse sternotomy (includes clamshell)

7 Minimally invasive

Long Name: Robotic Technology Assisted SeqNo: 2436

Short Name: Robotic Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the cardiac surgery was assisted by robotic technology.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: CAB SeqNo: 2437

Short Name: OpCAB Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether coronary artery bypass grafting was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Valve SeqNo: 2440

Short Name: OpValve Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Valve Prosthesis Explant SeqNo: 2450

Short Name: ValExp Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a prosthetic valve or annuloplasty was explanted during this procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Valve Format: Text (categorical values

specified by STS)

ParentShortName: OpValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Valve Prosthesis Explant Postion SeqNo: 2451

Short Name: ValExpPos Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the location of the first explanted prosthetic valve or annuloplasty.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Valve Prosthesis Explant Format: Text (categorical values

specified by STS)

ParentShortName: ValExp DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Aortic

2 Mitral

3 Tricuspid

4 Pulmonic

Long Name: Valve Explant Type SeqNo: 2460

Short Name: ValExpTyp Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the first type of valve device explanted or enter unknown.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Valve Prosthesis Explant Format: Text (categorical values

specified by STS)

ParentShortName: ValExp DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Unknown

2 Mechanical Valve

3 Bioprosthetic Valve

4 Annuloplasty Device

- 5 Mitral Clip
- 6 Transcatheter Device

Long Name: Valve Explant Manufacturer SeqNo: 2461

Short Name: ValExpMan Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the name of the manufacturer of the first prosthesis explanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Valve Prosthesis Explant Format: Text (categorical values

specified by STS)

ParentShortName: ValExp DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 1 None (Homograft or Pulmonary Autograft)
- 2 ATS
- 3 Baxter
- 4 Biocore
- 5 Björk-Shiley
- 6 CarboMedics
- 7 Carpentier-Edwards
- 8 Cosgrove-Edwards
- 9 Cryolife
- 10 Cryolife O'Brien
- 11 Edwards
- 12 Genesee
- 13 Hancock
- 14 Ionescu-Shiley
- 15 Labcor
- 16 LifeNet
- 17 Lillehei-Kaster
- 18 MCRI
- 19 Medtronic
- 20 Medtronic Colvin Galloway

- 21 Medtronic-Duran
- 22 Medtronic-Hall
- 23 Mitroflow
- 24 OmniCarbon
- 25 OmniScience
- 26 Sorin
- 27 Sorin-Puig
- 28 St. Jude Medical
- 29 St. Jude Tailor
- 30 Starr-Edwards
- 31 Ultracor
- 98 Unknown
- 99 Other

Long Name: Valve Explant Device SeqNo: 2462

Short Name: ValExpDev Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the name of the first prosthesis explanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Valve Prosthesis Explant Format: Text (categorical values

specified by STS)

ParentShortName: ValExp DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 2 ATS Mechanical Prosthesis
- 3 Björk-Shiley Convex-Concave Mechanical

Prosthesis

- 4 Björk-Shiley Monostrut Mechanical Prosthesis
- 6 CarboMedics Mechanical Prosthesis
- 57 CarboMedics Carbo-Seal Ascending Aortic Valved Conduit Prosthesis

- 58 CarboMedics Carbo-Seal Valsalva Ascending Aortic Valved Conduit Prosthesis
- 59 CarboMedics Reduced Cuff Aortic Valve
- 60 CarboMedics Standard Aortic Valve
- 61 CarboMedics Top-Hat Supraannular Aortic Valve
- 62 CarboMedics OptiForm Mitral Valve
- 63 CarboMedics Standard Mitral Valve
- 64 CarboMedics Orbis Universal Valve
- 65 CarboMedics Small Adult Aortic and Mitral Valves
- 53 Lillehei-Kaster Mechanical Prosthesis
- 10 MCRI On-X Mechanical Prosthesis
- 8 Medtronic-Hall/Hall Easy-Fit Mechanical Prosthesis
- 66 Medtronic ADVANTAGE Mechanical Prosthesis
- 9 OmniCarbon Mechanical Prosthesis
- 54 OmniScience Mechanical Prosthesis
- 11 Sorin Bicarbon (Baxter Mira) Mechanical Prosthesis
- 12 Sorin Monoleaflet Allcarbon Mechanical Prosthesis
- 13 St. Jude Medical Mechanical Heart Valve
- 67 St. Jude Medical Masters Series Mechanical Heart Valve
- 68 St. Jude Medical Masters Series Aortic Valve Graft Prosthesis
- 69 St. Jude Medical Mechanical Heart Valve Hemodynamic Plus (HP) Series
- 70 St. Jude Medical Masters

Series Hemodynamic Plus Valve with FlexCuff Sewing Ring

- 71 St. Jude Medical Regent Valve
- 14 Starr-Edwards Caged-Ball Prosthesis
- 15 Ultracor Mechanical Prosthesis
- 133 Medtronic Hall Conduit
- 108 ATS 3f Aortic Bioprosthesis
- 72 Edwards Prima StentlessPorcine Bioprosthesis -Subcoronary
- 73 Edwards Prima StentlessPorcine Bioprosthesis Root
- 19 Biocor Porcine Bioprosthesis
- 74 Biocor Stentless PorcineBioprosthesis Subcoronary
- 75 Biocor Stentless Porcine Bioprosthesis - Root
- 21 CarboMedics PhotoFix Pericardial Bioprosthesis
- 76 Carpentier-Edwards Porcine Bioprosthesis
- 77 Edwards Prima Plus StentlessPorcine Bioprosthesis -Subcoronary
- 78 Edwards Prima Plus Stentless Porcine Bioprosthesis - Root
- 22 Carpentier-Edwards PERIMOUNT Pericardial Bioprosthesis
- 103 Carpentier-Edwards PERIMOUNT Pericardial Magna Bioprosthesis
- 23 Carpentier-Edwards Standard Porcine Bioprosthesis
- 25 Carpentier-Edwards Supra-Annular Aortic Porcine Bioprosthesis
- 79 Cryolife O'Brien StentlessPorcine Bioprosthesis -Subcoronary
- 80 Cryolife O'Brien Stentless Porcine Bioprosthesis - Root

- 55 Hancock Standard Porcine Bioprosthesis
- 28 Hancock II Porcine Bioprosthesis
- 29 Hancock Modified Orifice Porcine Bioprosthesis
- 30 Ionescu-Shiley Pericardial Bioprosthesis
- 31 Labcor Stented Porcine Bioprosthesis
- 81 Labcor Stentless Porcine Bioprosthesis - Subcoronary
- 82 Labcor Stentless Porcine Bioprosthesis - Root
- 83 Medtronic Freestyle Stentless Porcine Bioprosthesis -Subcoronary
- 84 Medtronic Freestyle Stentless Porcine Bioprosthesis - Root
- 35 Medtronic Intact Porcine Bioprosthesis
- 36 Medtronic Mosaic Porcine Bioprosthesis
- 85 Medtronic Contegra Bovine Jugular Bioprosthesis
- 37 Mitroflow Pericardial Bioprosthesis
- 39 St. Jude Medical Toronto SPV Stentless Porcine Bioprosthesis
- 40 St. Jude Medical-Bioimplant Porcine Bioprosthesis
- 86 St. Jude Medical Biocor Stented Tissue Valve
- 87 St. Jude Medical Epic Stented Porcine Bioprosthesis
- 88 St. Jude Medical Toronto Root Stentless Porcine Bioprosthesis
- 38 Sorin Pericarbon Stentless Pericardial Bioprosthesis
- 111 Carpentier-Edwards
 PERIMOUNT MAGNA
 Pericardial Bioprosthesis with
 Carpentier-Edwards
 Thermafix Tissue Process

- 112 Carpentier-Edwards PERIMOUNT Theon RSR Pericardial Bioprosthesis
- 113 Carpentier-Edwards
 PERIMOUNT RSR
 Pericardial Bioprosthesis
- 114 Carpentier-Edwards
 PERIMOUNT Theon
 Pericardial Bioprosthesis
- 115 Carpentier-Edwards S.A.V. Porcine Bioprosthesis
- 116 Edwards Prima Plus Stentless Bioprosthesis
- 117 Carpentier-Edwards
 PERIMOUNT Plus
 Pericardial Bioprosthesis with
 Tricentrix Holder
- 118 Carpentier-Edwards Duraflex Low Pressure Porcine Bioprosthesis
- 119 Carpentier-Edwards Duraflex Low Pressure ESR Porcine Bioprosthesis
- 120 Carpentier-Edwards
 PERIMOUNT Theon
 Pericardial Bioprosthesis with
 Tricentrix Holder.
- 121 St. Jude Medical Biocor Supra Stented Porcine Bioprosthesis
- 122 St. Jude Medical Epic Supra Stented Porcine Bioprosthesis.
- 134 Carpentier Edwards Physio II
- 135 Carpentier Edwards
 Perimount Magna Mitral
 Valve
- 89 CryoLife Aortic Homograft
- 90 CryoLife Pulmonary Homograft
- 91 CryoLife CryoValve SG(Decellularized)Aortic Homograft
- 92 CryoLife CryoValve SG Pulmonary Homograft
- 41 Homograft Aortic Subcoronary

- 42 Homograft Aortic Root
- 43 Homograft Mitral
- 44 Homograft Pulmonic Root
- 93 LifeNet CV Allografts
- 45 Pulmonary Autograft to aortic root (Ross Procedure)
- 109 ATS Simulus Flex-O Ring
- 110 ATS Simulus Flex-C Band
- 94 CarboMedics AnnuloFlo Ring
- 95 CarboMedics AnnuloFlex Ring
- 96 CarboMedics CardioFix Bovine Pericardium with PhotoFix Technology
- 46 Carpentier-Edwards Classic Annuloplasty Ring
- 104 Carpentier-Edwards Geoform Ring
- 105 Carpentier-Edwards IMR Etlogix Ring
- 47 Carpentier-Edwards Physio Annuloplasty System Ring
- 48 Cosgrove-Edwards Annuloplasty System Ring
- 97 Edwards MC³ Tricuspid Annuloplasty System
- 98 Genesee Sculptor Annuloplasty Ring
- 49 Medtronic Sculptor Ring
- 50 Medtronic-Duran AnCore Ring
- 51 Sorin-Puig-Messana Ring
- 52 St. Jude Medical Séguin Annuloplasty Ring.
- 106 St. Jude Medical Rigid Saddle Ring
- 99 St. Jude Medical Tailor Annuloplasty Ring
- 123 ATS Simulus Flexible Annuloplasty ring.
- 124 ATS Simulus Semi-Rigid Annuloplasty ring
- 125 Carpentier-Edwards Classic

Annuloplasty Ring with Duraflo Treatment

126 Carpentier-Edwards Physio Annuloplasty Ring with Duraflo Treatment

127 Cosgrove-Edwards
Annuloplasty System with
Duraflo Treatment

128 Myxo Etlogix Annuloplasty Ring

131 Sorin Memo 3D Ring

132 UNIRING, Universal Annuloplasty System

137 Medtronic Colvin Galloway Future Ring

138 Medtronic Profile 3D Ring

100 Medtronic Colvin Galloway Future Band

101 Medtronic Duran Band

102 Medtronic Duran - Ancore Band

107 St. Jude Medical Tailor Annuloplasty Band

777 Other

Long Name: Second Valve Prosthesis Explant SeqNo: 2463

Short Name: ValExp2 Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a second prosthetic valve or annuloplasty was explanted during this procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

ModelField: PQRIField:

Parent Long Name: Valve Format: Text (categorical values

specified by STS)

ParentShortName: OpValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

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Long Name: Second Valve Prosthesis Explant Postion SeqNo: 2464

Short Name: ValExpPos2 Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the location of the second explanted prosthetic valve or annuloplasty.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Second Valve Prosthesis Format: Text (categorical values

Explant specified by STS)

ParentShortName: ValExp2 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Aortic

2 Mitral

3 Tricuspid

4 Pulmonic

Long Name: Second Valve Explant Type SeqNo: 2465

Short Name: ValExpTyp2 Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the second type of valve device explanted or enter unknown.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Second Valve Prosthesis Format: Text (categorical values

Explant specified by STS)

ParentShortName: ValExp2 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Unknown

2 Mechanical Valve

3 Bioprosthetic Valve

- 4 Annuloplasty Device
- 5 Mitral Clip
- 6 Transcatheter Device

Long Name: Second Valve Explant Manufacturer SeqNo: 2466

Short Name: ValExpMan2 Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the name of the manufacturer of the second prosthesis explanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Second Valve Prosthesis Format: Text (categorical values

Explant specified by STS)

ParentShortName: ValExp2 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 1 None (Homograft or Pulmonary Autograft)
- 2 ATS
- 3 Baxter
- 4 Biocore
- 5 Björk-Shiley
- 6 CarboMedics
- 7 Carpentier-Edwards
- 8 Cosgrove-Edwards
- 9 Cryolife
- 10 Cryolife O'Brien
- 11 Edwards
- 12 Genesee
- 13 Hancock
- 14 Ionescu-Shiley
- 15 Labcor
- 16 LifeNet
- 17 Lillehei-Kaster
- 18 MCRI
- 19 Medtronic

- 20 Medtronic Colvin Galloway
- 21 Medtronic-Duran
- 22 Medtronic-Hall
- 23 Mitroflow
- 24 OmniCarbon
- 25 OmniScience
- 26 Sorin
- 27 Sorin-Puig
- 28 St. Jude Medical
- 29 St. Jude Tailor
- 30 Starr-Edwards
- 31 Ultracor
- 98 Unknown
- 99 Other

Long Name:Second Valve Explant DeviceSeqNo:2467Short Name:ValExpDev2Core:Yes

Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the name of the first prosthesis explanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Second Valve Prosthesis Format: Text (categorical values

Explant specified by STS)

ParentShortName: ValExp2 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 2 ATS Mechanical Prosthesis
- 3 Björk-Shiley Convex-Concave Mechanical Prosthesis
- 4 Björk-Shiley Monostrut Mechanical Prosthesis
- 6 CarboMedics Mechanical Prosthesis
- 57 CarboMedics Carbo-Seal Ascending Aortic Valved

Conduit Prosthesis

- 58 CarboMedics Carbo-Seal Valsalva Ascending Aortic Valved Conduit Prosthesis
- 59 CarboMedics Reduced Cuff Aortic Valve
- 60 CarboMedics Standard Aortic Valve
- 61 CarboMedics Top-Hat Supraannular Aortic Valve
- 62 CarboMedics OptiForm Mitral Valve
- 63 CarboMedics Standard Mitral Valve
- 64 CarboMedics Orbis Universal Valve
- 65 CarboMedics Small Adult Aortic and Mitral Valves
- 53 Lillehei-Kaster Mechanical Prosthesis
- 10 MCRI On-X Mechanical Prosthesis
- 8 Medtronic-Hall/Hall Easy-Fit Mechanical Prosthesis
- 66 Medtronic ADVANTAGE Mechanical Prosthesis
- 9 OmniCarbon Mechanical Prosthesis
- 54 OmniScience Mechanical Prosthesis
- 11 Sorin Bicarbon (Baxter Mira) Mechanical Prosthesis
- 12 Sorin Monoleaflet Allcarbon Mechanical Prosthesis
- 13 St. Jude Medical Mechanical Heart Valve
- 67 St. Jude Medical Masters Series Mechanical Heart Valve
- 68 St. Jude Medical Masters Series Aortic Valve Graft Prosthesis
- 69 St. Jude Medical Mechanical Heart Valve Hemodynamic Plus (HP) Series

- 70 St. Jude Medical Masters Series Hemodynamic Plus Valve with FlexCuff Sewing Ring
- 71 St. Jude Medical Regent Valve
- 14 Starr-Edwards Caged-Ball Prosthesis
- 15 Ultracor Mechanical Prosthesis
- 133 Medtronic Hall Conduit
- 108 ATS 3f Aortic Bioprosthesis
- 72 Edwards Prima Stentless Porcine Bioprosthesis -Subcoronary
- 73 Edwards Prima StentlessPorcine Bioprosthesis Root
- 19 Biocor Porcine Bioprosthesis
- 74 Biocor Stentless Porcine Bioprosthesis - Subcoronary
- 75 Biocor Stentless Porcine Bioprosthesis - Root
- 21 CarboMedics PhotoFix Pericardial Bioprosthesis
- 76 Carpentier-Edwards Porcine Bioprosthesis
- 77 Edwards Prima Plus StentlessPorcine Bioprosthesis -Subcoronary
- 78 Edwards Prima Plus Stentless Porcine Bioprosthesis - Root
- 22 Carpentier-Edwards PERIMOUNT Pericardial Bioprosthesis
- 103 Carpentier-Edwards PERIMOUNT Pericardial Magna Bioprosthesis
- 23 Carpentier-Edwards Standard Porcine Bioprosthesis
- 25 Carpentier-Edwards Supra-Annular Aortic Porcine Bioprosthesis
- 79 Cryolife O'Brien StentlessPorcine Bioprosthesis -Subcoronary
- 80 Cryolife O'Brien Stentless

- Porcine Bioprosthesis Root
- 55 Hancock Standard Porcine Bioprosthesis
- 28 Hancock II Porcine Bioprosthesis
- 29 Hancock Modified Orifice Porcine Bioprosthesis
- 30 Ionescu-Shiley Pericardial Bioprosthesis
- 31 Labcor Stented Porcine Bioprosthesis
- 81 Labcor Stentless Porcine Bioprosthesis - Subcoronary
- 82 Labcor Stentless Porcine Bioprosthesis - Root
- 83 Medtronic Freestyle StentlessPorcine Bioprosthesis -Subcoronary
- 84 Medtronic Freestyle Stentless Porcine Bioprosthesis - Root
- 35 Medtronic Intact Porcine Bioprosthesis
- 36 Medtronic Mosaic Porcine Bioprosthesis
- 85 Medtronic Contegra Bovine Jugular Bioprosthesis
- 37 Mitroflow Pericardial Bioprosthesis
- 39 St. Jude Medical Toronto SPV Stentless Porcine Bioprosthesis
- 40 St. Jude Medical-Bioimplant Porcine Bioprosthesis
- 86 St. Jude Medical Biocor Stented Tissue Valve
- 87 St. Jude Medical Epic Stented Porcine Bioprosthesis
- 88 St. Jude Medical Toronto Root Stentless Porcine Bioprosthesis
- 38 Sorin Pericarbon Stentless Pericardial Bioprosthesis
- 111 Carpentier-Edwards
 PERIMOUNT MAGNA
 Pericardial Bioprosthesis with

Carpentier-Edwards Thermafix Tissue Process

- 112 Carpentier-Edwards PERIMOUNT Theon RSR Pericardial Bioprosthesis
- 113 Carpentier-Edwards
 PERIMOUNT RSR
 Pericardial Bioprosthesis
- 114 Carpentier-Edwards
 PERIMOUNT Theon
 Pericardial Bioprosthesis
- 115 Carpentier-Edwards S.A.V. Porcine Bioprosthesis
- 116 Edwards Prima Plus Stentless Bioprosthesis
- 117 Carpentier-Edwards
 PERIMOUNT Plus
 Pericardial Bioprosthesis with
 Tricentrix Holder
- 118 Carpentier-Edwards Duraflex Low Pressure Porcine Bioprosthesis
- 119 Carpentier-Edwards Duraflex Low Pressure ESR Porcine Bioprosthesis
- 120 Carpentier-Edwards
 PERIMOUNT Theon
 Pericardial Bioprosthesis with
 Tricentrix Holder.
- 121 St. Jude Medical Biocor Supra Stented Porcine Bioprosthesis
- 122 St. Jude Medical Epic Supra Stented Porcine Bioprosthesis.
- 134 Carpentier Edwards Physio II
- 135 Carpentier Edwards
 Perimount Magna Mitral
 Valve
- 89 CryoLife Aortic Homograft
- 90 CryoLife Pulmonary Homograft
- 91 CryoLife CryoValve SG(Decellularized)Aortic Homograft
- 92 CryoLife CryoValve SG Pulmonary Homograft

- 41 Homograft Aortic Subcoronary
- 42 Homograft Aortic Root
- 43 Homograft Mitral
- 44 Homograft Pulmonic Root
- 93 LifeNet CV Allografts
- 45 Pulmonary Autograft to aortic root (Ross Procedure)
- 109 ATS Simulus Flex-O Ring
- 110 ATS Simulus Flex-C Band
- 94 CarboMedics AnnuloFlo Ring
- 95 CarboMedics AnnuloFlex Ring
- 96 CarboMedics CardioFix Bovine Pericardium with PhotoFix Technology
- 46 Carpentier-Edwards Classic Annuloplasty Ring
- 104 Carpentier-Edwards Geoform Ring
- 105 Carpentier-Edwards IMR Etlogix Ring
- 47 Carpentier-Edwards Physio Annuloplasty System Ring
- 48 Cosgrove-Edwards
 Annuloplasty System Ring
- 97 Edwards MC³ Tricuspid Annuloplasty System
- 98 Genesee Sculptor Annuloplasty Ring
- 49 Medtronic Sculptor Ring
- 50 Medtronic-Duran AnCore Ring
- 51 Sorin-Puig-Messana Ring
- 52 St. Jude Medical Séguin Annuloplasty Ring.
- 106 St. Jude Medical Rigid Saddle Ring
- 99 St. Jude Medical Tailor Annuloplasty Ring
- 123 ATS Simulus Flexible Annuloplasty ring.
- 124 ATS Simulus Semi-Rigid

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Annuloplasty ring

- 125 Carpentier-Edwards Classic Annuloplasty Ring with Duraflo Treatment
- 126 Carpentier-Edwards Physio Annuloplasty Ring with Duraflo Treatment
- 127 Cosgrove-Edwards
 Annuloplasty System with
 Duraflo Treatment
- 128 Myxo Etlogix Annuloplasty Ring
- 131 Sorin Memo 3D Ring
- 132 UNIRING, Universal Annuloplasty System
- 137 Medtronic Colvin Galloway Future Ring
- 138 Medtronic Profile 3D Ring
- 100 Medtronic Colvin Galloway Future Band
- 101 Medtronic Duran Band
- 102 Medtronic Duran Ancore Band
- 107 St. Jude Medical Tailor Annuloplasty Band

777 Other

Long Name: VAD SeqNo: 2470
Short Name: VAD Core: No

Section Name: Operative Harvest: No

DBTableName AdultData

Definition: Indicate whether a ventricular assist device (VAD) was implanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VAD Implanted or Removed SeqNo: 2480

Short Name: VADProc Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a VAD was implanted or removed during this procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Yes, implanted

3 Yes, explanted

4 Yes, implanted and explanted

Long Name: Other Card SeqNo: 2490

Short Name: OpOCard Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether an other cardiac procedure was done (other than CABG and/or Valve procedures).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name:Other Non CardSeqNo:2500Short Name:OpONCardCore:YesSection Name:OperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate whether a non-cardiac procedure was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Unplanned Procedure SeqNo: 2501

Short Name: UnplProc Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate if an unplanned procedure was done during this operation.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Yes, unsuspected patient disease or anatomy

3 Yes, surgical complication

Version: 2.73

Long Name: Unplanned CABG SeqNo: 2502

Short Name: UnplCABG Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether unplanned procedure was a CABG.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Unplanned Procedure Format: Text (categorical values

specified by STS)

ParentShortName: UnplProc DataLength:

ParentValue: = "Yes, unsuspected patient Data Source: User

disease or anatomy" or "Yes,

surgical complication"

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Unplanned Aortic Valve Procedure SeqNo: 2503

Short Name: UnplAV Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether unplanned procedure was an aortic valve repair or replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Unplanned Procedure Format: Text (categorical values

specified by STS)

ParentShortName: UnplProc DataLength:

ParentValue: = "Yes, unsuspected patient Data Source: User

disease or anatomy" or "Yes,

surgical complication"

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Unplanned Mitral Valve Procedure SeqNo: 2504

Short Name: UnplMV Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether unplanned procedure was a mitral valve repair or replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Data Source: User

Parent Long Name: Unplanned Procedure Format: Text (categorical values

specified by STS)

ParentShortName: UnplProc DataLength:

ParentValue: = "Yes, unsuspected patient

disease or anatomy" or "Yes,

surgical complication"

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Unplanned Aorta Procedure SeqNo: 2505

Short Name: UnplAo Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether unplanned procedure was an aorta procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Unplanned Procedure Format: Text (categorical values

specified by STS)

ParentShortName: UnplProc DataLength:

ParentValue: = "Yes, unsuspected patient Data Source: User

disease or anatomy" or "Yes,

surgical complication"

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Unplanned VAD SeqNo: 2506

Short Name: UnplVAD Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether unplanned procedure was a VAD insertion.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Data Source: User

Parent Long Name: Unplanned Procedure Format: Text (categorical values

specified by STS)

ParentShortName: UnplProc DataLength:

ParentValue: = "Yes, unsuspected patient

disease or anatomy" or "Yes,

surgical complication"

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Unplanned Other Procedure SeqNo: 2507

Short Name: UnplOth Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate if other unplanned procedure was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Unplanned Procedure Format: Text (categorical values

specified by STS)

ParentShortName: UnplProc DataLength:

ParentValue: = "Yes, unsuspected patient Data Source: User

disease or anatomy" or "Yes,

surgical complication"

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name:CPT-1 Code # 1SeqNo:2510Short Name:CPT1Code1Core:YesSection Name:OperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate the first CPT procedure code (CPT-1) pertaining to the surgery for which the data

collection form was initiated.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text - Length exactly 5

ParentShortName: DataLength:

ParentValue: Data Source: User or Automatic

Long Name:CPT-1 Code # 2SeqNo:2520Short Name:CPT1Code2Core:YesSection Name:OperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate, if applicable, the second CPT procedure code (CPT-1) pertaining to the surgery for which

the data collection form was initiated.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPT-1 Code # 1 Format: Text - Length exactly 5

ParentShortName: CPT1Code1 DataLength:

Version: 2.73

Long Name: CPT-1 Code # 3 SeqNo: 2530

Short Name: CPT1Code3 Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate, if applicable, the third CPT procedure code (CPT-1) pertaining to the surgery for which the

data collection form was initiated.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPT-1 Code # 2 Format: Text - Length exactly 5

ParentShortName: CPT1Code2 DataLength:

ParentValue: Is Not Missing Data Source: User or Automatic

Long Name:CPT-1 Code # 4SeqNo:2540Short Name:CPT1Code4Core:YesSection Name:OperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate, if applicable, the fourth CPT procedure code (CPT-1) pertaining to the surgery for which

the data collection form was initiated.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPT-1 Code # 3 Format: Text - Length exactly 5

ParentShortName: CPT1Code3 DataLength:

Version: 2.73

Yes

Harvest:

 Long Name:
 CPT-1 Code # 5
 SeqNo:
 2550

 Short Name:
 CPT1Code5
 Core:
 Yes

Section Name: Operative DBTableName AdultData

Definition: Indicate, if applicable, the fifth CPT procedure code (CPT-1) pertaining to the surgery for which the

data collection form was initiated.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPT-1 Code # 4 Format: Text - Length exactly 5

ParentShortName: CPT1Code4 DataLength:

ParentValue: Is Not Missing Data Source: User or Automatic

Long Name:CPT-1 Code # 6SeqNo:2560Short Name:CPT1Code6Core:YesSection Name:OperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate, if applicable, the sixth CPT procedure code (CPT-1) pertaining to the surgery for which

the data collection form was initiated.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPT-1 Code # 5 Format: Text - Length exactly 5

ParentShortName: CPT1Code5 DataLength:

Version: 2.73

Long Name: CPT-1 Code # 7 SeqNo: 2570

Short Name: CPT1Code7 Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate, if applicable, the seventh CPT procedure code (CPT-1) pertaining to the surgery for which

the data collection form was initiated.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPT-1 Code # 6 Format: Text - Length exactly 5

ParentShortName: CPT1Code6 DataLength:

ParentValue: Is Not Missing Data Source: User or Automatic

Long Name:CPT-1 Code # 8SeqNo:2580Short Name:CPT1Code8Core:YesSection Name:OperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate, if applicable, the eighth CPT procedure code (CPT-1) pertaining to the surgery for which

the data collection form was initiated.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPT-1 Code #7 Format: Text - Length exactly 5

ParentShortName: CPT1Code7 DataLength:

Version: 2.73

Long Name:CPT-1 Code # 9SeqNo:2590Short Name:CPT1Code9Core:YesSection Name:OperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate, if applicable, the ninth CPT procedure code (CPT-1) pertaining to the surgery for which

the data collection form was initiated.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPT-1 Code # 8 Format: Text - Length exactly 5

ParentShortName: CPT1Code8 DataLength:

ParentValue: Is Not Missing Data Source: User or Automatic

Long Name:CPT-1 Code # 10SeqNo:2600Short Name:CPT1Code10Core:YesSection Name:OperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate, if applicable, the tenth CPT procedure code (CPT-1) pertaining to the surgery for which

the data collection form was initiated.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NOFField: No

ModelField: No PQRIField: No

Parent Long Name: CPT-1 Code # 9 Format: Text - Length exactly 5

ParentShortName: CPT1Code9 DataLength:

Version: 2.73

Long Name: OR Entry Date And Time SeqNo: 2610

Short Name: OREntryDT Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the date and time, to the nearest minute (using 24-hour clock), that the patient entered the

operating room. If the procedure was performed in a location other than the OR, record the time

when the sterile field, or its equivalent, was set up.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Date and time in the format

mm/dd/yyyy hh:mm with the

time in 24-hour clock

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: OR Exit Date And Time SeqNo: 2620
Short Name: ORExitDT Core: Yes

Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the date and time, to the nearest minute (using 24-hour clock), that the patient exits the

operating room. If the procedure was performed in a location other than the OR, record the time

when the sterile field, or its equivalent, was taken down.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PORIField: No

Parent Long Name: Format: Date and time in the format

mm/dd/yyyy hh:mm with the

time in 24-hour clock

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Initial Intubation Date And Time SeqNo: 2670

Short Name: IntubateDT Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm) (24 hour clock) ventilatory support started. The following guidelines apply:

- 1. Capture the intubation closest to the surgical start time. If the patient was intubated upon admission and remained intubated until the surgical start time, capture this intubation's date and time.
- 2. If the patient was admitted intubated (intubated at another institution) and remained continually intubated until the surgical start time, capture the patient's admission date and time.
- 3. If the patient was admitted with a tracheostomy in place without ventilatory support, capture the date and time closest to the surgical start time that ventilatory support was initiated.
- 4. If the patient was admitted with a tracheostomy in place receiving chronic ventilatory support, capture the admission date and time.
- 5. If the intubation date and time is otherwise unknown, enter the date and time the patient entered the operating room.
- 6. Do not alter the previously established date and time that ventilatory support was initiated for scenarios including, but not limited to, interruptions in ventilatory support due to accidental extubation/de-cannulation, elective tube change etc.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Date and time in the format

mm/dd/yyyy hh:mm with the

time in 24-hour clock

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Initial Extubation Date And Time SeqNo: 2680

Short Name: ExtubateDT Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm) (24 hour clock) ventilatory support initially

ceased after surgery. The following guidelines apply:

1. Capture the extubation closest to the surgical stop time.

- 2. If the patient has a tracheostomy and is separated from the mechanical ventilator postoperatively within the hospital admission, capture the date and time of separation from the mechanical ventilator closest to the surgical stop time.
- 3. If the patient expires while intubated or cannulated and on the ventilator, capture the date and time of expiration.

4. If patient is discharged on chronic ventilatory support, capture the date and time of discharge.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Date and time in the format

mm/dd/yyyy hh:mm with the

time in 24-hour clock

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: Skin Incision Start Date And Time SeqNo: 2690

Short Name: SIStartDT Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the date and time, to the nearest minute (using 24-hour clock), that the skin incision, or its

equivalent, was made. For example, during bronchoscopy, one would utilize the bronchoscope

insertion time.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Date and time in the format

mm/dd/yyyy hh:mm with the

time in 24-hour clock

ParentShortName: DataLength:

ParentValue: Data Source: User

Version: 2.73

2700 Long Name: Skin Incision Stop Date And Time SeqNo:

Short Name: **SIStopDT** Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Indicate the date and time, to the nearest minute (using 24-hour clock), that the skin incision was Definition:

closed, or its equivalent (i.e. removal of bronchoscope). If the patient leaves the operating room

with an open incision, collect the time that the dressings were applied to the incision.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Format: Date and time in the format

mm/dd/yyyy hh:mm with the

time in 24-hour clock

ParentShortName: DataLength:

Data Source: User ParentValue:

Long Name: Appropriate Antibiotic Selection SeqNo: 2710

Short Name: AbxSelect Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate if there was documentation of an order for a first generation or second generation

cephalosporin prophylactic antibiotic, documentation that it was given preoperatively or in the

event of a documented allergy an alternate antibiotic choice is ordered and administered.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

> ModelField: No PORIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

Data Source: User ParentValue:

Harvest Codes and Value Definitions:

Definition: Code: Value:

1 Yes 2 No

3 Exclusion

The reason for not ordering appropriate prophylactic

antibiotic is documented in the medical record.

Version: 2.73

Long Name: Appropriate Antibiotic Administration Timing SeqNo: 2720

Short Name: AbxTiming Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether prophylactic antibiotics were administered within one hour of surgical incision or

start of procedure if no incision required (two hours if receiving vancomycin or fluoroquinolone).

The surgical incision time is the time of the first incision, regardless of location.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: Yes

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value:</u>
Definition:

1 Yes
Given

2 No Not given, no documented reason

3 Exclusion Documented contraindication or rationale for not

administering antibiotic in medical record

Version: 2.73

Long Name: Appropriate Antibiotic Discontinuation SeqNo: 2730

Short Name: AbxDisc Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the prophylactic antibiotics were ordered to be discontinued OR were discontinued

within 48 hours after surgery end time.

Determining the timeframe (within 48 hours) begins at the "surgical end time" - the time the patient

leaves the operating room.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: Yes

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

3 Exclusion

Long Name: CPB Utilization SeqNo: 2740

Short Name: CPBUtil Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the level of CPB or coronary perfusion used during the procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 None No CPB or coronary perfusion used during the

procedure.

2750

2 Combination With or without CPB and/or with or without coronary

perfusion at any time during the procedure (capture conversions from off-pump to on-pump only):

At start of procedure: No CPB/No Coronary

Perfusion -> conversion to -> CPB

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

conversion to -> CPB

3 Full CPB or coronary perfusion was used for the entire

procedure

Long Name: CPB Utilization - Combination Plan SeqNo:

Short Name: CPBCmb Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the combination procedure from off-pump to on-pump was a planned or an

unplanned conversion.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

1 Planned The surgeon intended to treat with any of the

combination options described in "CPB utilization".

2 Unplanned The surgeon did not intend to treat with any of the

combination options described in "CPB utilization".

Version: 2.73

Long Name: CPB Utilization - Unplanned Combination Reason SeqNo: 2760

Short Name: CPBCmbR Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the reason that the procedure required the initiation of CPB and/or coronary perfusion.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPB Utilization - Format: Text (categorical values

Combination Plan specified by STS)

ParentShortName: CPBCmb DataLength:

ParentValue: = "Unplanned" Data Source: User

Harvest Codes:

Code: Value:

1 Exposure/visualization

2 Bleeding

3 Inadequate size and/or diffuse disease of distal vessel

4 Hemodynamic instability (hypotension/arrhythmias)

5 Conduit quality and/or trauma

9 Other

Long Name: Cardiopulmonary Bypass Time SeqNo: 2770

Short Name: PerfusTm Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the total number of minutes that systemic return is diverted into the cardiopulmonary bypass

(CPB) circuit and returned to the systemic system. This time period (Cardiopulmonary Bypass Time) includes all periods of cerebral perfusion and sucker bypass. This time period (Cardiopulmonary Bypass Time) excludes any circulatory arrest and modified ultrafiltration periods. If more than one period of CPB is required during the surgical procedure, the sum of all the CPB periods will equal

the

total number of CPB minutes.

LowValue: 1 UsualRangeLow: 1 ACCField: Not mapped

HighValue: 999 UsualRangeHigh: 300 ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPB Utilization Format: Integer

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Long Name: Lowest Temp SeqNo: 2780

Short Name: LwstTemp Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Record the patient's lowest core temperature during the procedure in degrees centigrade.

LowValue: 5.0 UsualRangeLow: ACCField: Not mapped

HighValue: 40.0 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Real

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Version: 2.73

Long Name: Lowest Hematocrit SeqNo: 2790

Short Name: LwstHct Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Enter the lowest hematocrit recorded during procedure.

LowValue: 1.0 UsualRangeLow: ACCField: Not mapped

HighValue: 50.0 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Real

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Long Name: Cannulation Method - Aorta and Femoral/Jugular Vein SeqNo: 2800

Short Name: CanAortFem Core: No Section Name: Operative Harvest: No

DBTableName AdultData

Definition: Indicate whether the method of cannulation included Aorta and Femoral/Jugular Vein for

cardiopulmonary bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Long Name: Cannulation Method - Femoral Artery and Femoral/Jugular Vein SeqNo: 2810

Short Name: CanFemFem Core: No Section Name: Operative Harvest: No

DBTableName AdultData

Definition: Indicate whether the method of cannulation included Femoral Artery and Femoral/Jugular Vein for

cardiopulmonary bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Cannulation Method - Aorta and Atrial/Caval SeqNo: 2820

Short Name: CanAortAtr Core: No Section Name: Operative Harvest: No

DBTableName AdultData

Definition: Indicate whether the method of cannulation included Aorta and Atrial/Caval for cardiopulmonary

bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Long Name: Cannulation Method - Femoral Artery and Atrial/Caval SeqNo: 2830

Short Name: CanFemAtr Core: No Section Name: Operative Harvest: No

DBTableName AdultData

Definition: Indicate whether the method of cannulation included Femoral Artery and Atrial/Caval for

cardiopulmonary bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Cannulation Method - Other SeqNo: 2840

Short Name: CanOther Core: No Section Name: Operative Harvest: No

DBTableName AdultData

Definition: Indicate whether the method of cannulation included any other method for cardiopulmonary bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Version: 2.73

Long Name: Cannulation - Arterial Cannulation Site - Aortic SeqNo: 2851

Short Name: CanArtStAort Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included the aorta.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Cannulation - Arterial Cannulation Site - Femoral SegNo: 2852

Short Name: CanArtStFem Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included a femoral artery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Cannulation - Arterial Cannulation Site - Axillary SeqNo: 2853

Short Name: CanArtStAx Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included an axillary artery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Cannulation - Arterial Cannulation Site - Other SeqNo: 2854

Short Name: CanArtStOth Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included any other artery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Cannulation - Venous Cannulation Site - Femoral SeqNo: 2856

Short Name: CanVenStFem Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included a femoral vein.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Cannulation - Venous Cannulation Site - Jugular SeqNo: 2857

Short Name: CanVenStJug Core: Yes

Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included a jugular vein.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Cannulation - Venous Cannulation Site - Right Atrial SeqNo: 2858

Short Name: CanVenStRtA Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included the right atrium.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Cannulation - Venous Cannulation Site - Left Atrial SegNo: 2859

Short Name: CanVenStLfA Core: Yes

Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included the left atrium.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Cannulation - Venous Cannulation Site - Pulmonary Vein SeqNo: 2861

Short Name: CanVenStPulm Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included a pulmonary vein.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Cannulation - Venous Cannulation Site - Caval/Bicaval SegNo: 2862

Short Name: CanVenStBi Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included the superior and/or inferior vena

cava.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Cannulation - Venous Cannulation Site - Other SeqNo: 2863

Short Name: CanVenStOth Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included any other site.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CPB Utilization Format: Text (categorical values

specified by STS)

ParentShortName: CPBUtil DataLength:

ParentValue: = "Combination" or "Full" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Circulatory Arrest SeqNo: 2865

Short Name: CircArr Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether or not circulatory arrest was utilized during the procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Circulatory Arrest Time Without Cerebral Perfusion SeqNo: 2866

Short Name: DHCATm Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the total number of minutes of deep hypothermic circulatory arrest without cerebral

perfusion. If more than one period of circulatory arrest is required during this surgical procedure,

the sum of these periods is equal to the total duration of circulatory arrest.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 300 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Circulatory Arrest Format: Integer

ParentShortName: CircArr DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Circulatory Arrest With Cerebral Perfusion SeqNo: 2867

Short Name: CPerfUtil Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether circulatory arrest with cerebral perfusion was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Circulatory Arrest Format: Text (categorical values

specified by STS)

ParentShortName: CircArr DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

Version: 2.73

Long Name: Cerebral Perfusion Time SeqNo: 2868

Short Name: CPerfTime Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the total number of minutes cerebral perfusion was performed. This would include

antegrade and/or retrograde cerebral perfusion strategies.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 999 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Circulatory Arrest With Format: Integer

Cerebral Perfusion

ParentShortName: CPerfUtil DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Cerebral Perfusion Type SeqNo: 2869

Short Name: CPerfTyp Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate type of cerebral perfusion utilized.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Circulatory Arrest With Format: Text (categorical values

Cerebral Perfusion specified by STS)

ParentShortName: CPerfUtil DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Antegrade

2 Retrograde

3 Both antegrade and retrograde

Long Name: Aortic Occlusion SeqNo: 2870

Short Name: AortOccl Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the technique of aortic occlusion used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

5 None - beating heart

6 None - fibrillating heart

2 Aortic Crossclamp

3 Balloon Occlusion

Long Name: Cross Clamp Time (min) SeqNo: 2880

Short Name: XClampTm Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the total number of minutes that the coronary circulation is mechanically isolated from

systemic circulation, either by an aortic cross clamp or systemic circulatory arrest.

LowValue: 0 UsualRangeLow: 0 ACCField: Not mapped

HighValue: 600 UsualRangeHigh: 180 ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Aortic Occlusion Format: Integer

ParentShortName: AortOccl DataLength:

ParentValue: = "Aortic Crossclamp" or Data Source: User

"Balloon Occlusion"

Long Name: Cardioplegia SeqNo: 2890

Short Name: Cplegia Core: No
Section Name: Operative Harvest: No

DBTableName AdultData

Definition: Indicate whether cardioplegia was used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Cardioplegia Delivery SeqNo: 2900

Short Name: CplegiaDeliv Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the delivery method of cardioplegia if used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Antegrade

3 Retrograde

4 Both

Version: 2.73

Long Name: Cardioplegia Type SeqNo: 2901

Short Name: CplegiaType Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the type of cardioplegia used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Cardioplegia Delivery Format: Text (categorical values

specified by STS)

ParentShortName: CplegiaDeliv DataLength:

ParentValue: = "Antegrade", "Retrograde" Data Source: User

or "Both"

Harvest Codes:

Code: Value:

1 Blood

2 Crystalloid

3 Both

4 Other

Long Name: Cerebral Oximetry Used SeqNo: 2930

Short Name: CerOxUsed Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether cerebral oximetry was used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Pre-Induction Baseline Regional Oxygen Saturation - Left SeqNo: 2940

Short Name: PreRSO2Lft Core: Yes
Section Name: Operative Harvest: Optional

DBTableName AdultData

Definition: Indicate the percent baseline left cerebral regional oxygen saturation (rSO2) values at the beginning

of the operation, when the patient is awake and functional. Patient can be sedated or on

supplemental oxygen at the time measurement is taken. In the absence of a user-specified baseline, the cerebral oximeter will automatically select a baseline value from the first few minutes of the case.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 99 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Cerebral Oximetry Used Format: Integer

ParentShortName: CerOxUsed DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Pre-Induction Baseline Regional Oxygen Saturation - Right SeqNo: 2950

Short Name: PreRSO2Rt Core: Yes
Section Name: Operative Harvest: Optional

DBTableName AdultData

Definition: Indicate the percent baseline right cerebral regional oxygen saturation (rSO2) values at the

beginning of the operation, when the patient is awake and functional. Patient can be sedated or on supplemental oxygen at the time measurement is taken. In the absence of a user-specified baseline, the cerebral oximeter will automatically select a baseline value from the first few minutes of the case.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 99 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Cerebral Oximetry Used Format: Integer

ParentShortName: CerOxUsed DataLength:

Long Name: Cumulative Saturation Below Threshold - Left SeqNo: 2960

Short Name: CumulSatLft Core: Yes
Section Name: Operative Harvest: Optional

DBTableName AdultData

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of

75% of the baseline rSO2 value (relative decline of 25% below baseline) for the left rSO2.

Calculated by the cerebral oximeter by multiplying the difference between the threshold and current

rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated throughout the operation. Units are minute-%. This is also called area under the curve (AUC).

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 9999 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Cerebral Oximetry Used Format: Integer

ParentShortName: CerOxUsed DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Cumulative Saturation Below Threshold - Right SeqNo: 2970

Short Name: CumulSatRt Core: Yes
Section Name: Operative Harvest: Optional

DBTableName AdultData

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of

75% of the baseline rSO2 value (relative decline of 25% below baseline) for the right rSO2.

Calculated by the cerebral oximeter by multiplying the difference between the threshold and current

rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated throughout the operation. Units are minute-%. This is also called area under the curve (AUC).

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 9999 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Cerebral Oximetry Used Format: Integer

ParentShortName: CerOxUsed DataLength:

Version: 2.73

Long Name: Cerebral Oximeter Provided The First Indication SeqNo: 2980

Short Name: COFirstInd Core: Yes
Section Name: Operative Harvest: Optional

DBTableName AdultData

Definition: Indicate whether the cerebral oximeter provided the first indication of a technical problem or

physiological change in the patient that could potentially lead to an adverse patient outcome.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Cerebral Oximetry Used Format: Text (categorical values

specified by STS)

ParentShortName: CerOxUsed DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Skin Closure Regional Oxygen Saturation - Left SeqNo: 2990

Short Name: SCRSO2Lft Core: Yes
Section Name: Operative Harvest: Optional

DBTableName AdultData

Definition: Indicate the left cerebral regional oxygen saturation of blood (rSO2) value at the time of skin

closure at the end of the operation. Units are %.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 99 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Cerebral Oximetry Used Format: Integer

ParentShortName: CerOxUsed DataLength:

Version: 2.73

Long Name: Skin Closure Regional Oxygen Saturation - Right SeqNo: 3000

Short Name: SCRSO2Rt Core: Yes
Section Name: Operative Harvest: Optional

DBTableName AdultData

Definition: Indicate the right cerebral regional oxygen saturation of blood (rSO2) value at the time of skin

closure at the end of the operation. Units are %.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 99 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Cerebral Oximetry Used Format: Integer

ParentShortName: CerOxUsed DataLength:

ParentValue: = "Yes" Data Source: User

Long Name:Concentric CalcificationSeqNo:3005Short Name:ConCalcCore:Yes

Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether concentric calcification of the aorta was discovered preoperatively or

introperatively using imaging or palpation.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Echo Assessment of Ascending Aorta/Arch SeqNo: 3010

Short Name: AsmtAscAA Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the Ascending Aorta/Arch was evaluated during surgery using TEE or epiaortic

ultrasound.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Assessment of Aorta Disease SeqNo: 3020

Short Name: AsmtAoDx Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate highest grade of disease in the ascending aorta indicated on epiaortic ultrasound or TEE.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Echo Assessment of Format: Text (categorical values

Ascending Aorta/Arch specified by STS)

ParentShortName: AsmtAscAA DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Normal Aorta

2 Extensive intimal thickening

3 Protruding Atheroma < 5 mm

4 Protruding Atheroma >= 5

mm

5 Mobile plaques

6 Not documented

Long Name: Assessment Altered Plan SeqNo: 3030

Short Name: AsmtAPln Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether echographic aortic assessment changed cannulation strategy or surgical plan.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Echo Assessment of Format: Text (categorical values

Ascending Aorta/Arch specified by STS)

ParentShortName: AsmtAscAA DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Intraop Blood Products SeqNo: 3040

Short Name: IBIdProd Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether blood products were transfused any time intraoperatively during the initial

surgery. Intraoperatively is defined as any blood started inside of the OR.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

Version: 2.73

Long Name: Intraop Blood Products Refused SeqNo: 3050

Short Name: IBldProdRef Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient or family refused blood products.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Intraop Blood Products Format: Text (categorical values

specified by STS)

ParentShortName: IBldProd DataLength:

ParentValue: = "No" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Intraop Blood Products - RBC Units SeqNo: 3060

Short Name: BdRBCU Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of units of packed red blood cells that were transfused intraoperatively.

Do not include autologous, cell-saver, pump-residual or chest tube recirculated blood.

LowValue: 0 UsualRangeLow: 0 ACCField: Not mapped

HighValue: 99 UsualRangeHigh: 10 ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Intraop Blood Products Format: Integer

ParentShortName: IBldProd DataLength:

Version: 2.73

Long Name: Intraop Blood Products - FFP Units SeqNo: 3070

Short Name: IBdFFPU Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of units of fresh frozen plasma that were transfused intraoperatively.

LowValue: 0 UsualRangeLow: 0 ACCField: Not mapped

HighValue: 99 UsualRangeHigh: 10 ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Intraop Blood Products Format: Integer

ParentShortName: IBldProd DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Intraop Blood Products - Cryo Units SeqNo: 3080

Short Name: IBdCryoU Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of units of cryoprecipitate that were transfused intraoperatively.

One bag of cryo = one unit.

The number of units is not volume dependent.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 99 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Intraop Blood Products Format: Integer

ParentShortName: IBldProd DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: Intraop Blood Products - Platelet Units SeqNo: 3090

Short Name: IBdPlatU Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of units of platelets that were transfused intraoperatively.

Count the dose pack as one unit. A dose pack may consist of 4, 6, 8, 10, or any number of donor

platelets obtained. The number of units coded is not volume dependent.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 99 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Intraop Blood Products Format: Integer

ParentShortName: IBldProd DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Intraop Blood Products - Factor VIIa SeqNo: 3091

Short Name: IBdFactorVII Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the amount of Factor VIIa that was given intraoperatively. Units are measured in

micrograms per kilogram.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 1000 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Intraop Blood Products Format: Integer

ParentShortName: IBldProd DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Intraop Medications - Aprotinin SeqNo: 3100

Short Name: IMedAprot Core: No Section Name: Operative Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient received Aprotinin in the operating room.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Intraop Medications - Aprotinin - Dose SeqNo: 3110

Short Name: IMedAprotD Core: No Section Name: Operative Harvest: No

DBTableName AdultData

Definition: Indicate the dosage of the Aprotinin the patient received in the operating room.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Intraop Medications - Format: Text (categorical values

Aprotinin specified by STS)

ParentShortName: IMedAprot DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:1 Full dose2 Half dose

Version: 2.73

Long Name: Intraop Antifibrinolytic Medications - Epsilon Amino-Caproic Acid SeqNo: 3120

Short Name: IMedEACA Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient received Epsilon Amino-Caproic Acid in the operating room.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Intraop Medications - Desmopressin SeqNo: 3130

Short Name: IMedDesmo Core: No Section Name: Operative Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient received Desmopressin in the operating room.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Version: 2.73

Long Name: Intraop Antifibrinolytic Medications - Tranexamic Acid SeqNo: 3140

Short Name: IMedTran Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient received Tranexamic Acid in the operating room.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Intraop TEE post procedure SeqNo: 3157

Short Name: InOpTEE Core: Yes
Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether intraoperative TEE was performed following procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Post Repair TEE Aortic Insufficiency SeqNo: 3158

Short Name: PRepAR Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest level of aortic regurgitation found on post CPB intraop TEE. Mild-to-Moderate

should be coded as moderate; moderate to severe should be coded as severe. Amount of AR should be the LAST ASSESSMENT before leaving the operating room. For example: if patient has a ortic repair, separates from CPB and finds moderate AR, surgeon goes back on and re-fixes, comes off

and finds no AR, it should be recorded as none.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Intraop TEE post procedure Format: Text (categorical values

specified by STS)

ParentShortName: InOpTEE DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Trace/trivial

3 Mild

4 Moderate

5 Severe

Long Name: Post Repair TEE Mitral Insufficiency SeqNo: 3159

Short Name: PRepMR Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest level of mitral regurgitation found on post CPB intraop TEE. Mild-to-Moderate

should be coded as moderate; moderate to severe should be coded as severe. Amount of MR should be the LAST ASSESSMENT before leaving the operating room. For example: if patient has mitral repair, separates from CPB and finds moderate MR, surgeon goes back on and re-fixes, comes off

and finds no MR, it should be recorded as none.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Intraop TEE post procedure Format: Text (categorical values

specified by STS)

ParentShortName: InOpTEE DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Trace/trivial

3 Mild

4 Moderate

5 Severe

Version: 2.73

Long Name: Post Repair TEE Tricuspid Insufficiency SeqNo: 3161

Short Name: PRepTR Core: Yes Section Name: Operative Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest level of tricuspid regurgitation found on post CPB intraop TEE. Mild-to-

Moderate should be coded as moderate; moderate to severe should be coded as severe. Amount of

TR should be the LAST ASSESSMENT before leaving the operating room.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Intraop TEE post procedure Format: Text (categorical values

specified by STS)

ParentShortName: InOpTEE DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Trace/trivial

3 Mild

4 Moderate

5 Severe

Long Name: Hybrid Procedure CAB PCI SeqNo: 3165

Short Name: CABHybrPCI Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a hybrid coronary surgical and interventional cardiology procedure was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name:Hybrid StatusSeqNo:3170Short Name:HybrStatCore:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate Status of Hybrid procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Hybrid Procedure CAB PCI Format: Text (categorical values

specified by STS)

ParentShortName: CABHybrPCI DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 Planned - concurrent Planned, performed same setting

2 Planned - staged Planned, performed same hospital admission

3 Unplanned Unplanned, performed after incomplete

revascularization or graft closure during the same

hospital admission

Long Name:Hybrid ProcedureSeqNo:3180Short Name:HybrProcCore:YesSection Name:Coronary BypassHarvest:Yes

bection trame. Coronary Bypass

DBTableName AdultData

Definition: Indicate PCI Procedure performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Hybrid Procedure CAB PCI Format: Text (categorical values

specified by STS)

ParentShortName: CABHybrPCI DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Angioplasty

2 Stent

Version: 2.73

Long Name: Dist Anast - Art # SeqNo: 3190

Short Name: DistArt Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses with arterial conduits, whether IMA, GEPA, radial

artery, etc.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 9 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: CAB Format: Integer

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Dist Anast - Vein # SeqNo: 3200

Short Name: DistVein Core: Yes

Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses with venous conduits.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 9 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: CAB Format: Integer

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: Dist Anast - Vein Harvest Technique SeqNo: 3205

Short Name: DistVeinHTech Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the technique used to harvest the vein graft(s).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Dist Anast - Vein # Format: Text (categorical values

specified by STS)

ParentShortName: DistVein DataLength:

ParentValue: > 0 Data Source: User

Harvest Codes:

Code: Value:

1 Endoscopic

2 Direct Vision (open)

3 Both

4 Cryopreserved

Long Name: Saphenous Vein Harvest Time SeqNo: 3206

Short Name: SaphHrvstT Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the total time in minutes for saphenous vein harvest.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 120 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Dist Anast - Vein Harvest Format: Integer

Technique

ParentShortName: DistVeinHTech DataLength:

ParentValue: = "Endoscopic", "Direct Data Source: User

Vision (open)", or "Both"

Version: 2.73

Long Name: Saphenous Vein Preparation Time SeqNo: 3207

Short Name: SaphPrepT Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the total amount of vein preparation time (e.g., side branch ligation, etc.) in minutes.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 60 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Dist Anast - Vein Harvest

Technique

Format: Integer

ParentShortName: DistVeinHTech DataLength:

ParentValue: = "Endoscopic", "Direct Data Source: User

Vision (open)", or "Both"

Long Name: IMA Artery Used SeqNo: 3210

Short Name: IMAArtUs Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: Yes

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Left IMA

2 Right IMA

3 Both IMAs

4 No IMA

Version: 2.73

Long Name: Reason for No IMA SeqNo: 3220

Short Name: NoIMARsn Core: Yes Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate PRIMARY reason Internal Mammary artery was not used as documented in medical record.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: IMA Artery Used Format: Text (categorical values

specified by STS)

ParentShortName: IMAArtUs DataLength:

ParentValue: = "No IMA" Data Source: User

Harvest Codes:

Code: Value:

1 The IMA is not a suitable conduit due to size or flow

2 Subclavian stenosis

3 Previous cardiac or thoracic surgery

4 Previous mediastinal radiation

5 Emergent or salvage procedure

6 No LAD disease

Long Name: IMA Dist Anast # SeqNo: 3230

Short Name: NumIMADA Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses done using IMA grafts.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 6 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: IMA Artery Used Format: Integer

ParentShortName: IMAArtUs DataLength:

ParentValue: = "Left IMA", "Right IMA", Data Source: User

or "Both IMAs"

STS Adult Cardiac Database Version: 2.73

Long Name: IMA Harvest Technique SeqNo: 3240

Short Name: IMATechn Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the technique of IMA harvest.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: IMA Artery Used Format: Text (categorical values

specified by STS)

ParentShortName: IMAArtUs DataLength:

ParentValue: = "Left IMA", "Right IMA", Data Source: User

or "Both IMAs"

Harvest Codes:

Code: Value:

2 Direct Vision (open)

3 Thoracoscopy

4 Combination

5 Robotic Assisted

Long Name: Radial Artery Used SeqNo: 3250

Short Name: RadArtUs Core: No Section Name: Coronary Bypass Harvest: No

DBTableName AdultData

Definition: Indicate which radial artery(ies) was/were used for grafts:

No Radial artery Left Radial artery Right Radial artery Both Radial arteries

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

ModelField: No PQRIField: No

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

3260

SeqNo:

1 No Radial

2 Left Radial

3 Right Radial

4 Both Radials

Long Name: Number of Radial Arteries Used

Short Name: NumRadArtUs Core: Yes Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of radial artery(ies) that were used for grafts.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 2 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB Format: Integer

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Radial Dist Anast # SeqNo: 3270

Short Name: NumRadDA Core: Yes

Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses done using radial artery grafts.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 6 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Number of Radial Arteries Format: Integer

Used

ParentShortName: NumRadArtUs DataLength:

ParentValue: >0 Data Source: User

Version: 2.73

Long Name: Radial Dist Anast Harvest Technique SeqNo: 3280

Short Name: RadHTech Core: Yes Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the technique used to harvest the radial artery(s).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Radial Dist Anast # Format: Text (categorical values

specified by STS)

ParentShortName: NumRadDA DataLength:

ParentValue: >0 Data Source: User

Harvest Codes:

Code: Value:

1 Endoscopic

2 Direct Vision (open)

3 Both

Long Name: Radial Artery Harvest Time SeqNo: 3285

Short Name: RadHrvstT Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the total time in minutes for radial artery harvesting.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 120 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Radial Dist Anast # Format: Integer

ParentShortName: NumRadDA DataLength:

ParentValue: >0 Data Source: User

STS Adult Cardiac Database Version: 2.73

Long Name: Radial Artery Preparation Time SeqNo: 3286

Short Name:RadPrepTCore:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate the total amount of artery preparation time (e.g., side branch ligation, etc.) in minutes.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 60 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Radial Dist Anast # Format: Integer

ParentShortName: NumRadDA DataLength:

ParentValue: >0 Data Source: User

Long Name: GEPA Dist Anast # SeqNo: 3290

Short Name: NumGEPDA Core: No Section Name: Coronary Bypass Harvest: No

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses done using gastro-epiploic artery grafts.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 6 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CAB Format: Integer

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: Other Arterial Distal Anastomoses # SeqNo: 3300

Short Name: NumOArtD Core: Yes Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of arterial distal anastomoses that were used, other than radial or IMA.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 6 UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CAB Format: Integer

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Anastomotic Device Used SeqNo: 3310

Short Name: AnasDevU Core: No
Section Name: Coronary Bypass Harvest: No

DBTableName AdultData

Definition: Indicate whether an anastomotic device/material was used for proximal or distal anastomoses such

as glue, magnets, clips, stapler, etc. Exclude sutures.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Anastomotic Device SeqNo: 3320

Short Name: AnasDev Core: No Section Name: Coronary Bypass Harvest: No

DBTableName AdultData

Definition: Indicate which type of anastomotic device was used. If more than one device used, indicate device

used on Distal Anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Anastomotic Device Used Format: Text (categorical values

specified by STS)

ParentShortName: AnasDevU DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Glue

2 Magnets

3 Clips

4 Staples

9 Other

Long Name: CAB Native Coronary Disease Location 01 SeqNo: 3355

Short Name: CABDisLoc01 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PORIField:

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Left Main

2 Proximal LAD

- 3 Mid LAD
- 4 Distal LAD
- 5 Diagonal 1
- 6 Diagonal 2
- 7 Circumflex
- 8 OM 1
- 9 OM 2
- 10 OM 3
- 11 RCA
- 12 PDA
- 13 PLB
- 14 AM branches
- 15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 01 SeqNo: 3356

Short Name: CABPctSten01 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 100 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB Format: Integer

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: CAB Previous Conduit 01 SeqNo: 3357

Short Name: CABPrevCon01 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes - Diseased

2 Yes - No disease

3 No previous conduit

Long Name:CAB Proximal Site 01SeqNo:3360Short Name:CABProximalSite01Core:Yes

Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 In Situ Mammary

2 Ascending aorta

3 Descending aorta

4 Subclavian artery

5 Innominate artery

- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Long Name: CAB Proximal Technique 01 SeqNo: 3370

Short Name: CABProxTech01 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

5 In Situ Mammary

- 1 Running
- 2 Interrupted
- 3 Anastomotic Device
- 4 Anastomotic Assist Device

Version: 2.73

Harvest:

CAB Conduit 01 SeqNo: 3380 Long Name: Short Name: CABConduit01 Core: Yes Yes

Section Name: Coronary Bypass

DBTableName AdultData

Definition: Indicate the conduit type used.

UsualRangeLow: Not mapped LowValue: ACCField:

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

= "Yes" Data Source: User ParentValue:

Harvest Codes:

Code: Value:

1 Vein graft

2 In Situ LIMA

3 In Situ RIMA

4 Free IMA

5 Radial artery

Other arteries, homograft

Long Name: CAB Distal Site 01 SegNo: 3390

Short Name: CABDistSite01 Core: Yes Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code: Value: **Definition:**

1 RCA Right Coronary Artery

2 AM Acute Marginal 3 PDA Posterior Descending Artery

4 PLB Posterolateral Branch

Frox LAD
 Mid LAD
 Middle Left Anterior Descending
 Distal LAD
 Distal Left Anterior Descending

8 Diag 1 First Diagonal
9 Diag 2 Second Diagonal
10 Ramus Ramus Intermedius
11 OM 1 First Obtuse Marginal
12 OM 2 Second Obtuse Marginal

14 Other

OM 3

13

Long Name: CAB Distal Technique 01 SeqNo: 3400

Short Name: CABDistTech01 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Third Obtuse Marginal

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Running

2 Interrupted

3 Clips

4 Anastomotic Device

Version: 2.73

Long Name: CAB Distal Position 01 SeqNo: 3410

Short Name: CABDistPos01 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 End to side

2 Sequential (side to side)

Long Name: CAB Endarterectomy 01 SeqNo: 3420

Short Name: CABEndArt01 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Version: 2.73

Long Name: CAB Hybrid PCI 01 SeqNo: 3430

Short Name: CABHyPCI01 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in

conjunction with this graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Angioplasty

3 Stent

Long Name: CAB 02 SeqNo: 3440

Short Name: CAB02 Core: Yes

Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a second Coronary Artery Bypass graft was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB Format: Text (categorical values

specified by STS)

ParentShortName: OpCAB DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Version: 2.73

Long Name: CAB Native Coronary Disease Location 02 SeqNo: 3445

Short Name: CABDisLoc02 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Text (categorical values

specified by STS)

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Left Main

2 Proximal LAD

3 Mid LAD

4 Distal LAD

5 Diagonal 1

6 Diagonal 2

7 Circumflex

8 OM 1

9 OM 2

10 OM 3

11 RCA

12 PDA

13 PLB

14 AM branches

15 Ramus

STS Adult Cardiac Database Version: 2.73

Long Name: CAB Highest Percent Stenosis In Native Vessel 02 SeqNo: 3446

Short Name: CABPctSten02 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 100 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Integer

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Long Name:CAB Previous Conduit 02SeqNo:3447Short Name:CABPrevCon02Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Text (categorical values

specified by STS)

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes - Diseased

2 Yes - No disease

3 No previous conduit

Version: 2.73

Long Name: CAB Proximal Site 02 SeqNo: 3450

Short Name: CABProximalSite02 Core: Yes Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Text (categorical values

specified by STS)

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 In Situ Mammary

2 Ascending aorta

3 Descending aorta

4 Subclavian artery

5 Innominate artery

6 T-graft off SVG

7 T-graft off Radial

8 T-graft off LIMA

9 T-graft off RIMA

Version: 2.73

Long Name: CAB Proximal Technique 02 SeqNo: 3460

Short Name: CABProxTech02 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Text (categorical values

specified by STS)

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

5 In Situ Mammary

1 Running

2 Interrupted

3 Anastomotic Device

4 Anastomotic Assist Device

Long Name:CAB Conduit 02SeqNo:3470Short Name:CABConduit02Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Text (categorical values

specified by STS)

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Vein graft

2 In Situ LIMA

3 In Situ RIMA

4 Free IMA

5 Radial artery

6 Other arteries, homograft

Long Name:CAB Distal Site 02SeqNo:3480Short Name:CABDistSite02Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Text (categorical values

specified by STS)

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code:Value:Definition:1RCARight Coronary Artery2AMAcute Marginal3PDAPosterior Descending Artery

4 PLB Posterolateral Branch

5 Prox LAD
 6 Mid LAD
 7 Distal LAD
 Proximal Left Anterior Descending
 Distal Left Anterior Descending

8 Diag 1
9 Diag 2
10 Ramus
11 OM 1
12 OM 2
13 OM 3
First Diagonal
Ramus Intermedius
First Obtuse Marginal
Second Obtuse Marginal
Third Obtuse Marginal

14 Other

Version: 2.73

Long Name: CAB Distal Technique 02 SeqNo: 3490

Short Name: CABDistTech02 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Text (categorical values

specified by STS)

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Running

2 Interrupted

3 Clips

4 Anastomotic Device

Long Name: CAB Distal Position 02 SeqNo: 3500

Short Name: CABDistPos02 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Text (categorical values

specified by STS)

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 End to side

2 Sequential (side to side)

Version: 2.73

Long Name: CAB Endarterectomy 02 SeqNo: 3510

Short Name: CABEndArt02 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Text (categorical values

specified by STS)

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: CAB Hybrid PCI 02 SeqNo: 3520

Short Name: CABHyPCI02 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in

conjunction with this graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Text (categorical values

specified by STS)

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Angioplasty

3 Stent

Version: 2.73

Long Name: CAB 03 SeqNo: 3530

Short Name: CAB03 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a third Coronary Artery Bypass graft was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 02 Format: Text (categorical values

specified by STS)

ParentShortName: CAB02 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: CAB Native Coronary Disease Location 03 SeqNo: 3535

Short Name: CABDisLoc03 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Text (categorical values

specified by STS)

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Left Main

2 Proximal LAD

3 Mid LAD

4 Distal LAD

5 Diagonal 1

6 Diagonal 2

7 Circumflex

8 OM 1

9 OM 2

10 OM 3

11 RCA

12 PDA

13 PLB

14 AM branches

15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 03 SeqNo: 3536

Short Name: CABPctSten03 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 100 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Integer

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: CAB Previous Conduit 03 SeqNo: 3537

Short Name: CABPrevCon03 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Text (categorical values

specified by STS)

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes - Diseased

- 2 Yes No disease
- 3 No previous conduit

Long Name:CAB Proximal Site 03SeqNo:3540Short Name:CABProximalSite03Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Text (categorical values

specified by STS)

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Version: 2.73

Long Name: CAB Proximal Technique 03 SeqNo: 3550

Short Name: CABProxTech03 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Text (categorical values

specified by STS)

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

5 In Situ Mammary

1 Running

2 Interrupted

3 Anastomotic Device

4 Anastomotic Assist Device

Long Name:CAB Conduit 03SeqNo:3560Short Name:CABConduit03Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Text (categorical values

specified by STS)

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Vein graft

2 In Situ LIMA

3 In Situ RIMA

4 Free IMA

- 5 Radial artery
- 6 Other arteries, homograft

Long Name:CAB Distal Site 03SeqNo:3570Short Name:CABDistSite03Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Text (categorical values

specified by STS)

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 RCA Right Coronary Artery

2 AM Acute Marginal

3 PDA Posterior Descending Artery

4 PLB Posterolateral Branch

5 Prox LAD
 6 Mid LAD
 7 Distal LAD
 Proximal Left Anterior Descending
 Distal LAD
 Distal Left Anterior Descending

8 Diag 1 First Diagonal
9 Diag 2 Second Diagonal
10 Ramus Ramus Intermedius
11 OM 1 First Obtuse Marginal
12 OM 2 Second Obtuse Marginal
13 OM 3 Third Obtuse Marginal

14 Other

Version: 2.73

Long Name: CAB Distal Technique 03 SeqNo: 3580

Short Name: CABDistTech03 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Text (categorical values

specified by STS)

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Running

2 Interrupted

3 Clips

4 Anastomotic Device

Long Name: CAB Distal Position 03 SeqNo: 3590

Short Name: CABDistPos03 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Text (categorical values

specified by STS)

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 End to side

2 Sequential (side to side)

Version: 2.73

Long Name: CAB Endarterectomy 03 SeqNo: 3600

Short Name: CABEndArt03 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Text (categorical values

specified by STS)

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: CAB Hybrid PCI 03 SeqNo: 3610

Short Name: CABHyPCI03 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in

conjunction with this graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Text (categorical values

specified by STS)

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Angioplasty

3 Stent

Version: 2.73

Long Name: CAB 04 SeqNo: 3620

Short Name: CAB04 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a fourth Coronary Artery Bypass graft was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 03 Format: Text (categorical values

specified by STS)

ParentShortName: CAB03 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: CAB Native Coronary Disease Location 04 SeqNo: 3625

Short Name: CABDisLoc04 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Text (categorical values

specified by STS)

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Left Main

2 Proximal LAD

3 Mid LAD

4 Distal LAD

5 Diagonal 1

6 Diagonal 2

7 Circumflex

8 OM 1

9 OM 2

10 OM 3

11 RCA

12 PDA

13 PLB

14 AM branches

15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 04 SeqNo: 3626

Short Name: CABPctSten04 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 100 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Integer

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: CAB Previous Conduit 04 SeqNo: 3627

Short Name: CABPrevCon04 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Text (categorical values

specified by STS)

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes - Diseased

- 2 Yes No disease
- 3 No previous conduit

Long Name:CAB Proximal Site 04SeqNo:3630Short Name:CABProximalSite04Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Text (categorical values

specified by STS)

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Version: 2.73

Long Name: CAB Proximal Technique 04 SeqNo: 3640

Short Name: CABProxTech04 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Text (categorical values

specified by STS)

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

5 In Situ Mammary

1 Running

2 Interrupted

3 Anastomotic Device

4 Anastomotic Assist Device

Long Name:CAB Conduit 04SeqNo:3650Short Name:CABConduit04Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Text (categorical values

specified by STS)

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Vein graft

2 In Situ LIMA

3 In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name:CAB Distal Site 04SeqNo:3660Short Name:CABDistSite04Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Text (categorical values

specified by STS)

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 RCA Right Coronary Artery

2 AM Acute Marginal

3 PDA Posterior Descending Artery

4 PLB Posterolateral Branch

5 Prox LAD
 6 Mid LAD
 7 Distal LAD
 Proximal Left Anterior Descending
 Distal LAD
 Distal Left Anterior Descending

8 Diag 1 First Diagonal
9 Diag 2 Second Diagonal
10 Ramus Ramus Intermedius
11 OM 1 First Obtuse Marginal
12 OM 2 Second Obtuse Marginal
13 OM 3 Third Obtuse Marginal

14 Other

Version: 2.73

Long Name: CAB Distal Technique 04 SeqNo: 3670

Short Name: CABDistTech04 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Text (categorical values

specified by STS)

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Running

2 Interrupted

3 Clips

4 Anastomotic Device

Long Name: CAB Distal Position 04 SeqNo: 3680

Short Name: CABDistPos04 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Text (categorical values

specified by STS)

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 End to side

2 Sequential (side to side)

Version: 2.73

Long Name: CAB Endarterectomy 04 SeqNo: 3690

Short Name: CABEndArt04 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Text (categorical values

specified by STS)

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: CAB Hybrid PCI 04 SeqNo: 3700

Short Name: CABHyPCI04 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in

conjunction with this graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Text (categorical values

specified by STS)

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Angioplasty

3 Stent

Version: 2.73

Long Name: CAB 05 SeqNo: 3710

Short Name: CAB05 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a fifth Coronary Artery Bypass graft was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 04 Format: Text (categorical values

specified by STS)

ParentShortName: CAB04 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: CAB Native Coronary Disease Location 05 SeqNo: 3715

Short Name: CABDisLoc05 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Text (categorical values

specified by STS)

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Left Main

2 Proximal LAD

3 Mid LAD

4 Distal LAD

5 Diagonal 1

6 Diagonal 2

7 Circumflex

8 OM 1

9 OM 2

10 OM 3

11 RCA

12 PDA

13 PLB

14 AM branches

15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 05 SeqNo: 3716

Short Name: CABPctSten05 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 100 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Integer

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: CAB Previous Conduit 05 SeqNo: 3717

Short Name: CABPrevCon05 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Text (categorical values

specified by STS)

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes - Diseased

- 2 Yes No disease
- 3 No previous conduit

Long Name:CAB Proximal Site 05SeqNo:3720Short Name:CABProximalSite05Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Text (categorical values

specified by STS)

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Version: 2.73

Long Name: CAB Proximal Technique 05 SeqNo: 3730

Short Name: CABProxTech05 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Text (categorical values

specified by STS)

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

5 In Situ Mammary

1 Running

2 Interrupted

3 Anastomotic Device

4 Anastomotic Assist Device

Long Name:CAB Conduit 05SeqNo:3740Short Name:CABConduit05Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Text (categorical values

specified by STS)

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Vein graft

2 In Situ LIMA

3 In Situ RIMA

4 Free IMA

5 Radial artery

6 Other arteries, homograft

Long Name:CAB Distal Site 05SeqNo:3750Short Name:CABDistSite05Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Text (categorical values

specified by STS)

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value:</u> <u>Definition:</u>

1 RCA Right Coronary Artery

2 AM Acute Marginal

3 PDA Posterior Descending Artery

4 PLB Posterolateral Branch

5 Prox LAD
 6 Mid LAD
 7 Distal LAD
 Proximal Left Anterior Descending
 Distal LAD
 Distal Left Anterior Descending

8 Diag 1 First Diagonal
9 Diag 2 Second Diagonal
10 Ramus Ramus Intermedius
11 OM 1 First Obtuse Marginal
12 OM 2 Second Obtuse Marginal
13 OM 3 Third Obtuse Marginal

14 Other

Version: 2.73

Long Name: CAB Distal Technique 05 SeqNo: 3760

Short Name: CABDistTech05 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Text (categorical values

specified by STS)

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Running

2 Interrupted

3 Clips

4 Anastomotic Device

Long Name: CAB Distal Position 05 SeqNo: 3770

Short Name: CABDistPos05 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Text (categorical values

specified by STS)

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 End to side

2 Sequential (side to side)

Version: 2.73

Long Name: CAB Endarterectomy 05 SeqNo: 3780

Short Name: CABEndArt05 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Text (categorical values

specified by STS)

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: CAB Hybrid PCI 05 SeqNo: 3790

Short Name: CABHyPCI05 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in

conjunction with this graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Text (categorical values

specified by STS)

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Angioplasty

3 Stent

Version: 2.73

Long Name: CAB 06 SeqNo: 3800

Short Name: CAB06 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a sixth Coronary Artery Bypass graft was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 05 Format: Text (categorical values

specified by STS)

ParentShortName: CAB05 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: CAB Native Coronary Disease Location 06 SeqNo: 3805

Short Name: CABDisLoc06 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Text (categorical values

specified by STS)

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Left Main

2 Proximal LAD

3 Mid LAD

4 Distal LAD

5 Diagonal 1

6 Diagonal 2

7 Circumflex

8 OM 1

9 OM 2

10 OM 3

11 RCA

12 PDA

13 PLB

14 AM branches

15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 06 SeqNo: 3806

Short Name: CABPctSten06 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 100 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Integer

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: CAB Previous Conduit 06 SeqNo: 3807

Short Name: CABPrevCon06 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Text (categorical values

specified by STS)

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes - Diseased

- 2 Yes No disease
- 3 No previous conduit

Long Name:CAB Proximal Site 06SeqNo:3810Short Name:CABProximalSite06Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Text (categorical values

specified by STS)

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Version: 2.73

Long Name: CAB Proximal Technique 06 SeqNo: 3820

Short Name: CABProxTech06 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Text (categorical values

specified by STS)

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

5 In Situ Mammary

1 Running

2 Interrupted

3 Anastomotic Device

4 Anastomotic Assist Device

Long Name:CAB Conduit 06SeqNo:3830Short Name:CABConduit06Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Text (categorical values

specified by STS)

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Vein graft

2 In Situ LIMA

3 In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name:CAB Distal Site 06SeqNo:3840Short Name:CABDistSite06Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Text (categorical values

specified by STS)

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 RCA Right Coronary Artery

2 AM Acute Marginal

3 PDA Posterior Descending Artery

4 PLB Posterolateral Branch

5 Prox LAD
 6 Mid LAD
 7 Distal LAD
 Proximal Left Anterior Descending
 Distal LAD
 Distal Left Anterior Descending

8 Diag 1
9 Diag 2
10 Ramus
11 OM 1
12 OM 2
13 OM 3
First Diagonal
Ramus Intermedius
First Obtuse Marginal
Second Obtuse Marginal
Third Obtuse Marginal

14 Other

Version: 2.73

Long Name: CAB Distal Technique 06 SeqNo: 3850

Short Name: CABDistTech06 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Text (categorical values

specified by STS)

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Running

2 Interrupted

3 Clips

4 Anastomotic Device

Long Name: CAB Distal Position 06 SeqNo: 3860

Short Name: CABDistPos06 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Text (categorical values

specified by STS)

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 End to side

2 Sequential (side to side)

Version: 2.73

Long Name: CAB Endarterectomy 06 SeqNo: 3870

Short Name: CABEndArt06 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Text (categorical values

specified by STS)

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: CAB Hybrid PCI 06 SeqNo: 3880

Short Name: CABHyPCI06 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in

conjunction with this graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Text (categorical values

specified by STS)

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Angioplasty

3 Stent

Version: 2.73

Long Name: CAB 07 SeqNo: 3890

Short Name: CAB07 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a seventh Coronary Artery Bypass graft was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 06 Format: Text (categorical values

specified by STS)

ParentShortName: CAB06 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: CAB Native Coronary Disease Location 07 SeqNo: 3895

Short Name: CABDisLoc07 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Text (categorical values

specified by STS)

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Left Main

2 Proximal LAD

3 Mid LAD

4 Distal LAD

5 Diagonal 1

6 Diagonal 2

7 Circumflex

8 OM 1

9 OM 2

10 OM 3

11 RCA

12 PDA

13 PLB

14 AM branches

15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 07 SeqNo: 3896

Short Name: CABPctSten07 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 100 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Integer

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: CAB Previous Conduit 07 SeqNo: 3897

Short Name: CABPrevCon07 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Text (categorical values

specified by STS)

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes - Diseased

- 2 Yes No disease
- 3 No previous conduit

Long Name:CAB Proximal Site 07SeqNo:3900Short Name:CABProximalSite07Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Text (categorical values

specified by STS)

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Version: 2.73

Long Name: CAB Proximal Technique 07 SeqNo: 3910

Short Name: CABProxTech07 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Text (categorical values

specified by STS)

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

5 In Situ Mammary

1 Running

2 Interrupted

3 Anastomotic Device

4 Anastomotic Assist Device

Long Name:CAB Conduit 07SeqNo:3920Short Name:CABConduit07Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Text (categorical values

specified by STS)

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Vein graft

2 In Situ LIMA

3 In Situ RIMA

4 Free IMA

- 5 Radial artery
- 6 Other arteries, homograft

Long Name:CAB Distal Site 07SeqNo:3930Short Name:CABDistSite07Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Text (categorical values

specified by STS)

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 RCA Right Coronary Artery

2 AM Acute Marginal

3 PDA Posterior Descending Artery

4 PLB Posterolateral Branch

5 Prox LAD
 6 Mid LAD
 7 Distal LAD
 Proximal Left Anterior Descending
 Distal LAD
 Distal Left Anterior Descending

8 Diag 1 First Diagonal
9 Diag 2 Second Diagonal
10 Ramus Ramus Intermedius
11 OM 1 First Obtuse Marginal
12 OM 2 Second Obtuse Marginal
13 OM 3 Third Obtuse Marginal

14 Other

Version: 2.73

Long Name: CAB Distal Technique 07 SeqNo: 3940

Short Name: CABDistTech07 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Text (categorical values

specified by STS)

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Running

2 Interrupted

3 Clips

4 Anastomotic Device

Long Name: CAB Distal Position 07 SeqNo: 3950

Short Name: CABDistPos07 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Text (categorical values

specified by STS)

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 End to side

2 Sequential (side to side)

Version: 2.73

Long Name: CAB Endarterectomy 07 SeqNo: 3960

Short Name: CABEndArt07 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Text (categorical values

specified by STS)

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: CAB Hybrid PCI 07 SeqNo: 3970

Short Name: CABHyPCI07 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in

conjunction with this graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Text (categorical values

specified by STS)

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Angioplasty

3 Stent

Version: 2.73

Long Name: CAB 08 SeqNo: 3980

Short Name: CAB08 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a eighth Coronary Artery Bypass graft was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 07 Format: Text (categorical values

specified by STS)

ParentShortName: CAB07 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: CAB Native Coronary Disease Location 08 SeqNo: 3985

Short Name: CABDisLoc08 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Text (categorical values

specified by STS)

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Left Main

2 Proximal LAD

3 Mid LAD

4 Distal LAD

5 Diagonal 1

6 Diagonal 2

7 Circumflex

8 OM 1

9 OM 2

10 OM 3

11 RCA

12 PDA

13 PLB

14 AM branches

15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 08 SeqNo: 3986

Short Name: CABPctSten08 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 100 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Integer

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: CAB Previous Conduit 08 SeqNo: 3987

Short Name: CABPrevCon08 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Text (categorical values

specified by STS)

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes - Diseased

- 2 Yes No disease
- 3 No previous conduit

Long Name:CAB Proximal Site 08SeqNo:3990Short Name:CABProximalSite08Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Text (categorical values

specified by STS)

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Version: 2.73

Long Name: CAB Proximal Technique 08 SeqNo: 4000

Short Name: CABProxTech08 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Text (categorical values

specified by STS)

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

5 In Situ Mammary

1 Running

2 Interrupted

3 Anastomotic Device

4 Anastomotic Assist Device

Long Name:CAB Conduit 08SeqNo:4010Short Name:CABConduit08Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Text (categorical values

specified by STS)

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Vein graft

2 In Situ LIMA

3 In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name:CAB Distal Site 08SeqNo:4020Short Name:CABDistSite08Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Text (categorical values

specified by STS)

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 RCA Right Coronary Artery

2 AM Acute Marginal

3 PDA Posterior Descending Artery

4 PLB Posterolateral Branch

5 Prox LAD
 6 Mid LAD
 7 Distal LAD
 Proximal Left Anterior Descending
 Distal LAD
 Distal Left Anterior Descending

8 Diag 1
9 Diag 2
10 Ramus
11 OM 1
12 OM 2
13 OM 3
First Diagonal
Ramus Intermedius
First Obtuse Marginal
Second Obtuse Marginal
Third Obtuse Marginal

14 Other

Version: 2.73

Long Name: CAB Distal Technique 08 SeqNo: 4030

Short Name: CABDistTech08 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Text (categorical values

specified by STS)

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Running

2 Interrupted

3 Clips

4 Anastomotic Device

Long Name: CAB Distal Position 08 SeqNo: 4040

Short Name: CABDistPos08 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Text (categorical values

specified by STS)

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 End to side

2 Sequential (side to side)

Version: 2.73

Long Name: CAB Endarterectomy 08 SeqNo: 4050

Short Name: CABEndArt08 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Text (categorical values

specified by STS)

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: CAB Hybrid PCI 08 SeqNo: 4060

Short Name: CABHyPCI08 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in

conjunction with this graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Text (categorical values

specified by STS)

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Angioplasty

3 Stent

Version: 2.73

Long Name: CAB 09 SeqNo: 4070

Short Name: CAB09 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a ninth Coronary Artery Bypass graft was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 08 Format: Text (categorical values

specified by STS)

ParentShortName: CAB08 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: CAB Native Coronary Disease Location 09 SeqNo: 4075

Short Name: CABDisLoc09 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Text (categorical values

specified by STS)

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Left Main

2 Proximal LAD

3 Mid LAD

4 Distal LAD

5 Diagonal 1

6 Diagonal 2

7 Circumflex

8 OM 1

9 OM 2

10 OM 3

11 RCA

12 PDA

13 PLB

14 AM branches

15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 09 SeqNo: 4076

Short Name: CABPctSten09 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 100 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Integer

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: CAB Previous Conduit 09 SeqNo: 4077

Short Name: CABPrevCon09 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Text (categorical values

specified by STS)

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes - Diseased

- 2 Yes No disease
- 3 No previous conduit

Long Name:CAB Proximal Site 09SeqNo:4080Short Name:CABProximalSite09Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Text (categorical values

specified by STS)

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 In Situ Mammary

2 Ascending aorta

3 Descending aorta

4 Subclavian artery

5 Innominate artery

6 T-graft off SVG

7 T-graft off Radial

8 T-graft off LIMA

9 T-graft off RIMA

Version: 2.73

Long Name: CAB Proximal Technique 09 SeqNo: 4090

Short Name: CABProxTech09 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Text (categorical values

specified by STS)

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

5 In Situ Mammary

1 Running

2 Interrupted

3 Anastomotic Device

4 Anastomotic Assist Device

Long Name:CAB Conduit 09SeqNo:4100Short Name:CABConduit09Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Text (categorical values

specified by STS)

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Vein graft

2 In Situ LIMA

3 In Situ RIMA

4 Free IMA

- 5 Radial artery
- 6 Other arteries, homograft

Long Name:CAB Distal Site 09SeqNo:4110Short Name:CABDistSite09Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Text (categorical values

specified by STS)

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 RCA Right Coronary Artery

2 AM Acute Marginal

3 PDA Posterior Descending Artery

4 PLB Posterolateral Branch

5 Prox LAD
 6 Mid LAD
 7 Distal LAD
 Proximal Left Anterior Descending
 Distal LAD
 Distal Left Anterior Descending

8 Diag 1
9 Diag 2
10 Ramus
11 OM 1
12 OM 2
13 OM 3
First Diagonal
Ramus Intermedius
First Obtuse Marginal
Second Obtuse Marginal
Third Obtuse Marginal

14 Other

Version: 2.73

Long Name: CAB Distal Technique 09 SeqNo: 4120

Short Name: CABDistTech09 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Text (categorical values

specified by STS)

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Running

2 Interrupted

3 Clips

4 Anastomotic Device

Long Name: CAB Distal Position 09 SeqNo: 4130

Short Name: CABDistPos09 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Text (categorical values

specified by STS)

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 End to side

2 Sequential (side to side)

Version: 2.73

Long Name: CAB Endarterectomy 09 SeqNo: 4140

Short Name: CABEndArt09 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Text (categorical values

specified by STS)

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: CAB Hybrid PCI 09 SeqNo: 4150

Short Name: CABHyPCI09 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in

conjunction with this graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Text (categorical values

specified by STS)

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Angioplasty

3 Stent

Version: 2.73

Long Name: CAB 10 SeqNo: 4160

Short Name: CAB10 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a tenth Coronary Artery Bypass graft was done.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 09 Format: Text (categorical values

specified by STS)

ParentShortName: CAB09 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: CAB Native Coronary Disease Location 10 SeqNo: 4165

Short Name: CABDisLoc10 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 10 Format: Text (categorical values

specified by STS)

ParentShortName: CAB10 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Left Main

2 Proximal LAD

3 Mid LAD

4 Distal LAD

5 Diagonal 1

6 Diagonal 2

7 Circumflex

8 OM 1

9 OM 2

10 OM 3

11 RCA

12 PDA

13 PLB

14 AM branches

15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 10 SeqNo: 4166

Short Name: CABPctSten10 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 100 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 10 Format: Integer

ParentShortName: CAB10 DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: CAB Previous Conduit 10 SeqNo: 4167

Short Name: CABPrevCon10 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 10 Format: Text (categorical values

specified by STS)

ParentShortName: CAB10 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes - Diseased

- 2 Yes No disease
- 3 No previous conduit

Long Name:CAB Proximal Site 10SeqNo:4170Short Name:CABProximalSite10Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 10 Format: Text (categorical values

specified by STS)

ParentShortName: CAB10 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Version: 2.73

Long Name: CAB Proximal Technique 10 SeqNo: 4180

Short Name: CABProxTech10 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 10 Format: Text (categorical values

specified by STS)

ParentShortName: CAB10 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

5 In Situ Mammary

1 Running

2 Interrupted

3 Anastomotic Device

4 Anastomotic Assist Device

Long Name:CAB Conduit 10SeqNo:4190Short Name:CABConduit10Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 10 Format: Text (categorical values

specified by STS)

ParentShortName: CAB10 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Vein graft

2 In Situ LIMA

3 In Situ RIMA

4 Free IMA

- 5 Radial artery
- 6 Other arteries, homograft

Long Name:CAB Distal Site 10SeqNo:4200Short Name:CABDistSite10Core:YesSection Name:Coronary BypassHarvest:Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 10 Format: Text (categorical values

specified by STS)

ParentShortName: CAB10 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 RCA Right Coronary Artery

2 AM Acute Marginal

3 PDA Posterior Descending Artery

4 PLB Posterolateral Branch

5 Prox LAD
 6 Mid LAD
 7 Distal LAD
 Proximal Left Anterior Descending
 Distal LAD
 Distal Left Anterior Descending

8 Diag 1 First Diagonal
9 Diag 2 Second Diagonal
10 Ramus Ramus Intermedius
11 OM 1 First Obtuse Marginal
12 OM 2 Second Obtuse Marginal
13 OM 3 Third Obtuse Marginal

14 Other

Version: 2.73

Long Name: CAB Distal Technique 10 SeqNo: 4210

Short Name: CABDistTech10 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 10 Format: Text (categorical values

specified by STS)

ParentShortName: CAB10 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Running

2 Interrupted

3 Clips

4 Anastomotic Device

Long Name: CAB Distal Position 10 SeqNo: 4220

Short Name: CABDistPos10 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 10 Format: Text (categorical values

specified by STS)

ParentShortName: CAB10 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 End to side

2 Sequential (side to side)

Version: 2.73

Long Name: CAB Endarterectomy 10 SeqNo: 4230

Short Name: CABEndArt10 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 10 Format: Text (categorical values

specified by STS)

ParentShortName: CAB10 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: CAB Hybrid PCI 10 SeqNo: 4240

Short Name: CABHyPCI10 Core: Yes
Section Name: Coronary Bypass Harvest: Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in

conjunction with this graft.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: CAB 10 Format: Text (categorical values

specified by STS)

ParentShortName: CAB10 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Angioplasty

3 Stent

Long Name: VS-Aortic Proc-Procedure SeqNo: 4250

Short Name: OpAortic Core: No Section Name: Valve Surgery Harvest: No

DBTableName AdultData

Definition: Indicate whether a surgical procedure was done or not done on the Aortic Valve. Select one of the

following:

a. No

b. Replacement

c. Repair/Reconstruction

d. Root Reconstruction with Valve Conduit

e. Replacement + Aortic Graft Conduit (not a valve conduit)

f. Root Reconstruction w/ Valve Sparing

g. Resuspension Aortic Valve with Replacement of Ascending aorta

h. Resuspension Aortic Valve without Replacement of Ascending aorta

i. Resection Sub-Aortic Stenosis

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Valve Format: Text (categorical values

specified by STS)

ParentShortName: OpValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

- 1 No
- 2 Replacement
- 3 Repair/Reconstruction
- 4 Root Reconstruction with

Valve Conduit

8 Replacement + Aortic Graft Conduit (not a valve conduit)

5 Root Reconstruction with Valve Sparing

9 Resuspension Aortic Valve with Replacement of

Ascending aorta

10 Resuspension Aortic Valve without Replacement of

Ascending aorta

7 Resection Sub-Aortic Stenosis

Long Name: VS-Mitral Proc-Procedure SeqNo: 4260

Short Name: OpMitral Core: No Section Name: Valve Surgery Harvest: No

DBTableName AdultData

Definition: Indicate whether a surgical procedure was done or not done on the Mitral Valve. Select one of the

following:

a. No

b. Annuloplasty only

c. Replacement

d. Reconstruction with Annuloplasty

e. Reconstruction without Annuloplasty

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Valve Format: Text (categorical values

specified by STS)

ParentShortName: OpValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Annuloplasty Only

3 Replacement

4 Reconstruction with Annuloplasty

5 Reconstruction without

Annuloplasty

Version: 2.73

Long Name: VS-Aortic Valve SeqNo: 4270

Short Name: VSAV Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether an aortic valve procedure was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Valve Format: Text (categorical values

specified by STS)

ParentShortName: OpValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: VS-Aortic Valve Procedure SeqNo: 4280

Short Name: VSAVPr Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate procedure performed on aortic valve and/or ascending aorta.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Format: Text (categorical values

specified by STS)

ParentShortName: VSAV DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

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 AV 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 reimplantation (David)
- 11 Valve sparing root remodeling (Yacoub)

Long Name: VS-Aortic Valve Repair - Commissural Annuloplasty SeqNo: 4282

Short Name: VSAVRComA Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included a commissural annuloplasty.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSAVPr DataLength:

ParentValue: = "Repair / Reconstruction" Data Source: User

Harvest Codes:

Code: Value:

Yes

2 No

Long Name: VS-Aortic Valve Repair - Ring Annuloplasty SeqNo: 4283

Short Name: VSAVRRingA Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included a ring annuloplasty.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSAVPr DataLength:

ParentValue: = "Repair / Reconstruction" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: VS-Aortic Valve Repair - Leaflet Plication SeqNo: 4284

Short Name: VSAVRLPlic Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet plication.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSAVPr DataLength:

ParentValue: = "Repair / Reconstruction" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

1 16

2 No

Long Name: VS-Aortic Valve Repair - Leaflet Resection SeqNo: 4285

Short Name: VSAVRLResect Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet resection.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSAVPr DataLength:

ParentValue: = "Repair / Reconstruction" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Aortic Valve Repair - Leaflet Free Edge Reinforcement (PTFE) Suture SeqNo: 4286

Short Name: VSAVRPTFE Core: Yes

Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet free edge reinforcement (PTFE)

suture.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSAVPr DataLength:

ParentValue: = "Repair / Reconstruction" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Version: 2.73

Long Name: VS-Aortic Valve Repair - Leaflet Pericardial Patch SeqNo: 4287

Short Name: VSAVRLPPatch Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet pericardial patch.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSAVPr DataLength:

ParentValue: = "Repair / Reconstruction" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: VS-Aortic Valve Repair - Leaflet Commissural Resuspension Suture SeqNo: 4288

Short Name: VSAVRComRS Core: Yes

Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet commissural resuspension suture.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSAVPr DataLength:

ParentValue: = "Repair / Reconstruction" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: VS-Aortic Valve Repair - Leaflet Debridement SeqNo: 4289

Short Name: VSAVRDeb Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet debridement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSAVPr DataLength:

ParentValue: = "Repair / Reconstruction" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: VS-Aortic Valve Repair - Division of Fused Leaflet Raphe SeqNo: 4290

Short Name: VSAVRRaphe Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included division of fused leaflet raphe.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSAVPr DataLength:

ParentValue: = "Repair / Reconstruction" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Version: 2.73

Long Name: VS-Transcatheter Valve Replacement SeqNo: 4295

Short Name: VSTCV Core: Yes Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included placement of a transcatheter valve.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Format: Text (categorical values

specified by STS)

ParentShortName: VSAV DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: VS-Transcatheter Valve Replacement Approach SeqNo: 4300

Short Name: VSTCVR Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate transcatheter valve replacement approach.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Transcatheter Valve Format: Text (categorical values

Replacement specified by STS)

ParentShortName: VSTCV DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Transapical

2 Transaxillary

3 Transfemoral

Version: 2.73

Long Name: VS-Aortic Proc-Aortic Annular Enlargement SeqNo: 4310

Short Name: AnlrEnl Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether an annular enlargement procedure was performed on the Aortic Valve. An aortic

annular enlargement is defined as incision of the aortic annulus to enlarge the aortic orifice. Annular enlargement techniques, include but are not limited to Manouguian, Konno and Nicks.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: VS-Aortic Valve Format: Text (categorical values

specified by STS)

ParentShortName: VSAV DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: VS-Resection of Sub-Aortic Stenosis SeqNo: 4311

Short Name: ResectSubA Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether resection of sub-aortic tissue was performed alone or in conjunction with an aortic

valve procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Aortic Valve Format: Text (categorical values

specified by STS)

ParentShortName: VSAV DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Aortic Proc-Imp-Type SeqNo: 4320

Short Name: VSAoImTy Core: No
Section Name: Valve Surgery Harvest: No

DBTableName AdultData

Definition: Indicate the type of implant; choose one:

None

M = Mechanical
B = Bioprosthesis
H = Homograft
A = Autograft (Ross)
R = Ring/Annuloplasty
BA = Band/Annuloplasty

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: VS-Aortic Proc-Procedure Format: Text (categorical values

specified by STS)

ParentShortName: OpAortic DataLength:

ParentValue: <> "No" And Is Not Missing Data Source: User

Harvest Codes:

Code: Value:

- 1 None
- 2 Mechanical
- 3 Bioprosthesis
- 4 Homograft
- 5 Autograft (Ross)
- 6 Ring/Annuloplasty
- 7 Band/Annuloplasty

Version: 2.73

Long Name: VS-Aortic Proc-Imp SeqNo: 4330

Short Name: VSAoIm Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's

model number with "xx" substituting for the device size.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: VS-Aortic Valve Format: Text (categorical values

specified by STS)

ParentShortName: VSAV DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: VS-Aortic Proc-Imp-Size SeqNo: 4340

Short Name: VSAoImSz Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate the Aortic implant size.

LowValue: 5 UsualRangeLow: 10 ACCField: Not mapped

HighValue: 50 UsualRangeHigh: 40 ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VS-Aortic Valve Format: Integer

ParentShortName: VSAV DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: VS-Mitral Valve SeqNo: 4351

Short Name: VSMV Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a mitral valve procedure was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Valve Format: Text (categorical values

specified by STS)

ParentShortName: OpValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: VS-Mitral Valve Procedure SegNo: 4352

Short Name: VSMVPr Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Format: Text (categorical values

specified by STS)

ParentShortName: VSMV DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Repair

2 Replacement

Version: 2.73

Long Name: VS-Mitral Valve Repair - Annuloplasty SeqNo: 4361

Short Name: VSMitRAnnulo Core: Yes Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included an annuloplasty.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSMVPr DataLength:

ParentValue: = "Repair" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Mitral Valve Repair - Leaflet Resection SeqNo: 4362

Short Name: VSMitRLeafRes Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a leaflet resection.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSMVPr DataLength:

ParentValue: = "Repair" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Mitral Leaflet Resection Type SeqNo: 4380

Short Name: VSLeafResTyp Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate the type of leaflet resection.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Repair - Fo

Leaflet Resection

Format: Text (categorical values

specified by STS)

ParentShortName: VSMitRLeafRes DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Triangular

2 Quadrangular

3 Other

Long Name: VS-Mitral Repair Location SeqNo: 4390

Short Name: VSLeafRepLoc Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the repair involved the anterior, posterior, or both leaflets.

Commissural closure stitches do not make a bileaflet repair.

A commissurotomy IS a bileaflet repair.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Repair -

S-Mitral Valve Repair - Format: Text (categorical values

Leaflet Resection specified by STS)

ParentShortName: VSMitRLeafRes DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Anterior

2 Posterior

4391

SeqNo:

3 Both Anterior and Posterior

Long Name: VS-Mitral Valve Repair - Sliding Plasty

Short Name: VSMitRSlidP Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a sliding plasty.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSMVPr DataLength:

ParentValue: = "Repair" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: VS-Mitral Valve Repair - Annular Decalcification SeqNo: 4393

Short Name: VSMitRADecalc Core: Yes Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included an annular decalcification.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSMVPr DataLength:

ParentValue: = "Repair" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: VS-Mitral Valve Repair - Neochords (PTFE) SeqNo: 4394

Short Name: VSMitRPTFE Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included neochords (PTFE).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSMVPr DataLength:

ParentValue: = "Repair" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: VS-Mitral Neochord Number SeqNo: 4400

Short Name: VSNeoChNum Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of neochords inserted - 1 neochord is created from 1 double arm suture.

LowValue: 1 UsualRangeLow: ACCField: Not mapped

HighValue: 4 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Repair - Format: Integer

Neochords (PTFE)

ParentShortName: VSMitRPTFE DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: VS-Mitral Valve Repair - Chordal / Leaflet Transfer SeqNo: 4401

Short Name: VSMitRChord Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a chordal / leaflet transfer.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSMVPr DataLength:

ParentValue: = "Repair" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: VS-Mitral Valve Repair - Leaflet Extension / Replacement / Patch SeqNo: 4402

Short Name: VSMitRLeafERP Core: Yes

Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a leaflet extension / replacement / patch.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSMVPr DataLength:

ParentValue: = "Repair" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: VS-Mitral Valve Repair - Edge To Edge Repair SeqNo: 4403

Short Name: VSMitREdge Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included an edge to edge repair.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSMVPr DataLength:

ParentValue: = "Repair" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: VS-Mitral Valve Repair - Mitral Commissurotomy SeqNo: 4404

Short Name: VSMitRMitComm Core: Yes

Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a mitral commissurotomy.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSMVPr DataLength:

ParentValue: = "Repair" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

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Long Name: VS-Mitral Repair Attempt SeqNo: 4410

Short Name: MitralIntent Core: Yes Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a Mitral Valve Repair was attempted prior to the Mitral Valve Replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VS-Mitral Valve Procedure Format: Text (categorical values

specified by STS)

ParentShortName: VSMVPr DataLength:

ParentValue: = "Replacement" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: VS-Mitral Proc-Imp-Type SeqNo: 4420

Short Name: VSMiImTy Core: No Section Name: Valve Surgery Harvest: No

DBTableName AdultData

Definition: Indicate the type of implant; choose one:

None

M = Mechanical
B = Bioprosthesis
H = Homograft
A = Autograft (Ross)
R = Ring/Annuloplasty
BA = Band/Annuloplasty

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VS-Mitral Proc-Procedure Format: Text (categorical values

specified by STS)

ParentShortName: OpMitral DataLength:

ParentValue: <> "No" And Is Not Missing Data Source: User

Harvest Codes:

Code: Value:

1 None

- 2 Mechanical
- 3 Bioprosthesis
- 4 Homograft
- 5 Autograft (Ross)
- 6 Ring/Annuloplasty
- 7 Band/Annuloplasty

Long Name: VS-Mitral Proc-Imp SeqNo: 4430

Short Name: VSMiIm Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's

model number with "xx" substituting for the device size.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VS-Mitral Valve Format: Text (categorical values

specified by STS)

ParentShortName: VSMV DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: VS-Mitral Proc-Imp-Size SeqNo: 4440

Short Name: VSMiImSz Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate the Mitral implant size.

LowValue: 5 UsualRangeLow: 10 ACCField: Not mapped

HighValue: 50 UsualRangeHigh: 40 ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VS-Mitral Valve Format: Integer

ParentShortName: VSMV DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: VS-Mitral Chordal Preservation SeqNo: 4450

Short Name: VSChorPres Core: Yes Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether native chords were preserved.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Mitral Valve Format: Text (categorical values

specified by STS)

ParentShortName: VSMV DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Anterior

3 Posterior

4 Both

Long Name: VS-Tricuspid Proc-Procedure SeqNo: 4500

Short Name: OpTricus Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a surgical procedure was done or not done on the Tricuspid Valve.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Valve Format: Text (categorical values

specified by STS)

ParentShortName: OpValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Annuloplasty Only

3 Replacement

4 Reconstruction with

Annuloplasty

- 5 Reconstruction without Annuloplasty
- 6 Valvectomy

Long Name: VS-Tricuspid Annuloplasty Type SeqNo: 4510

Short Name: OpTricusAnTy Core: Yes Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate type of annuloplasty procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VS-Tricuspid Proc- Format: Text (categorical values

Procedure specified by STS)

ParentShortName: OpTricus DataLength:

ParentValue: = "Annuloplasty Only" or Data Source: User

"Reconstruction with

Annuloplasty"

Harvest Codes:

Code: Value:

1 Pericardium

2 Suture

3 Prosthetic ring

Long Name: VS-Tricuspid Proc-Imp-Type SeqNo: 4530

Short Name: VSTrImTy Core: No Section Name: Valve Surgery Harvest: No

DBTableName AdultData

Definition: Indicate the type of implant; choose one:

None

M = Mechanical
B = Bioprosthesis
H = Homograft
A = Autograft (Ross)
R = Ring/Annuloplasty
BA = Band/Annuloplasty

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VS-Tricuspid Proc- Format: Text (categorical values

Procedure specified by STS)

ParentShortName: OpTricus DataLength:

ParentValue: <> "No" And Is Not Missing Data Source: User

Harvest Codes:

Code: Value:

- 1 None
- 2 Mechanical
- 3 Bioprosthesis
- 4 Homograft
- 5 Autograft (Ross)
- 6 Ring/Annuloplasty
- 7 Band/Annuloplasty

Version: 2.73

Long Name: VS-Tricuspid Proc-Imp SeqNo: 4540

Short Name: VSTrIm Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's

model number with "xx" substituting for the device size.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VS-Tricuspid Proc- Format: Text (categorical values

Procedure specified by STS)

ParentShortName: OpTricus DataLength:

ParentValue: <> "No" And Is Not Missing Data Source: User

Long Name: VS-Tricuspid Proc-Imp-Size SeqNo: 4550

Short Name: VSTrImSz Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate the Tricuspid implant size.

LowValue: 5 UsualRangeLow: 10 ACCField: Not mapped

HighValue: 50 UsualRangeHigh: 40 ReportField: No NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: VS-Tricuspid Proc- Format: Integer

Procedure

ParentShortName: OpTricus DataLength:

ParentValue: <> "No" And Is Not Missing Data Source: User

Version: 2.73

Long Name: VS-Pulmonic Proc-Procedure SeqNo: 4560

Short Name: OpPulm Core: Yes Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a surgical procedure was done or not done on the Pulmonic Valve.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Valve Format: Text (categorical values

specified by STS)

ParentShortName: OpValve DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 No

2 Replacement

3 Reconstruction

4 Valvectomy

Long Name: VS-Pulmonic Proc-Imp-Type SeqNo: 4570

Short Name: VSPuImTy Core: No Section Name: Valve Surgery Harvest: No

DBTableName AdultData

Definition: Indicate the type of implant; choose one:

None

M = Mechanical
B = Bioprosthesis
H = Homograft
A = Autograft (Ross)
R = Ring/Annuloplasty
BA = Band/Annuloplasty

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VS-Pulmonic Proc- Format: Text (categorical values

Procedure specified by STS)

ParentShortName: OpPulm DataLength:

ParentValue: <> "No" And Is Not Missing Data Source: User

Harvest Codes:

Code: Value:

- 1 None
- 2 Mechanical
- 3 Bioprosthesis
- 4 Homograft
- 5 Autograft (Ross)
- 6 Ring/Annuloplasty
- 7 Band/Annuloplasty

Version: 2.73

Long Name: VS-Pulmonic Proc-Imp SeqNo: 4580

Short Name: VSPuIm Core: Yes Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's

model number with "xx" substituting for the device size.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VS-Pulmonic Proc- Format: Text (categorical values

Procedure specified by STS)

ParentShortName: OpPulm DataLength:

ParentValue: <> "No" And Is Not Missing Data Source: User

Long Name: VS-Pulmonic Proc-Imp-Size SeqNo: 4590

Short Name: VSPuImSz Core: Yes
Section Name: Valve Surgery Harvest: Yes

DBTableName AdultData

Definition: Indicate the Pulmonic implant size.

LowValue: 5 UsualRangeLow: 10 ACCField: Not mapped

HighValue: 50 UsualRangeHigh: 40 ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VS-Pulmonic Proc- Format: Integer

Procedure

ParentShortName: OpPulm DataLength:

ParentValue: <> "No" And Is Not Missing Data Source: User

Long Name: Valve Implant List Version Number SeqNo: 4600

Short Name: ValveVrsn Core: No Section Name: Valve Surgery Harvest: No

DBTableName AdultData

Definition: The version number of the list of valve implant options. The value is inserted into the record at the

time the record is created. The version numbers will be specified by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Valve Format: Text

ParentShortName: OpValve DataLength:

= "Yes" ParentValue: Data Source: Automatic

4610 Long Name: **IABP** SeqNo:

Short Name: **IABP** Yes Core: Harvest: Yes

Section Name: Mechanical Cardiac Assist Devices

DBTableName AdultData

Definition: Indicate whether the patient was placed on Intra-Aortic Balloon Pump (IABP).

LowValue: UsualRangeLow: ACCField: Not mapped

UsualRangeHigh: HighValue: ReportField: Yes NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

Data Source: User ParentValue:

Harvest Codes:

Code: Value:

Yes 1

2 No

Version: 2.73

Version: 2.73

Long Name: IABP-When Inserted SeqNo: 4620

Short Name: IABPWhen Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate when the IABP was inserted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: Yes PQRIField: No

Parent Long Name: IABP Format: Text (categorical values

specified by STS)

ParentShortName: IABP DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Preop

2 Intraop

3 Postop

Long Name: IABP-Indication SeqNo: 4630

Short Name: IABPInd Core: Yes

Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the primary reason for inserting the IABP.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: IABP Format: Text (categorical values

specified by STS)

ParentShortName: IABP DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Hemodyn Instability

2 PTCA Support

3 Unstable Angina

4 Cardiopulmonary Bypass (CPB) Weaning Failure

5 Prophylactic

IABP-Removed Date Long Name: SeqNo: 4640

Yes **IABPRemDt** Short Name: Core: Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the date on which the IABP was removed.

UsualRangeLow: LowValue: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

> PQRIField: ModelField:

Parent Long Name: IABP Format: Date mm/dd/yyyy

ParentShortName: IABP DataLength:

= "Yes" Data Source: User ParentValue:

SeqNo: Long Name: Catheter Based Assist Device Used 4660

Short Name: CathBasAssist Core: Yes Harvest: Yes

Section Name: Mechanical Cardiac Assist Devices

DBTableName AdultData

Definition: Indicate whether the patient was placed on a catheter based assist device (e.g., Impella).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

Yes

2 No

Version: 2.73

Long Name: Catheter Based Assist Device SeqNo: 4670

Short Name: CathBasAssistDev Core: Yes Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the catheter based assist device that was used.

UsualRangeLow: LowValue: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: Catheter Based Assist Format: Text (categorical values

Device Used specified by STS)

ParentShortName: CathBasAssist DataLength:

= "Yes" Data Source: User ParentValue:

Harvest Codes:

Code: Value:

1 Impella

2 **Tandem Heart**

9 Other

Catheter Based Assist Device When Inserted 4690 Long Name: SeqNo:

Short Name: CathBasAssistWhen Core: Yes Yes Harvest:

Section Name: Mechanical Cardiac Assist Devices

DBTableName AdultData

Definition: Indicate when the catheter based assist device was inserted.

LowValue: UsualRangeLow: ACCField: Not mapped

NOFField: HighValue: UsualRangeHigh: ReportField:

> ModelField: PQRIField:

Parent Long Name: Catheter Based Assist Format: Text (categorical values

Device Used specified by STS)

ParentShortName: CathBasAssist DataLength:

= "Yes" Data Source: User ParentValue:

Harvest Codes:

Code: Value:

Preop

Intraop

Postop

Long Name: Catheter Based Assist Device Indication SeqNo: 4700

Short Name: CathBasAssistInd Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the primary reason for inserting the device.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Catheter Based Assist Format: Text (categorical values

Device Used specified by STS)

ParentShortName: CathBasAssist DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Hemodynamic Instability

2 Cardiopulmonary Bypass (CPB) weaning failure

3 PCI Failure

4 Other

Long Name: Catheter Based Assist Device Removed Date SeqNo: 4710

Short Name: CathBasAssistRemDt Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the date on which the catheter based assist device was removed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

ModelField: PQRIField:

Parent Long Name: Catheter Based Assist Format: Date mm/dd/yyyy

Device Used

ParentShortName: CathBasAssist DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Version: 2.73

Long Name: Extracorporeal Membrane Oxygenation SeqNo: 4730

Short Name: ECMO Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient was placed on ECMO.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

l Yes

2 No

Long Name: ECMO When Initiated SeqNo: 4740

Short Name: ECMOWhen Core: Yes

Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate when patient was placed on ECMO.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Extracorporeal Membrane Form

Oxygenation

Format: Text (categorical values

specified by STS)

ParentShortName: ECMO DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Preop

2 Intraop

3 Postop

4 Non-operative

Version: 2.73

Long Name: **ECMO Indication** SeqNo: 4750

Short Name: **ECMOInd** Core: Yes Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate clinical indication for placing patient on ECMO.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: Extracorporeal Membrane Format: Text (categorical values

Oxygenation specified by STS)

ParentShortName: ECMO DataLength:

= "Yes" ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Cardiac Failure

2 Respiratory Failure

Hypothermia

Rescue/salvage

Long Name: **VAD-Previous VAD** SeqNo: 4760

Short Name: **PrevVAD** Core: Yes Harvest: Yes

Section Name: Mechanical Cardiac Assist Devices

DBTableName AdultData

Indicate if at the time of this procedure, the patient has a VAD in place that was inserted during a

previous admission or from an outside hospital.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

Data Source: User ParentValue:

Harvest Codes:

Code: Value:

Yes

2 No

Version: 2.73

Long Name: Previous VAD Facility SeqNo: 4770

Short Name: PrevVADF Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate if the previously implanted assist device was implanted at another facility.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Previous VAD Format: Text (categorical values

specified by STS)

ParentShortName: PrevVAD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous VAD Insertion Date SeqNo: 4771

Short Name: PrevVADD Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate insertion date of previous VAD.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VAD-Previous VAD Format: Date mm/dd/yyyy

ParentShortName: PrevVAD DataLength:

ParentValue: = "Yes" Data Source: User

STS Adult Cardiac Database Version: 2.73

Long Name: Previous VAD Indication SeqNo: 4772

Short Name: PrevVADIn Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Specify indication for VAD insertion.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VAD-Previous VAD Format: Text (categorical values

specified by STS)

ParentShortName: PrevVAD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 Bridge to Transplantation Includes those patients who are supported with a VAD

until a heart transplant is possible.

2 Bridge to Recovery Includes those patients who are expected to have

ventricular recovery. (i.e. Myocarditis patients, postcardiotomy syndromes, viral cardiomyopathies, AMI w/ revascularization, and post-transplant

reperfusion injury).

3 Destination Includes those patients where a heart transplant is not an

option. The VAD is placed for permanent life

sustaining support.

4 Post Cardiotomy Ventricular

Failure

Includes those postcardiotomy patients who receive a VAD because of failure to separate from the heart-lung machine. Postcardiotomy refers to those patients with the inability to wean from cardiopulmonary bypass secondary to left, right, or biventricular failure.

5 Device Malfunction Includes those patients who are currently VAD

supported and are experiencing device failure.

6 End of Life Mechanical device pump has reached functional life

expectancy and requires replacement.

Version: 2.73

Long Name: Previous VAD Type SeqNo: 4773

Short Name: PrevVADTy Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate type of VAD previously inserted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VAD-Previous VAD Format: Text (categorical values

specified by STS)

ParentShortName: PrevVAD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value:</u> <u>Definition:</u>

1RVADRight Ventricular Assist Device2LVADLeft Ventricular Assist Device3BiVADBiVentricular Assist Device

4 TAH Total Artificial Heart

Long Name: Previous VAD Device SeqNo: 4774

Short Name:PrevVADDeviceCore:YesSection Name:Mechanical Cardiac Assist DevicesHarvest:Yes

DBTableName AdultData

Definition: Indicate Previous VAD device.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VAD-Previous VAD Format: Text (categorical values

specified by STS)

ParentShortName: PrevVAD DataLength:

ParentValue: = "Yes" Data Source: User

STS Adult Cardiac Database Version: 2.73

Long Name: VAD Product Type List Version Number SeqNo: 4780

Short Name: VADListVrsn Core: No
Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: The version number of the list of options available for the VAD product type fields. The value is

inserted into the record at the time the record is created. The version numbers will be specified by

the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: Automatic

Long Name: VAD-Indication for this VAD SeqNo: 4790

Short Name: VADInd Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the reason for implanting a Ventricular Assist Device (VAD) during this procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

ParentValue: = "Yes, implanted" or "Yes, Data Source: User

implanted and explanted"

Harvest Codes and Value Definitions:

Code: Value: Definition:

1 Bridge to Transplantation Includes those patients who are supported with a VAD

until a heart transplant is possible.

2 Bridge to Recovery Includes those patients who are expected to have

ventricular recovery. (i.e. Myocarditis patients, postcardiotomy syndromes, viral cardiomyopathies, AMI w/ revascularization, and post-transplant

reperfusion injury).

3 Destination Includes those patients where a heart transplant is not an

option. The VAD is placed for permanent life

sustaining support.

STS Adult Cardiac Database Version: 2.73

4 Postcardiotomy Ventricular Includes those postcardiotomy patients who receive a Failure (separation from CPB) VAD because of failure to separate from the heart-lung

machine. Postcardiotomy refers to those patients with the inability to wean from cardiopulmonary bypass secondary to left, right, or biventricular failure.

5 Device Malfunction Includes those patients who are currently VAD

supported and are experiencing device failure.

6 End of Life Mechanical device pump has reached functional life

expectancy and requires replacement.

Long Name: VAD-Intubated Pre-VAD SeqNo: 4800

Short Name: IntPVAD Core: No
Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: Indicate if the patient was intubated prior to the OR in which the VAD was placed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Format: Text (categorical values

specified by STS)

ParentShortName: VAD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: VAD-Hemodynamics Pre-VAD-PCWP SeqNo: 4810

Short Name: HPVPCWP Core: No
Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: Indicate the Pulmonary Capillary Wedge Pressure (PCWP) in mm/Hg as determined prior to

induction in the OR, or in an ICU immediately prior to the OR.

LowValue: 1 UsualRangeLow: 5 ACCField: Not mapped

HighValue: 50 UsualRangeHigh: 30 ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Format: Integer

ParentShortName: VAD DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: VAD-Hemodynamics Pre-VAD-CVP SeqNo: 4820

Short Name: HPVCVP Core: No Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: Indicate the Central Venous Pressure (CVP) in mm/Hg prior to induction in the OR, or in an ICU

immediately prior to the OR.

LowValue: 1 UsualRangeLow: 5 ACCField: Not mapped

HighValue: 50 UsualRangeHigh: 10 ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Format: Integer

ParentShortName: VAD DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: VAD-Hemodynamics Pre-VAD-CI SeqNo: 4830

Short Name: HPVCI Core: No
Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: Indicate the Cardiac Index (CI) in L/(min x m2) prior to induction in the OR, or in an ICU

immediately prior to the OR.

LowValue: 0.5 UsualRangeLow: 0.5 ACCField: Not mapped

HighValue: 5.0 UsualRangeHigh: 2.0 ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Format: Real

ParentShortName: VAD DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: VAD-Hemodynamics Pre-VAD-RVEF SeqNo: 4840

Short Name: HPVRVEF Core: No Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: Indicate the Right Ventricular Function prior to anesthesia induction in the OR and as close to time

of the VAD implant as possible.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Format: Text (categorical values

specified by STS)

ParentShortName: VAD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Normal

2 Mildly Impaired

3 Moderately Impaired

4 Severely Impaired

Version: 2.73

Long Name: VAD-Implant Type SeqNo: 4850

Short Name: VImpTy Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the first type of VAD implanted during this hospitalization.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

ParentValue: = "Yes, implanted" or "Yes, Data Source: User

implanted and explanted"

Harvest Codes:

Code: Value:

1 RVAD - Right Ventricular

Assist Device

2 LVAD - Left Ventricular

Assist Device

3 BiVAD - BiVentricular Assist

Device

4 TAH - Total Artificial Heart

Long Name: VAD-Initial VAD Cannulation/Attach Site - LVAD Inflow SeqNo: 4860

Short Name: LVADInf Core: No
Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: Indicate the location of the LVAD inflow site as the left atrium (LA) or the left ventricle (LV). The

LVAD inflow is defined as the anatomic location (left atrium or left ventricle) for the VAD cannula

or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant Type Format: Text (categorical values

specified by STS)

ParentShortName: VImpTy DataLength:

ParentValue: = "LVAD", "BiVAD", or Data Source: User

"TAH"

Harvest Codes:

Code: Value:

1 Left Atrium

2 Left Ventricle

Long Name: VAD-Initial VAD Cannulation/Attach Site - RVAD Inflow SeqNo: 4870

Short Name: RVADInf Core: No
Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: Indicate the location of the RVAD inflow site as the right atrium (RA) or the right ventricle (RV).

The RVAD inflow is defined as the anatomic location (right atrium or right ventricle) for the VAD

cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant Type Format: Text (categorical values

specified by STS)

ParentShortName: VImpTy DataLength:

ParentValue: = "RVAD", "BiVAD" or Data Source: User

"TAH"

Harvest Codes:

Code: Value:

1 Right Atrium

2 Right Ventricle

Long Name:VAD-DeviceSeqNo:4880Short Name:VProdTyCore:YesSection Name:Mechanical Cardiac Assist DevicesHarvest:Yes

DBTableName AdultData

Definition: Indicate the VAD brand name implanted. Implant defined as physical placement of the VAD.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant Type Format: Text (categorical values

specified by STS)

ParentShortName: VImpTy DataLength:

ParentValue: Is Not Missing Data Source: User

Long Name: VAD-Implant Date SeqNo: 4890

Short Name: VImpDt Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the date the VAD was implanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant Type Format: Date mm/dd/yyyy

ParentShortName: VImpTy DataLength:

ParentValue: Is Not Missing Data Source: User

Version: 2.73

Long Name: VAD-Explant SeqNo: 4900

Short Name: VExp Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate if the VAD was explanted. Explant is defined as physical removal of the VAD.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant Type Format: Text (categorical values

specified by STS)

ParentShortName: VImpTy DataLength:

ParentValue: Is Not Missing Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VAD-Explant Date SeqNo: 4910

Short Name: VExpDt Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the date the VAD was explanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Explant Format: Date mm/dd/yyyy

ParentShortName: VExp DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: VAD-Explant Reason SeqNo: 4920

Short Name: VExpRsn Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the reason the VAD was explanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Explant Format: Text (categorical values

specified by STS)

ParentShortName: VExp DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

Cardiac Transplant
 Recovery
 The VAD was explanted for Cardiac Transplant.
 Recovery
 The VAD was removed after cardiac recovery.

3 Device Transfer The VAD was explanted in order to implant another

assist device.

4 Device-Related Infection An infection within the pump pocket, driveline, VAD

Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever

requiring medical or surgical intervention.

5 Device Malfunction The VAD pump itself is not functioning properly

causing hemodynamic compromise, and/or requiring

immediate intervention or VAD replacement.

6 End of Life Mechanical device pump has reached functional life

expectancy and requires replacement.

4930 Long Name: VAD-Cardiac Transplant Date SeqNo:

Short Name: **VTxDt** Core: Yes Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the date the patient received a cardiac transplant.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

> PORIField: No ModelField: No

Parent Long Name: VAD-Explant Reason Format: Date mm/dd/yyyy

ParentShortName: VExpRsn DataLength:

ParentValue: = "Cardiac Transplant" Data Source: User

VAD-Implant #2 4940 Long Name: SeqNo:

Short Name: VImp2 Core: Yes Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a second ventricular assist device was implanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

= "Yes, implanted" or "Yes, Data Source: User ParentValue:

implanted and explanted"

Harvest Codes:

Code: Value:

1 Yes

2 No

Version: 2.73

Version: 2.73

Long Name: VAD-Implant Type #2 SeqNo: 4950

Short Name: VImpTy2 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the second type of ventricular assist device implanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant #2 Format: Text (categorical values

specified by STS)

ParentShortName: VImp2 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 RVAD - Right Ventricular

Assist Device

2 LVAD - Left Ventricular

Assist Device

3 BiVAD - BiVentricular Assist

Device

4 TAH - Total Artificial Heart

Long Name: VAD- #2 VAD Cannulation/Attach Site - LVAD Inflow SeqNo: 4960

Short Name: LVADinf2 Core: No
Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: Indicate the location of the LVAD inflow site as the left atrium (LA) or the left ventricle (LV). The

LVAD inflow is defined as the anatomic location (left atrium or left ventricle) for the VAD cannula

or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant Type #2 Format: Text (categorical values

specified by STS)

ParentShortName: VImpTy2 DataLength:

ParentValue: = "LVAD", "BiVAD", or Data Source: User

"TAH"

Harvest Codes:

Code: Value:

1 Left Atrium

2 Left Ventricle

Long Name: VAD- #2 VAD Cannulation/Attach Site - RVAD Inflow SeqNo: 4970

Short Name: RVADinf2 Core: No
Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: Indicate the location of the RVAD inflow site as the right atrium (RA) or the right ventricle (RV).

The RVAD inflow is defined as the anatomic location (right atrium or right ventricle) for the VAD

cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant Type #2 Format: Text (categorical values

specified by STS)

ParentShortName: VImpTy2 DataLength:

ParentValue: = "RVAD", "BiVAD" or Data Source: User

"TAH"

Harvest Codes:

Code: Value:

1 Right Atrium

2 Right Ventricle

Long Name:VAD-Device #2SeqNo:4980Short Name:VProdTy2Core:YesSection Name:Mechanical Cardiac Assist DevicesHarvest:Yes

DBTableName AdultData

Definition: Indicate the specific product #2 implanted. Implant defined as physical placement of the VAD.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant #2 Format: Text (categorical values

specified by STS)

ParentShortName: VImp2 DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: VAD-Implant Date #2 SeqNo: 4990

Short Name: VImpDt2 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the date the VAD #2 was implanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant #2 Format: Date mm/dd/yyyy

ParentShortName: VImp2 DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: VAD-Explant #2 SeqNo: 5000

Short Name: VExp2 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate if the VAD #2 was explanted. Explant is defined as physical removal of the VAD.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant #2 Format: Text (categorical values

specified by STS)

ParentShortName: VImp2 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VAD-Explant Date #2 SeqNo: 5010

Short Name: VExpDt2 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the date the VAD #2 was explanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Explant #2 Format: Date mm/dd/yyyy

ParentShortName: VExp2 DataLength:

ParentValue: = "Yes" Data Source: User

STS Adult Cardiac Database Version: 2.73

Long Name: VAD-Explant Reason #2 SeqNo: 5020

Short Name: VExpRsn2 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the reason the VAD #2 was explanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Explant #2 Format: Text (categorical values

specified by STS)

ParentShortName: VExp2 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

Cardiac Transplant
 Recovery
 The VAD was explanted for Cardiac Transplant.
 Recovery
 The VAD was removed after cardiac recovery.

3 Device Transfer The VAD was explanted in order to implant another

assist device.

4 Device-Related Infection An infection within the pump pocket, driveline, VAD

Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever

requiring medical or surgical intervention.

5 Device Malfunction The VAD pump itself is not functioning properly

causing hemodynamic compromise, and/or requiring

immediate intervention or VAD replacement.

6 End of Life Mechanical device pump has reached functional life

expectancy and requires replacement.

STS Adult Cardiac Database Version: 2.73

Long Name: VAD-Cardiac Transplant Date #2 SeqNo: 5030

Short Name: VTxDt2 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the date the patient received a cardiac transplant.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Explant Reason #2 Format: Date mm/dd/yyyy

ParentShortName: VExpRsn2 DataLength:

ParentValue: = "Cardiac Transplant" Data Source: User

Long Name: VAD-Implant #3 SeqNo: 5040

Short Name: VImp3 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

bectton trame. Weenamed Cardiac Assist Devices

Definition: Indicate whether a third ventricular assist device was implanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant #2 Format: Text (categorical values

specified by STS)

ParentShortName: VImp2 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

DBTableName AdultData

Code: Value:
1 Yes

2 No

Version: 2.73

Long Name: VAD-Implant Type #3 SeqNo: 5050

Short Name: VImpTy3 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the third type of ventricular assist device implanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant #3 Format: Text (categorical values

specified by STS)

ParentShortName: VImp3 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 RVAD - Right Ventricular

Assist Device

2 LVAD - Left Ventricular

Assist Device

3 BiVAD - BiVentricular Assist

Device

4 TAH - Total Artificial Heart

Long Name: VAD- #3 VAD Cannulation/Attach Site - LVAD Inflow SeqNo: 5060

Short Name: LVADInf3 Core: No
Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: Indicate the location of the LVAD inflow site as the left atrium (LA) or the left ventricle (LV). The

LVAD inflow is defined as the anatomic location (left atrium or left ventricle) for the VAD cannula

or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant Type #3 Format: Text (categorical values

specified by STS)

ParentShortName: VImpTy3 DataLength:

ParentValue: = "LVAD", "BiVAD", or Data Source: User

"TAH"

Harvest Codes:

Code: Value:

1 Left Atrium

2 Left Ventricle

Long Name: VAD- #3 VAD Cannulation/Attach Site - RVAD Inflow SeqNo: 5070

Short Name: RVADInf3 Core: No
Section Name: Mechanical Cardiac Assist Devices Harvest: No

DBTableName AdultData

Definition: Indicate the location of the RVAD inflow site as the right atrium (RA) or the right ventricle (RV).

The RVAD inflow is defined as the anatomic location (right atrium or right ventricle) for the VAD

cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant Type #3 Format: Text (categorical values

specified by STS)

ParentShortName: VImpTy3 DataLength:

ParentValue: = "RVAD", "BiVAD" or Data Source: User

"TAH"

Harvest Codes:

Code: Value:

1 Right Atrium

2 Right Ventricle

Long Name: VAD-Device #3 SeqNo: 5080
Short Name: VProdTy3 Core: Yes

Short Name: VProdTy3 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the specific product #3 implanted. Implant defined as physical placement of the VAD.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant #3 Format: Text (categorical values

specified by STS)

ParentShortName: VImp3 DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: VAD-Implant Date #3 SeqNo: 5090

Short Name: VImpDt3 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the date the VAD #3 was implanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant #3 Format: Date mm/dd/yyyy

ParentShortName: VImp3 DataLength:

ParentValue: = "Yes" Data Source: User

STS Adult Cardiac Database

Version: 2.73

Long Name: VAD-Explant #3 SeqNo: 5100

Short Name: VExp3 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate if the VAD #3 was explanted. Explant is defined as physical removal of the VAD.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Implant #3 Format: Text (categorical values

specified by STS)

ParentShortName: VImp3 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VAD-Explant Date #3 SeqNo: 5110

Short Name: VExpDt3 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the date the VAD #3 was explanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Explant #3 Format: Date mm/dd/yyyy

ParentShortName: VExp3 DataLength:

ParentValue: = "Yes" Data Source: User

STS Adult Cardiac Database Version: 2.73

Long Name: VAD-Explant Reason #3 SeqNo: 5120

Short Name: VExpRsn3 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the reason the VAD #3 was explanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Explant #3 Format: Text (categorical values

specified by STS)

ParentShortName: VExp3 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

Cardiac Transplant
 Recovery
 The VAD was explanted for Cardiac Transplant.
 Recovery
 The VAD was removed after cardiac recovery.

3 Device Transfer The VAD was explanted in order to implant another

assist device.

4 Device-Related Infection An infection within the pump pocket, driveline, VAD

Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever

requiring medical or surgical intervention.

5 Device Malfunction The VAD pump itself is not functioning properly

causing hemodynamic compromise, and/or requiring

immdiate intervention or VAD replacement.

6 End of Life Mechanical device pump has reached functional life

expectancy and requires replacement.

STS Adult Cardiac Database Version: 2.73

Long Name: VAD-Cardiac Transplant Date #3 SeqNo: 5130

Short Name: VTxDt3 Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the date the patient received a cardiac transplant.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD-Explant Reason #3 Format: Date mm/dd/yyyy

ParentShortName: VExpRsn3 DataLength:

ParentValue: = "Cardiac Transplant" Data Source: User

Long Name: VAD-Primary VAD Comp-Intracranial Bleed SeqNo: 5140

Short Name: PVCmpBld Core: Yes Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient had an intracranial bleed, confirmed by CT scan or other diagnostic studies.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

ParentValue: = "Yes, implanted", "Yes, Data Source: User

explanted", or "Yes, implanted and explanted"

Harvest Codes:

Code: Value:

1 Yes

STS Adult Cardiac Database

Version: 2.73

Long Name: VAD-Primary VAD Comp-Embolic Stroke SeqNo: 5150

Short Name: PVCmpESt Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient had embolic stroke caused by a blood clot, air embolus, or tissue, confirmed

by CT scan or other diagnostic studies.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

ParentValue: = "Yes, implanted", "Yes, Data Source: User

explanted", or "Yes, implanted and explanted"

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: VAD-Primary VAD Comp-Driveline and/or cannula Infection SeqNo: 5160

Short Name: PVCmpDCI Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient had a driveline and/or cannula infection. Driveline and/or cannula infection is

defined as the presence of erythema, drainage, or purulence at the VAD connection site whether entering or exiting the body in association with leukocytosis and in the presence of positive culture.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

ParentValue: = "Yes, implanted", "Yes, Data Source: User

explanted", or "Yes, implanted and explanted"

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: VAD-Primary VAD Comp-Pump Pocket Infection SeqNo: 5170

Short Name: PVCmpPPI Core: Yes

Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient had a pump pocket infection. A pump pocket infection is defined as a

persistent drainage in the physical location of the pump, located preperitoneally or intra-

abdominally with positive cultures from the pocket site.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

ParentValue: = "Yes, implanted", "Yes, Data Source: User

explanted", or "Yes, implanted and explanted"

Harvest Codes:

Code: Value:

1 Yes

STS Adult Cardiac Database Version: 2.73

Long Name: VAD-Primary VAD Comp-VAD Endocarditis SeqNo: 5180

Short Name: PVCmpEnd Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient had VAD endocarditis. VAD endocarditis is defined as an infection of the

blood contacting surface of the VAD device itself. This may include:

internal surfaces;graft material;

- inflow/outflow valves of the VAD.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

ParentValue: = "Yes, implanted", "Yes, Data Source: User

explanted", or "Yes, implanted and explanted"

Harvest Codes:

Code: Value:

1 Yes

STS Adult Cardiac Database

Version: 2.73

Long Name: VAD-Primary VAD Comp-Device Malfunction SeqNo: 5190

Short Name: PVCmpMal Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate if the pump itself is not functioning properly causing hemodynamic compromise, and/or

requiring immediate intervention or VAD replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

ParentValue: = "Yes, implanted", "Yes, Data Source: User

explanted", or "Yes, implanted and explanted"

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: VAD-Primary VAD Comp-Hemolysis SeqNo: 5191

Short Name: PVCmpHem Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient experienced clinical signs of hemolysis (anemia, low hematocrit,

hyperbilirubinemia) and a plasma free hemoglobin > 40 mg/dl within 72 hours of VAD implant.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

ParentValue: = "Yes, implanted", "Yes, Data Source: User

explanted", or "Yes, implanted and explanted"

Harvest Codes:

Code: Value:
1 Yes

Long Name: VAD-Primary VAD Comp-Bowel Obstruction SeqNo: 5200

Short Name: PVCmpBO Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient was diagnosed with a bowel obstruction post VAD insertion by

documentation in the medical record.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

ParentValue: = "Yes, implanted", "Yes, Data Source: User

explanted", or "Yes, implanted and explanted"

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: VAD-Discharge Status SeqNo: 5210

Short Name: VADDiscS Core: Yes
Section Name: Mechanical Cardiac Assist Devices Harvest: Yes

DBTableName AdultData

Definition: Indicate the VAD status at discharge from the hospital.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PORIField: No

Parent Long Name: VAD Implanted or Removed Format: Text (categorical values

specified by STS)

ParentShortName: VADProc DataLength:

ParentValue: = "Yes, implanted", "Yes, Data Source: User

explanted", or "Yes, implanted and explanted"

Harvest Codes:

Code: Value:

1 With VAD

2 Without VAD

3 Expired in Hospital

Long Name: Other Card-LVA SeqNo: 5220

Short Name: OCarLVA Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Left Ventricular Aneurysm Repair either in conjunction with, or

as the primary surgical procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Other Card-VSD SeqNo: 5230

Short Name: OCarVSD Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Ventricular Septal Defect Repair either in conjunction with, or as

the primary surgical procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name:Other Card-ASDSeqNo:5240Short Name:OCarASDCore:YesSection Name:Other Cardiac ProceduresHarvest:Yes

DBTableName AdultData

Definition: Indicate whether the patient had an Atrial Septal Defect Repair either in conjunction with, or as the

primary surgical procedure including but not limited to ASD, Secundum; ASD, Sinus venosus; and

PFO.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Other Card-ASD-Type SeqNo: 5241

Short Name: OCarASDTy Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate the type of Atrial Septal Defect.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-ASD Format: Text (categorical values

specified by STS)

ParentShortName: OCarASD DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 Secundum An ASD confined to the region of the fossa ovalis; its

most common etiology is a deficiency of the septum primum, but deficiency of the limbus or septum

secundum may also contribute.

2 Sinus Venosus An ASD with a vena cava or pulmonary vein (or veins)

that overrides the atrial septum or the superior interatrial fold (septum secundum) producing an interatrial or anomalous venoatrial communication. Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of the true atrial septum.

3 PFO

Small interatrial communication in the region of the foramen ovale characterized by no deficiency of the septum primum and a normal limbus with no deficiency of the septum secundum.

Long Name: Other Card-Batista SeqNo: 5280

Short Name: OCarBati Core: No
Section Name: Other Cardiac Procedures Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient had a Left Ventricular Reduction Myoplasty either in conjunction with,

or as the primary surgical procedure. Left Ventricular Reduction Myoplasty is a procedure whereby left ventricular myocardium is excised to reduce left ventricular volume in patients with a dilated cardiomyopathy, with or without mitral valve replacement or repair. If a concomitant valve

procedure is performed, please check that category also.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PORIField: Yes

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Long Name: Other Card-Surgical Ventricular Restoration SeqNo: 5290

Short Name: OCarSVR Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Surgical Ventricular Restoration either in conjunction with, or as

the primary surgical procedure. Surgical Ventricular Restoration are procedures that restore the geometry of the heart after an anterior MI. They include the Dor procedure or the SAVER procedure. This SVR procedure is distinct from an anterior left ventricular aneurysmectomy (LVA)

and from a Batista procedure (left ventricular volume reduction procedure).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Other Card-Congenital SeqNo: 5300

Short Name: OCarCong Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a congenital defect repair either in conjunction with, or as the

primary surgical procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name:Other Card-Congenital Diagnosis 1SeqNo:5310Short Name:OCarCongDiag1Core:Yes

Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate the first of the three most significant congenital diagnoses.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Congenital Format: Text (categorical values

specified by STS)

ParentShortName: OCarCong DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

10 PFO Small interatrial communication in the region of the

foramen ovale characterized by no deficiency of the septum primum and a normal limbus with no deficiency

of the septum secundum.

20 ASD, Secundum An ASD confined to the region of the fossa ovalis; its

most common etiology is a deficiency of the septum primum, but deficieny of the limbus or septum

secundum may also contribute.

30 ASD, Sinus venosus Indicate if the patient has the diagnosis of "ASD, Sinus

venosus". An "ASD, Sinus venosus" is defined as a defect with a vena cava or pulmonary vein (or veins) that overrides the atrial septum or the superior interatrial fold (septum secundum) producing an interatrial or anomalous venoatrial communication. Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of

the true atrial septum.

40 ASD, Coronary sinus Deficiency of the wall (sinus septum) separating the left

atrium from the coronary sinus, often allowing blood to shunt from the left atrium to the right atrium via the coronary sinus ostium. May or may not be associated

with a persistent left superior vena cava.

50 ASD, Common atrium (single

atrium)

Complete absence of the interatrial septum. "Single atrium" is applied to defects with no associated

malformation of the atrioventricular valves. "Common atrium" is applied to defects with associated

malformation of the atrioventricular valves.

71 VSD, Type 1 (Subarterial) A VSD that lies beneath the semilunar valve(s) in the

(Supracristal) (Conal septal defect) (Infundibular)

- 73 VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)
- 75 VSD, Type 3 (Inlet) (AV canal type)
- 77 VSD, Type 4 (Muscular)
- 79 VSD, Type: Gerbode type (LV-RA communication)
- 80 VSD, Multiple
- 100 AVC (AVSD), Complete (CAVSD)

conal or outlet septum.

A VSD that is confluent with and involves the membranous septum and is bordered by an atrioventricular valve, not including type 3 VSDs.

A VSD that involves the inlet of the right ventricular septum immediately inferior to the AV valve apparatus.

A VSD completely surrounded by muscle.

A rare form of VSD in which the defect is at the membranous septum; the communication is between the left ventricle and right atrium.

More than one VSD exists. Each individual VSD may be coded separately to specify the individual VSD types.

Indicate if the patient has the diagnosis of "AVC (AVSD), Complete (CAVSD)". An "AVC (AVSD), Complete (CAVSD)" is a "complete atrioventricular canal" or a "complete atrioventricular septal defect" and occurs in a heart with the phenotypic feature of a common atrioventricular junction. An "AVC (AVSD), Complete (CAVSD)" is defined as an AVC with a common AV valve and both a defect in the atrial septum just above the AV valve (ostium primum ASD [a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve]) and a defect in the ventricular septum just below the AV valve. The AV valve is one valve that bridges both the right and left sides of the heart. Balanced AVC is an AVC with two essentially appropriately sized ventricles. Unbalanced AVC is an AVC defect with two ventricles in which one ventricle is inappropriately small. Such a patient may be thought to be a candidate for biventricular repair, or, alternatively, may be managed as having a functionally univentricular heart. AVC lesions with unbalanced ventricles so severe as to preclude biventricular repair should be classified as single ventricles. Rastelli type A: The common superior (anterior) bridging leaflet is effectively split in two at the septum. The left superior (anterior) leaflet is entirely over the left ventricle and the right superior (anterior) leaflet is similarly entirely over the right ventricle. The division of the common superior (anterior) bridging leaflet into left and right components is caused by extensive attachment of the superior (anterior) bridging leaflet to the crest of the ventricular septum by chordae tendineae. Rastelli type B: Rare, involves anomalous papillary muscle attachment from the right side of the ventricular septum to the left side of the common superior (anterior) bridging leaflet. Rastelli type C: Marked bridging of the ventricular septum by the superior (anterior) bridging leaflet, which 110 AVC (AVSD), Intermediate (transitional)

floats freely (often termed a "free-floater") over the ventricular septum without chordal attachment to the crest of the ventricular septum.

An AVC with two distinct left and right AV valve orifices but also with both an ASD just above and a VSD just below the AV valves. While these AV valves in the intermediate form do form two separate orifices they remain abnormal valves. The VSD is often restrictive.

120 AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum)

An AVC with an ostium primum ASD (a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve) and varying degrees of malformation of the left AV valve leading to varying degrees of left AV valve regurgitation. No VSD is present.

140 AP window (aortopulmonary window)

Indicate if the patient has the diagnosis of "AP window (aortopulmonary window)". An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)

150 Pulmonary artery origin from ascending aorta (hemitruncus)

One pulmonary artery arises from the ascending aorta and the other pulmonary artery arises from the right ventricle. DOES NOT include origin of the right or left pulmonary artery from the innominate artery or the aortic arch via a patent ductus arteriosus or collateral artery.

160 Truncus arteriosus

170 Truncal valve insufficiency

2010 Truncus arteriosus + Interrupted aortic arch

180 Partial anomalous pulmonary venous connection (PAPVC)

Indicate if the patient has the diagnosis of "Truncus arteriosus". A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. Often, the infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. In such instances, there may be no ventricular septal defect or a very small ventricular septal defect, in which case the left ventricle and mitral valve may be extremely hypoplastic.

Functional abnormality - insufficiency - of the truncal valve. May be further subdivided into grade of insufficiency (I, II, III, IV or mild, moderate, severe).

Indicate if the patient has the diagnosis of "Truncus arteriosus + Interrupted aortic arch". {A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. The infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. If in such case there is no ventricular septal defect, then the left ventricle and mitral valve may be extremely hypoplastic.} {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.}

Some, but not all of the pulmonary veins connect to the right atrium or to one or more of its venous tributaries. This definition excludes sinus venosus defects with normally connected but abnormally draining pulmonary veins (the pulmonary veins may drain abnormally into the right atrium via the atrial septal defect).

190 Partial anomalous pulmonary venous connection (PAPVC), scimitar

The right pulmonary vein(s) connect anomalously to the inferior vena cava or to the right atrium at the insertion of the inferior vena cava. The descending vertical vein resembles a scimitar (Turkish sword) on frontal chest x-ray. Frequently associated with: hypoplasia of the right lung with bronchial anomalies; dextroposition and/or dextrorotation of the heart; hypoplasia of the right pulmonary artery; and anomalous subdiaphragmatic systemic arterial supply to the lower lobe of the right lung directly from the aorta or its main branches.

Total anomalous pulmonary venous connection (TAPVC), Type 1 (supracardiac) All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 1 (supracardiac) TAPVC, the anomalous connection is at the supracardiac level and can be obstructed or nonobstructed.

210 Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac)

All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 2 (cardiac) TAPVC, the anomalous connection is to the heart, either to the right atrium directly or to the coronary sinus. Most patients with type 2 TAPVC are nonobstructed.

Total anomalous pulmonary venous connection (TAPVC),Type 3 (infracardiac)

All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 3 (infracardiac) TAPVC, the anomalous connection is at the infracardiac level (below the diaphragm), with the pulmonary venous return entering the right atrium ultimately via the inferior vena cava. In the vast majority of patients infracardiac TAPVC is obstructed.

230 Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed)

All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 4 (mixed) TAPVC, the anomalous connection is at two or more of the above levels (supracardiac, cardiac, infracardiac) and can be obstructed or nonobstructed.

250 Cor triatriatum

In the classic form of cor triatriatum a membrane divides the left atrium (LA) into a posterior accessory chamber that receives the pulmonary veins and an anterior chamber (LA) that communicates with the mitral valve. In differentiating cor triatriatum from supravalvar mitral ring, in cor triatriatum the posterior compartment contains the pulmonary veins while the anterior contains the left atrial appendage and the mitral valve orifice; in supravalvar mitral ring, the anterior compartment contains only the mitral valve orifice. Cor

triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.

260 Pulmonary venous stenosis

Any pathologic narrowing of one or more pulmonary veins. Can be further subdivided by etiology (congenital, acquired-postoperative, acquired-nonpostoperative) and extent of stenosis (diffusely hypoplastic, long segment focal/tubular stenosis, discrete stenosis).

270 Systemic venous anomaly

Anomalies of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from one or more anomalies of origin, duplication, course, or connection. Examples include abnormal or absent right SVC with LSVC, bilateral SVC, interrupted right or left IVC, azygos continuation of IVC, and anomalies of hepatic drainage. Bilateral SVC may have, among other configurations: 1) RSVC draining to the RA and the LSVC to the LA with completely unroofed coronary sinus, 2) RSVC draining to the RA and LSVC to the coronary sinus which drains (normally) into the RA, or 3) RSVC to the coronary sinus which drains (abnormally) into the LA and LSVC to LA. Anomalies of the inferior vena caval system include, among others: 1) left IVC to LA, 2) biatrial drainage, or 3) interrupted IVC (left or right) with azygos continuation to an LSVC or RSVC.

280 Systemic venous obstruction

Obstruction of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from congenital or acquired stenosis or occlusion. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.

290 TOF

Indicate if the patient has the diagnosis of "TOF". Only use this diagnosis if it is NOT known if the patient has one of the following four more specific diagnoses: (1). "TOF, Pulmonary stenosis", (2). "TOF, AVC (AVSD)", (3). "TOF, Absent pulmonary valve", (4). "Pulmonary atresia, VSD (Including TOF, PA)", or (5). "Pulmonary atresia, VSD-MAPCA (pseudotruncus)". {"TOF" is "Tetralogy of Fallot" and is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the

aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")

2140 TOF, Pulmonary stenosis

Indicate if the patient has the diagnosis of "TOF, Pulmonary stenosis". Use this diagnosis if the patient has tetralogy of Fallot and pulmonary stenosis. Do not use this diagnosis if the patient has tetralogy of Fallot and pulmonary atresia. Do not use this diagnosis if the patient has tetralogy of Fallot and absent pulmonary valve. Do not use this diagnosis if the patient has tetralogy of Fallot and atrioventricular canal. {Tetralogy of Fallot is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or

additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")}

there may be an absent left or right pulmonary artery;

300 TOF, AVC (AVSD)

TOF with complete common atrioventricular canal defect is a rare variant of common atrioventricular canal defect with the associated conotruncal abnormality of TOF. The anatomy of the endocardial cushion defect is that of Rastelli type C in almost all cases.

310 TOF, Absent pulmonary valve

Indicate if the patient has the diagnosis of "TOF, Absent pulmonary valve". "TOF, Absent pulmonary valve" is " Tetralogy of Fallot with Absent pulmonary valve" and is defined as a malformation with all of the morphologic characteristics of tetralogy of Fallot (anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta), in which the ventriculo-arterial junction of the right ventricle with the main pulmonary artery features an atypical valve with rudimentary cusps that lack the anatomical semilunar features of normal valve cusps and which functionally do not achieve central coaptation. The physiologic consequence is usually a combination of variable degrees of both stenosis and regurgitation of the pulmonary valve. A developmental accompaniment of this anatomy and physiology is dilatation of the main pulmonary artery and central right and left pulmonary arteries, which when extreme, is associated with abnormal arborization of lobar and segmental pulmonary artery branches and with compression of the trachea and mainstem bronchi. One theory holds that absence of the arterial duct or ductal ligament (which is a nearly constant finding in cases of tetralogy of Fallot with absent pulmonary valve) in combination with

320 Pulmonary atresia

Pulmonary atresia, IVS

340 Pulmonary atresia, VSD (Including TOF, PA)

pulmonary `valve stenosis and regurgitation, comprise the physiologic conditions which predispose to central pulmonary artery dilatation during fetal development. (Tetralogy of Fallot with Absent Pulmonary Valve Syndrome is a term frequently used to describe the clinical presentation when it features both circulatory alterations and respiratory distress secondary to airway compression.)

Pulmonary atresia defects which do not readily fall into pulmonary atresia-intact ventricular septum or pulmonary atresia-VSD (with or without MAPCAs) categories. These may include complex lesions in which pulmonary atresia is a secondary diagnosis, for example, complex single ventricle malformations with associated pulmonary atresia.

Pulmonary atresia (PA) and intact ventricular septum (IVS) is a duct-dependent congenital malformation that forms a spectrum of lesions including atresia of the pulmonary valve, a varying degree of right ventricle and tricuspid valve hypoplasia, and anomalies of the coronary circulation. An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis. Associated Ebstein's anomaly of the tricuspid valve can be present; the tricuspid diameter is enlarged and the prognosis is poor.

Pulmonary atresia (PA) and ventricular septal defect (VSD) is a heterogeneous group of congenital cardiac malformations in which there is lack of luminal continuity and absence of blood flow from either ventricle (in cases with ventriculo-arterial discordance) and the pulmonary artery, in a biventricular heart that has an opening or a hole in the interventricular septum (VSD). The malformation forms a spectrum of lesions including tetralogy of Fallot with pulmonary atresia. Tetralogy of Fallot with PA is a specific type of PA-VSD where the intracardiac malformation is more accurately defined (extreme underdevelopment of the RV infundibulum with marked anterior and leftward displacement of the infundibular septum often fused with the anterior wall of the RV resulting in complete obstruction of blood flow into the pulmonary artery and associated with a large outlet, subaortic ventricular septal defect). In the vast majority of cases of PA-VSD the intracardiac anatomy is that of TOF. The pulmonary circulation in PA-VSD is variable in terms of origin of blood flow, presence or absence of native pulmonary arteries, presence or absence of major aortopulmonary collateral arteries (MAPCA(s)), and distal distribution (pulmonary parenchymal segment arborization) abnormalities. Native pulmonary arteries may be present or absent. If MAPCAs are present this code

350 Pulmonary atresia, VSD-MAPCA (pseudotruncus) should not be used; instead, Pulmonary atresia, VSD-MAPCA (pseudotruncus) should be used.

MAPCA(s) are large and distinct arteries, highly variable in number, that usually arise from the descending thoracic aorta, but uncommonly may originate from the aortic arch or the subclavian, carotid or even the coronary arteries. MAPCA(s) may be associated with present or absent native pulmonary arteries. If present, the native pulmonary arteries may be hypoplastic, and either confluent or nonconfluent. Systemic pulmonary collateral arteries have been categorized into 3 types based on their site of origin and the way they connect to the pulmonary circulation: direct aortopulmonary collaterals, indirect aortopulmonary collaterals, and true bronchial arteries. Only the first two should be considered MAPCA(s). If MAPCA(s) are associated with PA-VSD or TOF, PA this code should be used.

360 MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD) Rarely MAPCA(s) may occur in patents who do not have PA-VSD, but have severe pulmonary stenosis. The intracardiac anatomy in patients who have MAPCA(s) without PA should be specifically coded in each case as well.

370 Ebstein's anomaly

Indicate if the patient has the diagnosis of "Ebstein's anomaly". Ebstein's anomaly is a malformation of the tricuspid valve and right ventricle that is characterized by a spectrum of several features: (1) incomplete delamination of tricuspid valve leaflets from the myocardium of the right ventricle; (2) downward (apical) displacement of the functional annulus; (3) dilation of the "atrialized" portion of the right ventricle with variable degrees of hypertrophy and thinning of the wall; (4) redundancy, fenestrations, and tethering of the anterior leaflets; and (5) dilation of the right atrioventricular junction (the true tricuspid annulus). These anatomical and functional abnormalities cause tricuspid regurgitation (and rarely tricuspid stenosis) that results in right atrial and right ventricular dilatation and atrial and ventricular arrhythmias. With increasing degrees of anatomic severity of malformation, the fibrous transformation of leaflets from their muscular precursors remains incomplete, with the septal leaflet being most severely involved, the posterior leaflet less severely involved, and the anterior leaflet usually the least severely involved. Associated cardiac anomalies include an interatrial communication, the presence of accessory conduction pathways often associated with Wolff-Parkinson-White syndrome, and dilation of the right atrium and right ventricle in patients with severe Ebstein's anomaly. (Varying degrees of right ventricular outflow tract obstruction may be present, including pulmonary atresia in some cases. Such cases

of Ebstein's anomaly with pulmonary atresia should be coded with a Primary Diagnosis of "Ebstein's anomaly" , and a Secondary Diagnosis of "Pulmonary atresia".) (Some patients with atrioventricular discordance and ventriculoarterial discordance in situs solitus [congenitally corrected transposition] have an Ebsteinlike deformity of the left-sided morphologically tricuspid valve. The nature of the displacement of the septal and posterior leaflets is similar to that in rightsided Ebstein's anomaly in patients with atrioventricular concordance and ventriculoarterial concordance in situs solitus. These patients with "Congenitally corrected TGA" and an Ebstein-like deformity of the left-sided morphologically tricuspid valve should be coded with a Primary Diagnosis of "Congenitally corrected TGA", and a Secondary Diagnosis of "Ebstein's anomaly".)

380 Tricuspid regurgitation, non-Ebstein's related Non-Ebstein's tricuspid regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, absent papillary muscle/chordae) or acquired (post cardiac surgery or secondary to rheumatic fever, endocarditis, trauma, tumor, cardiomyopathy, iatrogenic or other causes).

390 Tricuspid stenosis

Tricuspid stenosis may be due to congenital factors (valvular hypoplasia, abnormal subvalvar apparatus, double-orifice valve, parachute deformity) or acquired (post cardiac surgery or secondary to carcinoid, rheumatic fever, tumor, systemic disease, iatrogenic, or other causes).

400 Tricuspid regurgitation and tricuspid stenosis

Tricuspid regurgitation present with tricuspid stenosis may be due to congenital factors or acquired.

410 Tricuspid valve, Other

Tricuspid valve pathology not otherwise specified in diagnosis definitions 370, 380, 390 and 400.

420 Pulmonary stenosis, Valvar

Pulmonary stenosis, Valvar ranges from critical neonatal pulmonic valve stenosis with hypoplasia of the right ventricle to valvar pulmonary stenosis in the infant, child, or adult, usually better tolerated but potentially associated with infundibular stenosis. Pulmonary branch hypoplasia can be associated. Only 10% of neonates with Pulmonary stenosis, Valvar with intact ventricular septum have RV-to-coronary artery fistula(s). An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis; this occurs in only 2% of neonates with Pulmonary stenosis, Valvar with IVS.

430 Pulmonary artery stenosis (hypoplasia), Main (trunk)

Indicate if the patient has the diagnosis of "Pulmonary artery stenosis (hypoplasia), Main (trunk)". "Pulmonary artery stenosis (hypoplasia), Main (trunk)" is defined as a congenital or acquired anomaly with pulmonary trunk (main pulmonary artery) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated

		or associated with other cardiac lesions. Since the narrowing is distal to the pulmonic valve, it may also be known as supravalvar pulmonary stenosis.
440	Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)" is defined as a congenital or acquired anomaly with central pulmonary artery branch (within the hilar bifurcation involving the right or left pulmonary artery, or both) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Coarctation of the pulmonary artery is related to abnormal extension of the ductus arteriosus into a pulmonary branch, more frequently the left branch.
450	Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)" is defined as a congenital or acquired anomaly with peripheral pulmonary artery narrowing or hypoplasia (at or beyond the hilar bifurcation). The stenosis or hypoplasia may be isolated or associated with other cardiac lesions.
470	Pulmonary artery, Discontinuous	Indicate if the patient has the diagnosis of "Pulmonary artery, Discontinuous". Pulmonary artery, Discontinuous" is defined as a congenital or acquired anomaly with discontinuity between the branch pulmonary arteries or between a branch pulmonary artery and the main pulmonary artery trunk.
490	Pulmonary stenosis, Subvalvar	Subvalvar (infundibular) pulmonary stenosis is a narrowing of the outflow tract of the right ventricle below the pulmonic valve. It may be due to a localized fibrous diaphragm just below the valve, an obstructing muscle bundle or to a long narrow fibromuscular channel.
500	DCRV	The double chambered right ventricle is characterized by a low infundibular (subvalvar) stenosis rather than the rare isolated infundibular stenosis that develops more superiorly in the infundibulum, and is often associated with one or several closing VSDs. In some cases, the VSD is already closed. The stenosis creates two chambers in the RV, one inferior including the inlet and trabecular portions of the RV and one superior including the infundibulum.
510	Pulmonary valve, Other	Other anomalies of the pulmonary valve may be listed here including but not restricted to absent pulmonary valve.
530	Pulmonary insufficiency	Pulmonary valve insufficiency or regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, etc.) or acquired

540 Pulmonary insufficiency and pulmonary stenosis

(for example, post cardiac surgery for repair of tetralogy of Fallot, etc.).

Pulmonary valve insufficiency and pulmonary stenosis beyond the neonatal period, in infancy and childhood, may be secondary to leaflet tissue that has become thickened and myxomatous. Retraction of the commissure attachment frequently creates an associated supravalvar stenosis.

2130 Shunt failure

Indicate if the patient has the diagnosis of "Shunt failure ". This diagnostic subgroup includes failure of any of a variety of shunts ("Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)", "Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)", "Shunt, Systemic to pulmonary, Other", and "Sano Shunt"), secondary to any of the following etiologies: shunt thrombosis, shunt occlusion, shunt stenosis, shunt obstruction, and shunt outgrowth. This diagnosis ("Shunt failure") would be the primary diagnosis in a patient with, for example, " Hypoplastic left heart syndrome (HLHS)" who underwent a "Norwood procedure" with a "Modified Blalock-Taussig Shunt" and now requires reoperation for thrombosis of the "Modified Blalock-Taussig Shunt" . The underlying or fundamental diagnosis in this patient is "Hypoplastic left heart syndrome (HLHS)", but the primary diagnosis for the operation to be performed to treat the thrombosis of the "Modified Blalock-Taussig Shunt" would be "Shunt failure".

Please note that the choice "2130 Shunt failure" does not include "520 Conduit failure".

Indicate if the patient has the diagnosis of "Conduit failure". This diagnostic subgroup includes failure of any of a variety of conduits (ventricular [right or left]-to-PA conduits, as well as a variety of other types of conduits [ventricular {right or left}-to-aorta, RA-to-RV, etc.]), secondary to any of the following etiologies: conduit outgrowth, obstruction, stenosis, insufficiency, or insufficiency and stenosis. This diagnosis ("Conduit failure") would be the primary diagnosis in a patient with, for example, "Truncus arteriosus" repaired in infancy who years later is hospitalized because of conduit stenosis/insufficiency. The underlying or fundamental diagnosis in this patient is "Truncus arteriosus", but the primary diagnosis for the operation to be performed during the hospitalization (in this case, " Conduit reoperation") would be "Conduit failure".

Please note that the choice "520 Conduit failure" does not include "2130 Shunt failure".

Subaortic obstruction can be caused by different lesions: subaortic membrane or tunnel, accessory mitral

520 Conduit failure

550 Aortic stenosis, Subvalvar

560 Aortic stenosis, Valvar

valve tissue, abnormal insertion of the mitral anterior leaflet to the ventricular septum, deviation of the outlet septum (seen in coarctation of the aorta and interrupted aortic arch), or a restrictive bulboventricular foramen in single ventricle complexes. The Shone complex consists of subvalvar aortic stenosis in association with supravalvar mitral ring, parachute mitral valve, and coarctation of aorta. Subvalvar aortic stenosis may be categorized into two types: localized subvalvar aortic stenosis, which consists of a fibrous or fibromuscular ridge, and diffuse tunnel subvalvar aortic stenosis, in which circumferential narrowing commences at the annular level and extends downward for 1-3 cm. Idiopathic hypertrophic subaortic stenosis (IHSS) is also know as hypertrophic obstructive cardiomyopathy (HOCM), and is characterized by a primary hypertrophy of the myocardium. The obstructive forms involve different degrees of dynamic subvalvar aortic obstruction from a thickened ventricular wall and anterior motion of the mitral valve. Definitive nomenclature and therapeutic options for IHSS are listed under cardiomyopathy.

Valvar aortic stenosis may be congenital or acquired. In its congenital form there are two types: critical (infantile), seen in the newborn in whom systemic perfusion depends on a patent ductus arteriosus, and noncritical, seen in infancy or later. Acquired valvar stenosis may be seen after as a result of rheumatic valvar disease, or from stenotic changes of an aortic valve prosthesis. Congenital valvar stenosis may result: (1) from complete fusion of commissures (acommissural) that results in a dome-shaped valve with a pinpoint opening (seen most commonly in infants with critical aortic valve stenosis); (2) from a unicommissural valve with one defined commissure and eccentric orifice (often with two raphes radiating from the ostium indicating underdeveloped commissures of a tricuspid aortic valve); (3) from a bicuspid aortic valve, with leaflets that can be equal in size or discrepant, and in left-right or anterior-posterior position; and finally (4) from a dysplastic tricuspid valve, which may have a gelatinous appearance with thick rarely equal in size leaflets, often obscuring the commissures. The dysplastic, tricuspid or bicuspid form of aortic valve deformity may not be initially obstructive but may become stenotic later in life due to leaflet thickening and calcification.

570 Aortic stenosis, Supravalvar

Congenital supravalvar aortic stenosis is described as three forms: an hourglass deformity, a fibrous membrane, and a diffuse narrowing of the ascending aorta. The disease can be inherited as an autosomal dominant trait or part of Williams-Beuren syndrome in association with mental retardation, elfin facies, failure 590 Aortic valve atresia

600 Aortic insufficiency

to thrive, and occasionally infantile hypercalcemia. Supravalvar aortic stenosis may involve the coronary artery ostia, and the aortic leaflets may be tethered. The coronary arteries can become tortuous and dilated due to elevated pressures and early atherosclerosis may ensue. Supravalvar aortic stenosis may also be acquired: (1) after a neoaortic reconstruction such as arterial switch, Ross operation, or Norwood procedure; (2) at a suture line from a previous aortotomy or cannulation; and (3) from a narrowed conduit.

Aortic valve atresia will most often be coded under the Hypoplastic left heart syndrome/complex diagnostic codes since it most often occurs as part of a spectrum of cardiac malformations. However, there is a small subset of patients with aortic valve atresia who have a well-developed left ventricle and mitral valve and a large VSD (nonrestrictive or restrictive). The diagnostic code "Aortic valve atresia" enables users to report those patients with aortic valve atresia and a well-developed systemic ventricle without recourse to either a hypoplastic left heart syndrome/complex diagnosis or a single ventricle diagnosis.

Congenital aortic regurgitation/insufficiency is rare as an isolated entity. There are rare reports of congenital malformation of the aortic valve that result in aortic insufficiency shortly after birth from an absent or underdeveloped aortic valve cusp. Aortic insufficiency is more commonly seen with other associated cardiac anomalies: (1) in stenotic aortic valves (commonly stenotic congenital bicuspid aortic valves) with some degree of aortic regurgitation due to aortic leaflet abnormality; (2) in association with a VSD (especially in supracristal or conal type I VSD, more commonly seen in Asian populations); (3) secondary to a ortic-left ventricular tunnel; (4) secondary to tethering or retraction of aortic valve leaflets in cases of supravalvar aortic stenosis that may involve the aortic valve; and similarly (5) secondary to encroachment on an aortic cusp by a subaortic membrane; or (6) turbulence caused by a stenotic jet can create progressive aortic regurgitation. Aortic insufficiency may also result from: (1) post-procedure such as closed or open valvotomy or aortic valve repair, VSD closure, balloon valvotomy, or diagnostic catheterization; (2) in the neoaorta post arterial switch, pulmonary autograft (Ross) procedure, homograft placement, Norwood procedure, or Damus-Kaye-Stansel procedure; (3) as a result of endocarditis secondary to perforated or prolapsed leaflets or annular dehiscence; (4) secondary to annuloaortic ectasia with prolapsed or noncoapting leaflets; (5) secondary to trauma, blunt or penetrating; or (6) as a result of aortitis, bacterial, viral or autoimmune. Aortic regurgitation secondary to prosthetic failure should be

610 Aortic insufficiency and aortic stenosis

coded first as either conduit failure or prosthetic valve failure, as applicable, and secondarily as aortic regurgitation secondary to prosthetic failure (perivalvar or due to structural failure). The underlying fundamental diagnosis that led to the initial conduit or valve prosthesis placement should also be described.

620 Aortic valve, Other

Aortic insufficiency is often seen in association with stenotic aortic valve, commonly the stenotic congenital bicuspid aortic valve. The degree of aortic regurgitation is due to the severity of the aortic leaflet abnormality.

This diagnostic subgroup may be used to delineate aortic valve cusp number (unicuspid, bicuspid, tricuspid, more than three cusps), commissural fusion (nromal, partially fused, completely fused), and valve leaflet (normal, thickened, dysplastic, calcified, gelatinous), annulus (normal, hypoplastic, calcified), or sinus description (normal, dilated). Note that any extensive descriptors chosen within those made available by a vendor will be converted, at harvest, to Aortic valve, Other.

630 Sinus of Valsalva aneurysm

The sinus of Valsalva is defined as that portion of the aortic root between the aortic root annulus and the sinotubular ridge. A congenital sinus of Valsalva aneurysm is a dilation usually of a single sinus of Valsalva. These most commonly originate from the right sinus (65%-85%), less commonly from the noncoronary sinus (10%-30%), and rarely from the left sinus (<5%). A true sinus of Valsalva aneurysm presents above the aortic annulus. The hierarchical coding system distinguishes between congenital versus acquired, ruptured versus nonruptured, sinus of origin, and chamber/site of penetration (right atrium, right ventricle, left atrium, left ventricle, pulmonary artery, pericardium). A nonruptured congenital sinus of Valsalva aneurysm may vary from a mild dilation of a single aortic sinus to an extensive windsock deformity. Rupture of a congenital sinus of Valsalva aneurysm into an adjacent chamber occurs most commonly between the ages of 15-30 years. Rupture may occur spontaneously, after trauma, after strenuous physical exertion, or from acute bacterial endocarditis. Congenital etiology is supported by the frequent association of sinus of Valsalva aneurysms with VSDs. Other disease processes are also associated with sinus of Valsalva aneurysm and include: syphilis, endocarditis, cystic medial necrosis, atherosclerosis, and trauma. Acquired sinus of Valsalva aneurysms more frequently involve multiple sinuses of Valsalva; when present in multiple form they are more appropriately classified as aneurysms of the aortic root.

The aortico-left ventricular tunnel (LV-to-aorta tunnel) is an abnormal paravalvular (alongside or in the vicinity

640 LV to aorta tunnel

650 Mitral stenosis, Supravalvar mitral ring

of a valve) communication between the aorta and left ventricle, commonly divided into 4 types: (1) type I, a simple tunnel with a slit-like opening at the aortic end and no aortic valve distortion; (2) type II, a large extracardiac aortic wall aneurysm of the tunnel with an oval opening at the aortic end, with or without ventricular distortion; (3) type III, intracardiac aneurysm of the septal portion of the tunnel, with or without right ventricular outflow obstruction; and (4) type IV, a combination of types II and III. Further differentiation within these types may be notation of right coronary artery arising from the wall of the tunnel. If a LV-to-aorta tunnel communicates with the right ventricle, many feel that the defect is really a ruptured sinus of Valsalva aneurysm.

Supravalvar mitral ring is formed by a circumferential ridge of tissue that is attached to the anterior mitral valve leaflet (also known as the aortic leaflet) slightly below its insertion on the annulus and to the atrium slightly above the attachment of the posterior mitral valve leaflet (also known as the mural leaflet). Depending on the diameter of the ring orifice, varying degrees of obstruction exist. The underlying valve is usually abnormal and frequently stenotic or hypoplastic. Supravalvar mitral ring is commonly associated with other stenotic lesions such as parachute or hammock valve (subvalvar stenosis), papillary muscle fusion (subvalvar stenosis), and double orifice mitral valve (valvar stenosis). Differentiation from cor triatriatum focuses on the compartments created by the supravalvar ring. In cor triatriatum the posterior compartment contains the pulmonary veins; the anterior contains the left atrial appendage and the mitral valve orifice. In supravalvar mitral ring, the posterior compartment contains the pulmonary veins and the left atrial appendage; the anterior compartment contains only the mitral valve orifice. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

660 Mitral stenosis, Valvar

Valvar mitral stenosis may arise from congenital (annular and / or leaflet) or acquired causes, both surgical (after mitral valve repair or replacement or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia, myxomatomous degeneration, trauma, or cardiomyopathy). Mitral valve annular hypoplasia is distinguished from severe mitral valve hypoplasia and mitral valve atresia, which are typically components of hypoplastic left heart syndrome. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or

primary defect.

670 Mitral stenosis, Subvalvar

Congenital subvalvar mitral stenosis may be due to obstructive pathology of either the chordae tendineae and / or papillary muscles which support the valve leaflets. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

regurgitation and stenosis) should be listed as the

680 Mitral stenosis, Subvalvar, Parachute In parachute mitral valve, all chordae are attached to a single papillary muscle originating from the posterior ventricular wall. When the interchordal spaces are partially obliterated valvar stenosis results. This defect also causes valvar insufficiency, most commonly due to a cleft leaflet, a poorly developed anterior leaflet, short chordae, or annular dilatation. This lesion is also part of Shone's anomaly, which consists of the parachute mitral valve, supravalvar mitral ring, subaortic stenosis, and coarctation of the aorta. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

695 Mitral stenosis

Stenotic lesions of the mitral valve not otherwise specified in the diagnosis definitions 650, 660, 670, and 680.

700 Mitral regurgitation and mitral stenosis

Mitral regurgitation and mitral stenosis may arise from congenital or acquired causes or after cardiac surgery. Additional details to aid in coding specific components of the diagnosis are available in the individual mitral stenosis or mitral regurgitation field definitions. When coding multiple mitral valve lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

710 Mitral regurgitation

Mitral regurgitation may arise from congenital (at the annular, leaflet or subvalvar level) or acquired causes both surgical (after mitral valve repair or replacement, subaortic stenosis repair, atrioventricular canal repair, cardiac transplantation, or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia (with chordal rupture or papillary muscle infarct), myxomatomous degeneration including Barlow's syndrome, trauma, or cardiomyopathy). Congenital lesions at the annular level include annular dilatation or deformation (usually deformation is consequent to associated lesions). At the valve leaflet level, mitral regurgitation may be due to a cleft, hypoplasia or agenesis of leaflet(s), excessive leaflet tissue, or a double orifice valve. At the subvalvar level, mitral regurgitation may be secondary to chordae

720 Mitral valve, Other

730 Hypoplastic left heart syndrome (HLHS)

2080 Shone's syndrome

tendineae anomalies (agenesis, rupture, elongation, or shortening as in funnel valve), or to papillary muscle anomalies (hypoplasia or agenesis, shortening, elongation, single-parachute, or multiple-hammock valve). When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

Mitral valve pathology not otherwise coded in diagnosis definitions 650 through 710.

Hypoplastic left heart syndrome (HLHS) is a spectrum of cardiac malformations characterized by a severe underdevelopment of the left heart-aorta complex, consisting of aortic and/or mitral valve atresia, stenosis, or hypoplasia with marked hypoplasia or absence of the left ventricle, and hypoplasia of the ascending aorta and of the aortic arch with coarctation of the aorta. Hypoplastic left heart complex is a subset of patients at the favorable end of the spectrum of HLHS characterized by hypoplasia of the structures of the left heart-aorta complex, consisting of aortic and mitral valve hypoplasia without valve stenosis or atresia, hypoplasia of the left ventricle, hypoplasia of the left ventricular outflow tract, hypoplasia of the ascending aorta and of the aortic arch, with or without coarctation of the aorta.

Shone's syndrome is a syndrome of multilevel hypoplasia and obstruction of left sided cardiovascular structures including more than one of the following lesions: (1) supravalvar ring of the left atrium, (2) a parachute deformity of the mitral valve, (3) subaortic stenosis, and (4) aortic coarctation. The syndrome is based on the original report from Shone [1] that was based on analysis of 8 autopsied cases and described the tendency of these four obstructive, or potentially obstructive, conditions to coexist. Only 2 of the 8 cases exhibited all four conditions, with the other cases exhibiting only two or three of the anomalies [2]. [1] Shone JD, Sellers RD, Anderson RG, Adams P, Lillehei CW, Edwards JE. The developmental complex of " parachute mitral valve", supravalvar ring of left atrium, subaortic stenosis, and coarctation of the aorta. Am J Cardiol 1963; 11: 714-725. [2]. Tchervenkov CI, Jacobs JP, Weinberg PM, Aiello VD, Beland MJ, Colan SD, Elliott MJ, Franklin RC, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G. The nomenclature, definition and classification of hypoplastic left heart syndrome. Cardiology in the Young, 2006; 16(4): 339-368, August 2006.

Please note that the term "2080 Shone's syndrome" may be the "Fundamental Diagnosis" of a patient; however,

		the term "2080 Shone's syndrome" may not be the "Primary Diagnosis" of an operation. The term "2080 Shone's syndrome" may be a "Secondary Diagnosis" of an operation.
740	Cardiomyopathy (including dilated, restrictive, and hypertrophic)	Cardiomyopathy is a term applied to a wide spectrum of cardiac diseases in which the predominant feature is poor myocardial function in the absence of any anatomic abnormalities. Cardiomyopathies can be dividied into three relatively easily distinguishable entities: (1) dilated, characterized by ventricular dilatation and systolic dysfunction; (2) hypertrophic, characterized by physiologically inappropriate hypertrophy of the left ventricle; and (3) restrictive, characterized by diastolic dysfunction, with a presentation often identical to constrictive pericarditis. Also included in this diagnostic category are patients with a cardiomyopathy or syndrome confined to the right ventricle, for example: (1) arrhythmogenic right ventricular dysplasia; (2) Uhl's syndrome (hypoplasia of right ventricular myocardium, parchment heart); or (3) spongiform cardiomyopathy.
750	Cardiomyopathy, End-stage congenital heart disease	Myocardial abnormality in which there is systolic and/or diastolic dysfunction in the presence of structural congenital heart disease without any (or any further) surgically correctable lesions.
760	Pericardial effusion	Inflammatory stimulation of the pericardium that results in the accumulation of appreciable amounts of pericardial fluid (also known as effusive pericarditis). The effusion may be idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced).
770	Pericarditis	Inflammatory process of the pericardium that leads to either (1) effusive pericarditis with accumulation of appreciable amounts of pericardial fluid or (2) constrictive pericarditis that leads to pericardial thickening and compression of the cardiac chambers, ultimately with an associated significant reduction in cardiac function. Etiologies are varied and include idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced) pericarditis.
780	Pericardial disease, Other	A structural or functional abnormality of the visceral or parietal pericardium that may, or may not, have a significant impact on cardiac function. Included are absence or partial defects of the pericardium.
790	Single ventricle, DILV	Single morphologically left ventricle (smooth internal walls, lack chordal attachments of AV valves to the rudimentary septal surface) that receives both atrioventricular valves.
800	Single ventricle, DIRV	Single morphologically right ventricle (more heavily trabeculated, generally have chordal attachments of AV valve to the septal surfaces) that receives both

atrioventricular valves.

810 Single ventricle, Mitral atresia

Single ventricle anomalies with mitral atresia. May also be associated with double outlet right ventricle, congenitally corrected transposition, pulmonary atresia, or pulmonary stenosis.

820 Single ventricle, Tricuspid atresia

Single ventricle anomalies with tricuspid atresia. May also be associated with complete transposition of the great arteries, congenitally corrected transposition of the great arteries, pulmonary atresia, pulmonary stenosis, subaortic stenosis, or ventricular septal defect (small or large).

830 Single ventricle, Unbalanced AV canal

Single ventricle anomalies with a common atrioventricular (AV) valve and only one completely well developed ventricle. If the common AV valve opens predominantly into the morphologic left ventricle, the defect is termed a left ventricular (LV)–type or LV-dominant AV septal defect. If the common AV valve opens predominantly into the morphologic right ventricle, the defect is termed a right ventricular (RV)–type or RV-dominant AV septal defect.

840 Single ventricle, Heterotaxia syndrome

Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or normal situation, visceral heterotaxy syndrome includes patients with an unusual degree of thoracic and abdominal visceral symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome. Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or

850 Single ventricle, Other

851 Single Ventricle + Total anomalous pulmonary venous connection (TAPVC) normal situation, visceral heterotaxy syndrome includes patients with an unusual degree of thoracic and abdominal visceral symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome.

If the single ventricle is of primitive or indeterminate type, other is chosen in coding. It is recognized that a considerable variety of other structural cardiac malformations (e.g., biventricular hearts with straddling atrioventricular valves, pulmonary atresia with intact ventricular septum, some complex forms of double outlet right ventricle) may at times be best managed in a fashion similar to that which is used to treat univentricular hearts. They are not to be coded in this section of the nomenclature, but according to the underlying lesions.

Indicate if the patient has the diagnosis of "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)". In the event of Single Ventricle occurring in association with Total anomalous pulmonary venous connection (TAPVC), code "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)", and then use additional (secondary) diagnostic codes to describe the Single Ventricle and the Total anomalous pulmonary venous connection (TAPVC) separately to provide further documentation about the Single Ventricle and Total anomalous pulmonary venous connection (TAPVC) types. {"Total anomalous pulmonary venous connection (TAPVC)" is defined as a heart where all of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium.} {The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart". (The functionally univentricular heart is defined as a spectrum of cardiac

malformations in which entire ventricular mass is functionally univentricular; in other words, whenever only one ventricle is capable, for whatever reason, of supporting either the systemic or the pulmonary circulation.) The consensus of the EACTS and STS Congenital Heart Surgery Database Committees is that the nomenclature proposal for single ventricle hearts would encompass hearts with double inlet atrioventricular connection (both double inlet left ventricle [DILV] and double inlet right ventricle [DIRV]), hearts with absence of one atrioventricular connection (mitral atresia and tricuspid atresia), hearts with a common atrioventricular valve and only one completely well-developed ventricle (unbalanced common atrioventricular canal defect), hearts with only one fully well-developed ventricle and heterotaxia syndrome (single ventricle heterotaxia syndrome), and finally other rare forms of univentricular hearts that do not fit in one of the specified major categories. In the version of the IPCCC derived from the nomenclature of the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and the STS, patients classified in this section of the nomenclature, therefore, include all those who would be coded using the Short List for "Single Ventricle", specifically: (1) Single ventricle; (2) Single ventricle, DILV; (3) Single ventricle, DIRV; (4) Single ventricle, Heterotaxia syndrome; (5) Single ventricle, Mitral atresia; (6) Single ventricle, Tricuspid atresia; (7) Single ventricle, Unbalanced AV canal. (Despite the recognition that hypoplastic left heart syndrome is a common form of functionally univentricular heart, with a single or dominant ventricle of right ventricular morphology, the EACTS-STS version of the IPCCC includes an entirely separate section for consideration of hypoplastic left heart syndrome. Also, it is recognized that a considerable variety of other structural cardiac malformations, such as pulmonary atresia with intact ventricular septum, biventricular hearts with straddling atrioventricular valves, and some complex forms of double outlet right ventricle (DORV), may at times be best managed in a fashion similar to that which is used to treat other functionally univentricular hearts. Nomenclature for description of those entities, however, is not included in this Single Ventricle section of the EACTS-STS version of the IPCCC.) [1] [1]. Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally

Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 – 21, February 2006.

870 Congenitally corrected TGA

Indicate if the patient has the diagnosis of "Congenitally corrected TGA". Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gavnor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.

872 Congenitally corrected TGA, IVS

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS". "Congenitally corrected TGA, IVS" is "Congenitally corrected transposition with an intact ventricular septum", in other words, " Congenitally corrected transposition with no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculoarterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

874 Congenitally corrected TGA, IVS-LVOTO

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS-LVOTO". "Congenitally corrected TGA, IVS-LVOTO" is "Congenitally corrected transposition with an intact ventricular septum and left ventricular outflow tract obstruction", in other words, " Congenitally corrected transposition with left ventricular outflow tract obstruction and no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculoarterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

876 Congenitally corrected TGA, VSD

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD". "Congenitally corrected TGA, VSD" is "Congenitally corrected transposition with a VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

878 Congenitally corrected TGA,

Indicate if the patient has the diagnosis of "Congenitally

VSD-LVOTO

corrected TGA, VSD-LVOTO". "Congenitally corrected TGA, VSD-LVOTO" is "Congenitally corrected transposition with a VSD and left ventricular outflow tract obstruction". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

880 TGA, IVS

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

890 TGA, IVS-LVOTO

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum and associated left ventricular obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

900 TGA, VSD

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial

910 TGA, VSD-LVOTO

930 DORV, VSD type

940 DORV, TOF type

discordance with one or more ventricular septal defects. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

A malformation of the heart in which there is atrioventricular concordance and ventricular terial discordance with one or more ventricular septal defects and left ventricular outflow tract obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, VSD type, there is an associated subaortic or doubly-committed VSD and no pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate sngle ventricle listing.

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TOF type, there is an associated subaortic or doubly-committed VSD and pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). DORV can occur in association with pulmonary atresia, keeping in mind in coding that in the nomenclature developed for DORV,

950 DORV, TGA type

there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles (in this situation DORV is coded as a primary diagnosis). Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate Single ventricle listing.

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TGA type, there is an associated subpulmonary VSD. Most frequently, there is no pulmonary outflow tract obstruction (Taussig-Bing heart). The aorta is usually to the right and slightly anterior to or side-by-side with the pulmonary artery. Associated aortic outflow tract stenosis (subaortic, aortic arch obstruction) is commonly associated with the Taussig-Bing heart and if present should be coded as a secondary diagnosis. Rarely, there is associated pulmonary outflow tract obstruction. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, Remote VSD type, there is a remote or noncommitted VSD. The VSD is far removed from both the aortic and pulmonary valves, usually within the inlet septum. Many of these VSD's are in hearts with DORV and common atrioventricular canal/septal defect. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be

Double outlet right ventricle is a type of

Indicate if the patient has the diagnosis of "DORV + AVSD (AV Canal)". In the event of DORV occurring in association with AVSD (AV Canal), code "DORV + AVSD (AV Canal)", and then use additional

coded under the appropriate single ventricle listing.

960 DORV, Remote VSD (uncommitted VSD)

2030 DORV + AVSD (AV Canal)

975 DORV, IVS

980 DOLV

990 Coarctation of aorta

1000 Aortic arch hypoplasia

(secondary) diagnostic codes to describe the DORV and the AVSD (AV Canal) separately to provide further documentation about the DORV and AVSD (AV Canal) types. {"DORV" is "Double outlet right ventricle" and is defined as a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle.} In this case, the DORV exists in combination with an atrioventricular septal defect and common atrioventricular junction guarded by a common atrioventricular valve.

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In the rare case of double outlet right ventricle with IVS the ventricular septum is intact. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connections with DORV are to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

Double outlet left ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the left ventricle. In the nomenclature developed for DOLV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DOLV is to be coded under congenitally corrected TGA. DOLV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

Indicate if the patient has the diagnosis of "Coarctation of aorta". A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.

Hypoplasia of the aortic arch is hypoplasia of the proximal or distal transverse arch or the aortic isthmus. The isthmus (arch between the left subclavian and insertion of the patent ductus arteriosus / ligamentum arteriosum) is hypoplastic if its diameter is less than 40% of the diameter of the ascending aorta. The proximal transverse arch (arch between the innominate and left carotid arteries) and distal transverse arch (arch between the left carotid and left subclavian arteries) are hypoplastic if their diameters are less than 60% and

50%, respectively, of the diameter of the ascending aorta.

92 VSD + Aortic arch hypoplasia

A ventricular septal defect, any type, associated with hypoplasia of the aortic arch. (See diagnosis definition 1000 for a definition of hypoplasia of the aortic arch.)

94 VSD + Coarctation of aorta

Indicate if the patient has the diagnosis of "VSD + Coarctation of aorta". In the event of a VSD occurring in association with Coarctation of aorta, code "VSD + Coarctation of aorta", and then use additional (secondary) diagnostic codes to describe the VSD and the Coarctation of aorta separately to provide further documentation about the individual VSD and Coarctation of aorta types. {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)} {A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.}

1010 Coronary artery anomaly, Anomalous aortic origin of coronary artery from aorta (AAOCA)

Anomalous aortic origins of the coronary arteries include a spectrum of anatomic variations of the normal coronary artery origins. Coronary artery anomalies of aortic origin to be coded under this diagnostic field include: anomalies of take-off (high take-off), origin (sinus), branching, and number. An anomalous course of the coronary artery vessels is also significant, particularly those coronary arteries that arise or course between the great vessels.

1020 Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA) In patients with anomalous pulmonary origin of the coronary artery, the coronary artery (most commonly the left coronary artery) arises from the pulmonary artery rather than from the aorta. Rarely, the right coronary artery, the circumflex, or both coronary arteries may arise from the pulmonary artery.

1030 Coronary artery anomaly, Fistula

The most common of coronary artery anomalies, a coronary arteriovenous fistula is a communication between a coronary artery and either a chamber of the heart (coronary-cameral fistula) or any segment of the systemic or pulmonary circulation (coronary arteriovenous fistula). They may be congenital or acquired (traumatic, infectious, iatrogenic) in origin,

and are mostly commonly seen singly, but occasionally multiple fistulas are present. Nomenclature schemes have been developed that further categorize the fistulas by vessel of origin and chamber of termination, and one angiographic classification scheme by Sakakibara has surgical implications. Coronary artery fistulas can be associated with other congenital heart anomalies such as tetralogy of Fallot, atrial septal defect, ventricular septal defect, and pulmonary atresia with intact ventricular septum, among others. The major cardiac defect should be listed as the primary diagnosis and the coronary artery fistula should be as an additional secondary diagnoses.

1040 Coronary artery anomaly, Aneurysm Coronary artery aneurysms are defined as dilations of a coronary vessel 1.5 times the adjacent normal coronaries. There are two forms, saccular and fusiform (most common), and both may be single or multiple. These aneurysms may be congenital or acquired (atherosclerotic, Kawasaki, systemic diseases other than Kawasaki, iatrogenic, infectious, or traumatic) in origin.

1050 Coronary artery anomaly, Other Coronary artery anomalies which may fall within this category include coronary artery bridging and coronary artery stenosis, as well as secondary coronary artery variations seen in congenital heart defects such as tetralogy of Fallot, transposition of the great arteries, and truncus arteriosus (with the exception of variations that can be addressed by a more specific coronary artery anomaly code).

1070 Interrupted aortic arch

Indicate if the patient has the diagnosis of "Interrupted aortic arch". Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.

2020 Interrupted aortic arch + VSD

Indicate if the patient has the diagnosis of "Interrupted aortic arch + VSD". In the event of interrupted aortic arch occurring in association with VSD, code "Interrupted aortic arch + VSD", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the VSD separately to provide further documentation about the individual interrupted aortic arch and VSD types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by

2000 Interrupted aortic arch + AP window (aortopulmonary window)

site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)}

Indicate if the patient has the diagnosis of "Interrupted aortic arch + AP window (aortopulmonary window)". In the event of interrupted aortic arch occurring in association with AP window, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the AP window separately to provide further documentation about the individual interrupted aortic arch and AP window types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window

involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)}

1080 Patent ductus arteriosus

Indicate if the patient has the diagnosis of "Patent ductus arteriosus". The ductus arteriosus (arterial duct) is an essential feature of fetal circulation, connecting the main pulmonary trunk with the descending aorta, distal to the origin of the left subclavian artery. In most patients it is on the left side. If a right aortic arch is present, it may be on the right or the left; very rarely it is bilateral. When luminal patency of the duct persists post-natally, it is referred to as patent ductus arteriosus (patent arterial duct). The length and diameter may vary considerably from case to case. The media of the ductus consists mainly of smooth muscle that is arranged spirally, and the intima is much thicker than that of the aorta. (A patent ductus arteriosus is a vascular arterial connection between the thoracic aorta and the pulmonary artery. Most commonly a PDA has its origin from the descending thoracic aorta, just distal and opposite the origin of the left subclavian artery. The insertion of the ductus is most commonly into the very proximal left pulmonary artery at its junction with the main pulmonary artery. Origination and insertion sites can be variable, however.)

1090 Vascular ring

The term vascular ring refers to a group of congenital vascular anomalies that encircle and comperss the esophagus and trachea. The compression may be from a complete anatomic ring (double aortic arch or right aortic arch with a left ligamentum) or from a compressive effect of an aberrant vessel (innominate artery compression syndrome).

1100 Pulmonary artery sling

In pulmonary artery sling, the left pulmonary artery originates from the right pulmonary artery and courses posteriorly between the trachea and esophagus in its route to the left lung hilum, causing a sling-like compression of the trachea.

1110 Aortic aneurysm (including pseudoaneurysm)

An aneurysm of the aorta is defined as a localized dilation or enlargement of the aorta at any site along its length (from aortic annulus to aortoiliac bifurcation). A true aortic aneurysm involves all layers of the aortic wall. A false aortic aneurysm (pseudoaneurysm) is defined as a dilated segment of the aorta not containing all layers of the aortic wall and may include

		postoperative or post-procedure false aneurysms at anastomotic sites, traumatic aortic injuries or transections, and infectious processes leading to a contained rupture.
1120	Aortic dissection	Aortic dissection is a separation of the layers of the aortic wall. Extension of the plane of the dissection may progress to free rupture into the pericardium, mediastinum, or pleural space if not contained by the outer layers of the media and adventitia. Dissections may be classified as acute or chronic (if they have been present for more than 14 days)
1130	Lung disease, Benign	Lung disease arising from any etiology (congenital or acquired) which does not result in death or lung or heart-lung transplant; examples might be non-life threatening asthma or emphysema, benign cysts.
1140	Lung disease, Malignant	Lung disease arising from any etiology (congenital or acquired, including pulmonary parenchymal disease, pulmonary vascular disease, congenital heart disease, neoplastm, etc.) which may result in death or lung or heart-lung transplant.
1150	Pectus	Pectus excavatum is a chest wall deformity in which the sternum is depressed. Pectus carinatum is a protrusion of the sternum.
1160	Tracheal stenosis	Tracheal stenosis is a reduction in the anatomic luminal diameter of the trachea by more than 50% of the remaining trachea. This stenosis may be congenital or acquired (as in post-intubation or traumatic tracheal stenosis).
1170	Airway disease	Included in this diagnostic category would be airway pathology not included under the definition of tracheal stenosis such as tracheomalacia, bronchotracheomalacia, tracheal right upper lobe, bronchomalacia, subglottic stenosis, bronchial stenosis, etc.
1430	Pleural disease, Benign	Benign diseases of the mediastinal or visceral pleura.
1440	Pleural disease, Malignant	Malignant diseases of the mediastinal or visceral pleura.
1450	Pneumothorax	A collection of air or gas in the pleural space.
1460	Pleural effusion	Abnormal accumulation of fluid in the pleural space.
1470	Chylothorax	The presence of lymphatic fluid in the pleural space secondary to a leak from the thoracic duct or its branches. Chylothorax is a specific type of pleural effusion.
1480	Empyema	A collection of purulent material in the pleural space, usually secondary to an infection.
1490	Esophageal disease, Benign	Any benign disease of the esophagus.
1500	Esophageal disease, Malignant	Any malignant disease of the esophagus.
1505	Mediastinal disease	Any disease of the mediastinum awaiting final

		benign/malignant pathology determination.
1510	Mediastinal disease, Benign	Any benign disease of the mediastinum.
1520	Mediastinal disease, Malignant	Any malignant disease of the mediastinum.
1540	Diaphragm paralysis	Paralysis of diaphragm, unilateral or bilateral.
1550	Diaphragm disease, Other	Any disease of the diaphragm other than paralysis.
1180	Arrhythmia	Any cardiac rhythm other than normal sinus rhythm.
2040	Arrhythmia, Atrial	Indicate if the patient has the diagnosis of "Arrhythmia, Atrial". "Arrhythmia, Atrial" ROOT Definition = Non-sinus atrial rhythm with or without atrioventricular conduction. [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 373.
2050	Arrhythmia, Junctional	Indicate if the patient has the diagnosis of "Arrhythmia, Junctional". "Arrhythmias arising from the atrioventricular junction; may be bradycardia, tachycardia, premature beats, or escape rhythm [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 379.
2060	Arrhythmia, Ventricular	Indicate if the patient has the diagnosis of "Arrhythmia, Ventricular". "Arrhythmia, Ventricular" ROOT Definition = Abnormal rhythm originating from the ventricles [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 393.
1185	Arrhythmia, Heart block	Atrioventricular block may be congenital or acquired, and may be of varying degree (first, second, or third degree).
1190	Arrhythmia, Heart block, Acquired	Atrioventricular block, when acquired, may be post- surgical, or secondary to myocarditis or other etiologies; the block may be first, second or third degree.
1200	Arrhythmia, Heart block, Congenital	Atrioventricular block, when congenital, may be first, second or third degree block.

1220 Arrhythmia, Pacemaker, Indications for pacemaker replacement may include end of generator life, malfunction, or infection.

1230 Atrial Isomerism, Left In isomerism, both appendages are of like morphology or structure; in left atrial isomerism both the right atrium and left atrium appear to be a left atrium structurally.

1240 Atrial Isomerism, Right In isomerism, both appendages are of like morphology or structure; in right atrial isomerism both the right atrium and left atrium appear to be a right atrium structurally.

Indicate if the patient has the diagnosis of "Dextrocardia ". "Dextrocardia" is most usually considered synonymous with a right-sided ventricular mass, whilst ' 'dextroversion' is frequently defined as a configuration where the ventricular apex points to the right. In a patient with the usual atrial arrangement, or situs solitus, dextroversion, therefore, implies a turning to the right of the heart [1]. [1]. Jacobs JP, Anderson RH, Weinberg P. Walters III HL, Tchervenkov CI, Del Duca D. Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

Indicate if the patient has the diagnosis of "Levocardia" . "Levocardia" usually considered synonymous with a left-sided ventricular mass, whilst "levoversion" is frequently defined as a configuration where the ventricular apex points to the left [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

Indicate if the patient has the diagnosis of "Mesocardia". "Mesocardia" is most usually considered synonymous with the ventricular mass occupying the midline [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin

2090 Dextrocardia

2100 Levocardia

2110 Mesocardia

2120 Situs inversus

RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi:

10.1017/S1047951107001138, September 2007.

Indicate if the patient has the diagnosis of "Situs inversus" of the atrial chambers. The development of morphologically right-sided structures on one side of the body, and morphologically left-sided structures on the other side, is termed lateralization. Normal lateralization, the usual arrangement, is also known as " situs solitus". The mirror-imaged arrangement is also known as "situs inversus". The term "visceroatrial situs" is often used to refer to the situs of the viscera and atria when their situs is in agreement. The arrangement of the organs themselves, and the arrangement of the atrial chambers, is not always the same. Should such disharmony be encountered, the sidedness of the organs and atrial chambers must be separately specified [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

1250 Aneurysm, Ventricular, Right (including pseudoaneurysm)

An aneurysm of the right ventricle is defined as a localized dilation or enlargement of the right ventricular wall.

1260 Aneurysm, Ventricular, Left (including pseudoaneurysm) An aneurysm of the left ventricle is defined as a localized dilation or enlargement of the left ventricular wall.

1270 Aneurysm, Pulmonary artery

An aneurysm of the pulmonary artery is defined as a localized dilation or enlargement of the pulmonary artery trunk and its central branches (right and left pulmonary artery).

1280 Aneurysm, Other

A localized dilation or enlargement of a cardiac vessel or chamber not coded in specific fields available for aortic aneurysm, sinus of Valsalva aneurysm, coronary artery aneurysm, right ventricular aneurysm, left

		ventricular aneurysm, or pulmonary artery aneurysm.
1290	Hypoplastic RV	Small size of the right ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the right ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
1300	Hypoplastic LV	Small size of the left ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the left ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
2070	Postoperative bleeding	Indicate if the patient has the diagnosis of "Postoperative bleeding".
1310	Mediastinitis	Inflammation/infection of the mediastinum, the cavity between the lungs which holds the heart, great vessels, trachea, esophagus, thymus, and connective tissues. In the United States mediastinits occurs most commonly following chest surgery.
1320	Endocarditis	An infection of the endocardial surface of the heart, which may involve one or more heart valves (native or prosthetic) or septal defects or prosthetic patch material placed at previous surgery.
1325	Rheumatic heart disease	Heart disease, usually valvular (e.g., mitral or aortic), following an infection with group A streptococci
1330	Prosthetic valve failure	Indicate if the patient has the diagnosis of "Prosthetic valve failure". This diagnosis is the primary diagnosis to be entered for patients undergoing replacement of a previously placed valve (not conduit) prosthesis, whatever type (e.g., bioprosthetic, mechanical, etc.). Failure may be due to, among others, patient somatic growth, malfunction of the prosthesis, or calcification or overgrowth of the prosthesis (e.g., pannus formation). Secondary or fundamental diagnosis would relate to the underlying valve disease entity. As an example, a patient undergoing removal or replacement of a prosthetic pulmonary valve previously placed for pulmonary insufficiency after repair of tetralogy of Fallot would have as a primary diagnosis "Prosthetic valve failure", as a secondary diagnosis "Pulmonary insufficiency" and as a fundamental diagnosis "

insufficiency", and as a fundamental diagnosis "

Tetralogy of Fallot'.

A myocardial infarction is the development of myocardial necrosis caused by a critical imbalance between the oxygen supply and demand of the myocardium. While a myocardial infarction may be caused by any process that causes this imbalance it most commonly results from plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Myocardial infarction is a usual accompaniment of anomalous left coronary artery from the pulmonary artery (ALCAPA).

An abnormal growth of tissue in or on the heart, demonstrating partial or complete lack of structural organization, and no functional coordination with normal cardiac tissue. Commonly, a mass is recognized which is distinct from the normal structural components of the heart. A primary cardiac tumor is one that arises directly from tissues of the heart, (e.g., myxoma, fibroelastoma, rhabdomyoma, fibroma, lipoma, pheochromocytoma, teratoma, hemangioma, mesothesioloma, sarcoma). A secondary cardiac tumor is one that arises from tissues distant from the heart, with subsequent spread to the otherwise normal tissues of the heart, (e.g., renal cell tumor with caval extension from the kidney to the level of the heart or tumor with extension from other organs or areas of the body (hepatic, adrenal, uterine, infradiaphragmatic)). N.B., in the nomenclature system developed, cardiac thrombus and cardiac vegetation are categorized as primary cardiac tumors.

An abnormal intrapulmonary connection (fistula) between an artery and vein that occurs in the blood vessels of the lungs. Pulmonary AV fistulas may be seen in association with congenital heart defects; the associated cardiac defect should be coded as well.

A pulmonary embolus is a blockage of an artery in the lungs by fat, air, clumped tumor cells, or a blood clot.

Pulmonary vascular obstructive disease (PVOD) other than those specifically defined elsewhere (Eisenmenger's pulmonary vascular obstructive disease, primary pulmonary hypertension, persistent fetal circulation). The spectrum includes PVOD arising from (1) pulmonary arterial hypertension or (2) pulmonary venous hypertension or (3) portal hypertension, or (4) collage vascular disease, or (5) drug or toxin induced, or (6) diseases of the respiratory system, or (7) chronic thromboembolic disease, among others.

"Eisenmenger syndrome" could briefly be described as "Acquired severe pulmonary vascular disease associated with congenital heart disease (Eisenmenger)".

1350 Cardiac tumor

1340 Myocardial infarction

1360 Pulmonary AV fistula

1370 Pulmonary embolism

1385 Pulmonary vascular obstructive disease

1390 Pulmonary vascular obstructive disease (Eisenmenger's)

		Eisenmenger syndrome is an acquired condition. In Eisenmenger-type pulmonary vascular obstructive disease, long-term left-to-right shunting (e.g., through a ventricular or atrial septal defect, patent ductus arteriosus, aortopulmonary window) can lead to chronic pulmonary hypertension with resultant pathological changes in the pulmonary vessels. The vessels become thick-walled, stiff, noncompliant, and may be obstructed. In Eisenmenger syndrome, the long-term left-to-right shunting will reverse and become right to left. Please note that the specific heart defect should be coded as a secondary diagnosis.
1400	Primary pulmonary hypertension	Primary pulmonary hypertension is a rare disease characterized by elevated pulmonary artery hypertension with no apparent cause. Two forms are included in the nomenclature, a sporadic form and a familial form which can be linked to the BMPR-II gene.
1410	Persistent fetal circulation	Persistence of the blood flow pattern seen in fetal life, in which high pulmonary vascular resistance in the lungs results in decreased blood flow to the lungs. Normally, after birth pulmonary pressure falls with a fall in pulmonary vascular resistance and there is increased perfusion of the lungs. Persistent fetal circulation, also known as persistent pulmonary hypertension of the newborn, can be related to lung or diaphragm malformations or lung immaturity.
1420	Meconium aspiration	Aspiration of amniotic fluid stained with meconium before, during, or after birth can lead to pulmonary sequelae including (1) pneumothorax, (2) pneumomediastinum, (3) pneumopericardium, (4) lung infection, and (5) meconium aspiration syndrome (MAS) with persistent pulmonary hypertension.
1560	Cardiac, Other	Any cardiac diagnosis not specifically delineated in other diagnostic codes.
1570	Thoracic and/or mediastinal, Other	Any thoracic and/or mediastinal disease not specifically delineated in other diagnostic codes.
1580	Peripheral vascular, Other	Any peripheral vascular disease (congenital or acquired) or injury (from trauma or iatrogenic); vessels involved may include, but are not limited to femoral artery, femorial vein, iliac artery, brachial artery, etc.
7000	Normal heart	Normal heart.
7777	Miscellaneous, Other	Any disease (congenital or acquired) not specifically delineated in other diagnostic codes.
4010	Status post - PFO, Primary closure	Status post - Suture closure of patent foramen ovale (PFO).
4020	Status post - ASD repair, Primary closure	Status post - Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
4030	Status post - ASD repair,	Status post - Patch closure (using any type of patch

	Patch	material) of secundum, coronary sinus, or sinus venosus ASD.
4040	Status post - ASD repair, Device	Status post - Closure of any type ASD (including PFO) using a device.
6110	Status post - ASD repair, Patch + PAPVC repair	
4050	Status post - ASD, Common atrium (single atrium), Septation	Status post - Septation of common (single) atrium using any type patch material.
4060	Status post - ASD creation/enlargement	Status post - Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
4070	Status post - ASD partial closure	Status post - Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
4080	Status post - Atrial septal fenestration	Status post - Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
4085	Status post - Atrial fenestration closure	Status post - Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
4100	Status post - VSD repair, Primary closure	Status post - Suture closure of any type VSD.
4110	Status post - VSD repair, Patch	Status post - Patch closure (using any type of patch material) of any type VSD.
4120	Status post - VSD repair, Device	Status post - Closure of any type VSD using a device.
4130	Status post - VSD, Multiple, Repair	Status post - Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
4140	Status post - VSD creation/enlargement	Status post - Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
4150	Status post - Ventricular septal fenestration	Status post - Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the

		ventricular septum.
4170	Status post - AVC (AVSD) repair, Complete (CAVSD)	Status post - Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
4180	Status post - AVC (AVSD) repair, Intermediate (Transitional)	Status post - Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
4190	Status post - AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Status post - Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
6300	Status post - Valvuloplasty, Common atrioventricular valve	
6250	Status post - Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	
6230	Status post - Valve replacement, Common atrioventricular valve	
4210	Status post - AP window repair	Status post - Repair of AP window using one- or two- patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
4220	Status post - Pulmonary artery origin from ascending aorta (hemitruncus) repair	Status post - Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
4230	Status post - Truncus arteriosus repair	Status post - Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
4240	Status post - Valvuloplasty, Truncal valve	Status post - Truncal valve repair, any type.
6290	Status post - Valvuloplasty converted to valve replacement in the same operation, Truncal valve	
4250	Status post - Valve replacement, Truncal valve	Status post - Replacement of the truncal valve with a prosthetic valve.

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6220	Status post - Truncus + Interrupted aortic arch repair (IAA) repair	
4260	Status post - PAPVC repair	Status post - PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
4270	Status post - PAPVC, Scimitar, Repair	Status post - In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
6120	Status post - PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)	
4280	Status post - TAPVC repair	Status post - Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.
6200	Status post - TAPVC repair + Shunt - systemic-to- pulmonary	
4290	Status post - Cor triatriatum repair	Status post - Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
4300	Status post - Pulmonary venous stenosis repair	Status post - Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
4310	Status post - Atrial baffle procedure (non-Mustard, non- Senning)	Status post - The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the

4330 Status post - Anomalous systemic venous connection repair right atrium.

Status post - With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).

4340 Status post - Systemic venous stenosis repair

Status post - Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.

4350 Status post - TOF repair, No ventriculotomy

Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.

4360 Status post - TOF repair, Ventriculotomy, Nontransanular patch Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.

4370 Status post - TOF repair, Ventriculotomy, Transanular patch Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.

4380 Status post - TOF repair, RV-PA conduit Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.

4390 Status post - TOF - AVC

Status post - Tetralogy of Fallot repair (assumes VSD

(AVSD) repair

closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.

4400 Status post - TOF - Absent pulmonary valve repair

Status post - Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.

4420 Status post - Pulmonary atresia - VSD (including TOF, PA) repair Status post - For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.

4430 Status post - Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair Status post - In the presence of MAPCAs, this code implies implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA conduit.

4440 Status post - Unifocalization MAPCA(s)

Status post - Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.

4450 Status post - Occlusion MAPCA(s)

Status post - Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.

4460 Status post - Valvuloplasty, Tricuspid Status post - Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle transplocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, pursestring annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.

6280 Status post - Valvuloplasty converted to valve

	replacement in the same operation, Tricuspid	
4465	Status post - Ebstein's repair	Status post - To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
4470	Status post - Valve replacement, Tricuspid (TVR)	Status post - Replacement of the tricuspid valve with a prosthetic valve.
4480	Status post - Valve closure, Tricuspid (exclusion, univentricular approach)	Status post - In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
4490	Status post - Valve excision, Tricuspid (without replacement)	Status post - Excision of the tricuspid valve without placement of a valve prosthesis.
4500	Status post - Valve surgery, Other, Tricuspid	Status post - Other tricuspid valve surgery not specified in procedure codes.
4510	Status post - RVOT procedure	Status post - Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
4520	Status post - 1 1/2 ventricular repair	Status post - Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
4530	Status post - PA, reconstruction (plasty), Main (trunk)	Status post - Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
4540	Status post - PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Status post - Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely,

		branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
4550	Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Status post - Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
4570	Status post - DCRV repair	Status post - Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
4590	Status post - Valvuloplasty, Pulmonic	Status post - Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
6270	Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
4600	Status post - Valve replacement, Pulmonic (PVR)	Status post - Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
4630	Status post - Valve excision, Pulmonary (without replacement)	Status post - Excision of the pulmonary valve without placement of a valve prosthesis.
4640	Status post - Valve closure, Semilunar	Status post - Closure of a semilunar valve (pulmonic or aortic) by any technique.
4650	Status post - Valve surgery, Other, Pulmonic	Status post - Other pulmonic valve surgery not specified in procedure codes.
4610	Status post - Conduit placement, RV to PA	Status post - Placement of a conduit, any type, from RV to PA.
4620	Status post - Conduit placement, LV to PA	Status post - Placement of a conduit, any type, from LV to PA.
5774	Status post - Conduit placement, Ventricle to aorta	Status post - Placement of a conduit from the right or left ventricle to the aorta.
5772	Status post - Conduit placement, Other	Status post - Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
4580	Status post - Conduit reoperation	Status post - Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV

		to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc).
4660	Status post - Valvuloplasty, Aortic	Status post - Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
6240	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic	
6310	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	
6320	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross- Konno procedure	
4670	Status post - Valve replacement, Aortic (AVR)	Status post - Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
4680	Status post - Valve replacement, Aortic (AVR), Mechanical	Status post - Replacement of the aortic valve with a mechanical prosthetic valve.
4690	Status post - Valve replacement, Aortic (AVR), Bioprosthetic	Status post - Replacement of the aortic valve with a bioprosthetic prosthetic valve.
4700	Status post - Valve replacement, Aortic (AVR), Homograft	Status post - Replacement of the aortic valve with a homograft prosthetic valve.
4715	Status post - Aortic root replacement, Bioprosthetic	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the

4720

Status post - Aortic root

replacement, Mechanical

coronary arteries) with a bioprosthesis (e.g., porcine) in

Status post - Replacement of the aortic root (that portion

of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechnical prosthesis in a

a conduit, often composite.

		composite conduit.
4730	Status post - Aortic root replacement, Homograft	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
4735	Status post - Aortic root replacement, Valve sparing	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
4740	Status post - Ross procedure	Status post - Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
4750	Status post - Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
4760	Status post - Ross-Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
4770	Status post - Other annular enlargement procedure	Status post - Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manougian and Nicks aortic annular enlargement procedures.
4780	Status post - Aortic stenosis, Subvalvar, Repair	Status post - Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation), Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
6100	Status post - Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	
4790	Status post - Aortic stenosis, Supravalvar, Repair	Status post - Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two

sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three

sinuses are patched separately.

		sinuses are pateried separatery.
4800	Status post - Valve surgery, Other, Aortic	Status post - Other aortic valve surgery not specified in other procedure codes.
4810	Status post - Sinus of Valsalva, Aneurysm repair	Status post - Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
4820	Status post - LV to aorta tunnel repair	Status post - LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
4830	Status post - Valvuloplasty, Mitral	Status post - Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissuorotomy, leaflet repair, or papillary muscle repair.
6260	Status post - Valvuloplasty converted to valve replacement in the same operation, Mitral	
4840	Status post - Mitral stenosis, Supravalvar mitral ring repair	Status post - Supravalvar mitral ring repair.
4850	Status post - Valve replacement, Mitral (MVR)	Status post - Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
4860	Status post - Valve surgery, Other, Mitral	Status post - Other mitral valve surgery not specified in procedure codes.
4870	Status post - Norwood procedure	Status post - The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neoaortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary

connection.

When coding the procedure "Norwood procedure", the primary procedure of the operation should be "Norwood procedure". The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:

- 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)
- 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)
- 3. Shunt, Systemic to pulmonary, Other
- 4. Conduit placement, RV to PA
- 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)
- 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)
- 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
- 8. HemiFontan

Status post - Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.

Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

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4880 Status post - HLHS biventricular repair

6160 Status post - Hybrid Approach "Stage 1", Application of RPA & LPA bands

6170 Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) 6180 Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of

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6140 Status post - Hybrid approach
"Stage 2", Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Aortic arch
repair (Norwood [Stage 1] +
Superior Cavopulmonary
anastomosis(es) + PA
Debanding)

Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.

6150 Status post - Hybrid approach
"Stage 2", Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Without aortic
arch repair

Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.

1590 Status post - Transplant, Heart

Status post - Heart transplantation, any technique, allograft or xenograft.

1610 Status post - Transplant, Heart and lung Status post - Heart and lung (single or double) transplantation.

4910 Status post - Partial left

Status post - Wedge resection of LV muscle, with

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	ventriculectomy (LV volume reduction surgery) (Batista)	suturing of cut edges together, to reduce LV volume.
4920	Status post - Pericardial drainage procedure	Status post - Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
4930	Status post - Pericardiectomy	Status post - Surgical removal of the pericardium.
4940	Status post - Pericardial procedure, Other	Status post - Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
4950	Status post - Fontan, Atrio- pulmonary connection	Status post - Fontan-type procedure with atrio- pulmonary connection.
4960	Status post - Fontan, Atrioventricular connection	Status post - Fontan-type procedure with atrioventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
4970	Status post - Fontan, TCPC, Lateral tunnel, Fenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
4980	Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
5000	Status post - Fontan, TCPC, External conduit, Fenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
5010	Status post - Fontan, TCPC, External conduit, Nonfenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
5025	Status post - Fontan revision or conversion (Re-do Fontan)	Status post - Revision of a previous Fontan procedure to a total cavopulmonary connection.
5030	Status post - Fontan, Other	Status post - Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
6340	Status post - Fontan + Atrioventricular valvuloplasty	
5035	Status post - Ventricular septation	Status post - Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
5050	Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Status post - Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
5060	Status post - Congenitally	Status post - Repair of congenitally corrected TGA by

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5145	Status post - Atrial baffle
	procedure, Mustard or
	Senning revision

Status post - Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).

5150 Status post - Rastelli

Status post - Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.

5160 Status post - REV

Status post - The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.

- 6190 Status post Aortic root translocation over left ventricle (Including Nikaidoh procedure)
- 6210 Status post TGA, Other procedures (Kawashima, LV-PA conduit, other)
- 5180 Status post DORV, Intraventricular tunnel repair
- 5200 Status post DOLV repair

Status post - Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima

Status post - Because of the morphologic variability of

		DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
5210	Status post - Coarctation repair, End to end	Status post - Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
5220	Status post - Coarctation repair, End to end, Extended	Status post - Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
5230	Status post - Coarctation repair, Subclavian flap	Status post - Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
5240	Status post - Coarctation repair, Patch aortoplasty	Status post - Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
5250	Status post - Coarctation repair, Interposition graft	Status post - Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
5260	Status post - Coarctation repair, Other	Status post - Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
5275	Status post - Coarctation repair + VSD repair	Status post - Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
5280	Status post - Aortic arch repair	Status post - Aortic arch repair, any technique.
5285	Status post - Aortic arch repair + VSD repair	Status post - Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
5290	Status post - Coronary artery fistula ligation	Status post - Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
5291	Status post - Anomalous origin of coronary artery from pulmonary artery repair	Status post - Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).

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5300	Status post - Coronary artery bypass	Status post - Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
5305	Status post - Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
5310	Status post - Coronary artery procedure, Other	Status post - Any coronary artery procedure not specifically listed.
5320	Status post - Interrupted aortic arch repair	Status post - Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD.
5330	Status post - PDA closure, Surgical	Status post - Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc).
5340	Status post - PDA closure, Device	Status post - Closure of a PDA by device using transcatheter techniques.
5360	Status post - Vascular ring repair	Status post - Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
5365	Status post - Aortopexy	Status post - Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
5370	Status post - Pulmonary artery sling repair	Status post - Pulmonary artery sling repair by any technique.
5380	Status post - Aortic aneurysm repair	Status post - Aortic aneurysm repair by any technique.
5390	Status post - Aortic dissection repair	Status post - Aortic dissection repair by any technique.
5400	Status post - Lung biopsy	Status post - Lung biopsy, any technique.
1600	Status post - Transplant, Lung(s)	Status post - Lung or lobe transplantation of any type.
5420	Status post - Lung procedure, Other	Status post - Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
5430	Status post - Pectus repair	Status post - Repair of pectus excavatum or carinatum by any technique.
5440	Status post - Tracheal procedure	Status post - Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib

		cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
5450	Status post - Pacemaker implantation, Permanent	Status post - Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc).
5460	Status post - Pacemaker procedure	Status post - Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
6350	Status post - Explantation of pacing system	
5470	Status post - ICD (AICD) implantation	Status post - Implantation of an (automatic) implantable cardioverter defibrillator system.
5480	Status post - ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Status post - Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
5490	Status post - Arrhythmia surgery - atrial, Surgical Ablation	Status post - Surgical ablation (any type) of any atrial arrhythmia.
5500	Status post - Arrhythmia surgery - ventricular, Surgical Ablation	Status post - Surgical ablation (any type) of any ventricular arrhythmia.
6500	Status post - Cardiovascular catheterization procedure, Diagnostic	
6520	Status post - Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	
6550	Status post - Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
6540	Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	
6510	Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	
6530	Status post - Cardiovascular catheterization procedure,	

- Diagnostic, Transluminal test occlusion
- 6410 Status post Cardiovascular catheterization procedure,
 Therapeutic
- 6670 Status post Cardiovascular catheterization procedure,
 Therapeutic, Adjunctive therapy
- 6570 Status post Cardiovascular catheterization procedure, Therapeutic, Balloon dilation
- 6590 Status post Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy
- 6600 Status post Cardiovascular catheterization procedure,
 Therapeutic, Coil implantation
- 6610 Status post Cardiovascular catheterization procedure,
 Therapeutic, Device implantation
- 6640 Status post Cardiovascular catheterization procedure,
 Therapeutic, Perforation
 (establishing interchamber and/or intervessel communication)
- 6580 Status post Cardiovascular catheterization procedure,
 Therapeutic, Septostomy
- 6620 Status post Cardiovascular catheterization procedure,
 Therapeutic, Stent insertion
- 6630 Status post Cardiovascular catheterization procedure,
 Therapeutic, Stent re-dilation
- 6650 Status post Cardiovascular catheterization procedure,
 Therapeutic, Transcatheter
 Fontan completion
- 6660 Status post Cardiovascular catheterization procedure,
 Therapeutic, Transcatheter implantation of valve
- 6680 Status post Cardiovascular electrophysiological

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	catheterization procedure	
6690	Status post - Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation	
5590	Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	Status post - Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5600	Status post - Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)	Status post - A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5610	Status post - Shunt, Systemic to pulmonary, Other	Status post - Placement of any other systemic-to- pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
5630	Status post - Shunt, Ligation and takedown	Status post - Takedown of any shunt.
6095	Status post - Shunt, Reoperation	
5640	Status post - PA banding (PAB)	Status post - Placement of a pulmonary artery band, any type.
5650	Status post - PA debanding	Status post - Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
5660	Status post - Damus-Kaye- Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	Status post - In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
5670	Status post - Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Status post - Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
5680	Status post - Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Status post - Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
5690	Status post - Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Status post - Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
5700	Status post - HemiFontan	Status post - A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be

accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-topulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.

6330	Status post - Superior
	cavopulmonary
	anastomosis(es) (Glenn or
	HemiFontan) +
	Atrioventricular valvuloplasty

- 6130 Status post Superior Cavopulmonary anastomosis(es) + PA reconstruction
- 5710 Status post Palliation, Other

Other

- 6360 Status post ECMO cannulation
- 6370 Status post ECMO decannulation
- 5910 Status post ECMO procedure

5900 Status post - Intraaortic balloon pump (IABP)

insertion

5920 Status post - Right/left heart assist device procedure

6390 Status post - VAD explantation

6380 Status post - VAD implantation

6420 Status post -Echocardiography procedure, Sedated transesophageal echocardiogram

6430 Status post Echocardiography procedure,
Sedated transthoracic
echocardiogram

Status post - Any other palliative procedure not specifically listed.

Status post - Any ECMO procedure (cannulation, decannulation, etc.).

Status post - Insertion of intraaortic balloon pump by any technique.

Status post - Any right, left, or biventricular assist device procedure (placement, removal etc.).

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6435	Status post - Non- cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	
6440	Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
6450	Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
6460	Status post - Radiology procedure on cardiac patient, Diagnostic radiology	
6470	Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
6480	Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
6490	Status post - Interventional radiology procedure on cardiac patient	
5720	Status post - Aneurysm, Ventricular, Right, Repair	Status post - Repair of right ventricular aneurysm, any technique.
5730	Status post - Aneurysm, Ventricular, Left, Repair	Status post - Repair of left ventricular aneurysm, any technique.
5740	Status post - Aneurysm, Pulmonary artery, Repair	Status post - Repair of pulmonary artery aneurysm, any technique.
5760	Status post - Cardiac tumor resection	Status post - Resection of cardiac tumor, any type.
5780	Status post - Pulmonary AV fistula repair/occlusion	Status post - Repair or occlusion of a pulmonary arteriovenous fistula.
5790	Status post - Ligation, Pulmonary artery	Status post - Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
5802	Status post - Pulmonary embolectomy, Acute pulmonary embolus	Status post - Acute pulmonary embolism (clot) removal, through catheter or surgery.
5804	Status post - Pulmonary embolectomy, Chronic pulmonary embolus	Status post - Chronic pulmonary embolism (clot) removal, through catheter or surgery.
5810	Status post - Pleural drainage	Status post - Pleural drainage procedure via

	procedure	thoracocentesis, tube thoracostomy, or open surgical drainage.
5820	Status post - Pleural procedure, Other	Status post - Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
5830	Status post - Ligation, Thoracic duct	Status post - Ligation of the thoracic duct; most commonly for persistent chylothorax.
5840	Status post - Decortication	Status post - Decortication of the lung by any technique.
5850	Status post - Esophageal procedure	Status post - Any procedure performed on the esophagus.
5860	Status post - Mediastinal procedure	Status post - Any non-cardiovascular mediastinal procedure not otherwise listed.
5870	Status post - Bronchoscopy	Status post - Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
5880	Status post - Diaphragm plication	Status post - Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
5890	Status post - Diaphragm procedure, Other	Status post - Any diaphragm procedure not specifically listed.
5930	Status post - VATS (video- assisted thoracoscopic surgery)	Status post - Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
5940	Status post - Minimally invasive procedure	Status post - Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
5950	Status post - Bypass for noncardiac lesion	Status post - Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
5960	Status post - Delayed sternal closure	Status post - Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
5970	Status post - Mediastinal exploration	Status post - Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
5980	Status post - Sternotomy wound drainage	Status post - Drainage of the sternotomy wound.

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5990	Status post - Thoracotomy, Other	Status post - Any procedure performed through a thoracotomy incision not otherwise listed.
6000	Status post - Cardiotomy, Other	Status post - Any procedure involving an incision in the heart that is not otherwise listed.
6010	Status post - Cardiac procedure, Other	Status post - Any cardiac procedure, bypass or non- bypass, that is not otherwise listed.
6020	Status post - Thoracic and/or mediastinal procedure, Other	Status post - Any thoracic and/or mediastinal procedure not otherwise listed.
6030	Status post - Peripheral vascular procedure, Other	Status post - Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
6040	Status post - Miscellaneous procedure, Other	Status post - Any miscellaneous procedure not otherwise listed.
6050	Status post - Organ procurement	Status post - Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
11777	Status post - Other procedure	Status post - Any procedure on any organ system not otherwise listed.

Long Name:Other Card-Congenital Diagnosis 2SeqNo:5320Short Name:OCarCongDiag2Core:YesSection Name:Other Cardiac ProceduresHarvest:Yes

DBTableName AdultData

Definition: Indicate the second of the three most significant congenital diagnoses.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Congenital Format: Text (categorical values

specified by STS)

ParentShortName: OCarCong DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

10 PFO Small interatrial communication in the region of the

foramen ovale characterized by no deficiency of the septum primum and a normal limbus with no deficiency

of the septum secundum.

20 ASD, Secundum An ASD confined to the region of the fossa ovalis; its

most common etiology is a deficiency of the septum primum, but deficieny of the limbus or septum

secundum may also contribute.

30 ASD, Sinus venosus Indicate if the patient has the diagnosis of "ASD, Sinus

venosus". An "ASD, Sinus venosus" is defined as a defect with a vena cava or pulmonary vein (or veins)

that overrides the atrial septum or the superior interatrial fold (septum secundum) producing an interatrial or anomalous venoatrial communication. Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of the true atrial septum.

40 ASD, Coronary sinus

Deficiency of the wall (sinus septum) separating the left atrium from the coronary sinus, often allowing blood to shunt from the left atrium to the right atrium via the coronary sinus ostium. May or may not be associated with a persistent left superior vena cava.

50 ASD, Common atrium (single atrium)

Complete absence of the interatrial septum. "Single atrium" is applied to defects with no associated malformation of the atrioventricular valves. "Common atrium" is applied to defects with associated malformation of the atrioventricular valves.

71 VSD, Type 1 (Subarterial) (Supracristal) (Conal septal defect) (Infundibular) A VSD that lies beneath the semilunar valve(s) in the conal or outlet septum.

73 VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular) A VSD that is confluent with and involves the membranous septum and is bordered by an atrioventricular valve, not including type 3 VSDs.

75 VSD, Type 3 (Inlet) (AV canal type)

A VSD that involves the inlet of the right ventricular septum immediately inferior to the AV valve apparatus.

77 VSD, Type 4 (Muscular)

A VSD completely surrounded by muscle.

79 VSD, Type: Gerbode type (LV-RA communication)

A rare form of VSD in which the defect is at the membranous septum; the communication is between the left ventricle and right atrium.

80 VSD, Multiple

More than one VSD exists. Each individual VSD may be coded separately to specify the individual VSD types.

100 AVC (AVSD), Complete (CAVSD)

Indicate if the patient has the diagnosis of "AVC (AVSD), Complete (CAVSD)". An "AVC (AVSD), Complete (CAVSD)" is a "complete atrioventricular canal" or a "complete atrioventricular septal defect" and occurs in a heart with the phenotypic feature of a common atrioventricular junction. An "AVC (AVSD), Complete (CAVSD)" is defined as an AVC with a common AV valve and both a defect in the atrial septum just above the AV valve (ostium primum ASD [a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve]) and a defect in the ventricular septum just below the AV valve. The AV valve is one valve that bridges both the right and left sides of the heart. Balanced AVC is an AVC with two essentially appropriately sized ventricles. Unbalanced AVC is an AVC defect with two ventricles in which one ventricle is inappropriately

small. Such a patient may be thought to be a candidate for biventricular repair, or, alternatively, may be managed as having a functionally univentricular heart. AVC lesions with unbalanced ventricles so severe as to preclude biventricular repair should be classified as single ventricles. Rastelli type A: The common superior (anterior) bridging leaflet is effectively split in two at the septum. The left superior (anterior) leaflet is entirely over the left ventricle and the right superior (anterior) leaflet is similarly entirely over the right ventricle. The division of the common superior (anterior) bridging leaflet into left and right components is caused by extensive attachment of the superior (anterior) bridging leaflet to the crest of the ventricular septum by chordae tendineae. Rastelli type B: Rare, involves anomalous papillary muscle attachment from the right side of the ventricular septum to the left side of the common superior (anterior) bridging leaflet. Rastelli type C: Marked bridging of the ventricular septum by the superior (anterior) bridging leaflet, which floats freely (often termed a "free-floater") over the ventricular septum without chordal attachment to the crest of the ventricular septum.

110 AVC (AVSD), Intermediate (transitional)

An AVC with two distinct left and right AV valve orifices but also with both an ASD just above and a VSD just below the AV valves. While these AV valves in the intermediate form do form two separate orifices they remain abnormal valves. The VSD is often restrictive.

120 AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum)

An AVC with an ostium primum ASD (a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve) and varying degrees of malformation of the left AV valve leading to varying degrees of left AV valve regurgitation. No VSD is present.

140 AP window (aortopulmonary window)

Indicate if the patient has the diagnosis of "AP window (aortopulmonary window)". An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal

defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)

150 Pulmonary artery origin from ascending aorta (hemitruncus)

One pulmonary artery arises from the ascending aorta and the other pulmonary artery arises from the right ventricle. DOES NOT include origin of the right or left pulmonary artery from the innominate artery or the aortic arch via a patent ductus arteriosus or collateral artery.

160 Truncus arteriosus

Indicate if the patient has the diagnosis of "Truncus arteriosus". A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. Often, the infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. In such instances, there may be no ventricular septal defect or a very small ventricular septal defect, in which case the left ventricle and mitral valve may be extremely hypoplastic.

170 Truncal valve insufficiency

Functional abnormality - insufficiency - of the truncal valve. May be further subdivided into grade of insufficiency (I, II, III, IV or mild, moderate, severe).

2010 Truncus arteriosus + Interrupted aortic arch

Indicate if the patient has the diagnosis of "Truncus arteriosus + Interrupted aortic arch". {A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. The infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum

(and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. If in such case there is no ventricular septal defect, then the left ventricle and mitral valve may be extremely hypoplastic.} {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.}

180 Partial anomalous pulmonary venous connection (PAPVC)

Some, but not all of the pulmonary veins connect to the right atrium or to one or more of its venous tributaries. This definition excludes sinus venosus defects with normally connected but abnormally draining pulmonary veins (the pulmonary veins may drain abnormally into the right atrium via the atrial septal defect).

190 Partial anomalous pulmonary venous connection (PAPVC), scimitar

The right pulmonary vein(s) connect anomalously to the inferior vena cava or to the right atrium at the insertion of the inferior vena cava. The descending vertical vein resembles a scimitar (Turkish sword) on frontal chest x-ray. Frequently associated with: hypoplasia of the right lung with bronchial anomalies; dextroposition and/or dextrorotation of the heart; hypoplasia of the right pulmonary artery; and anomalous subdiaphragmatic systemic arterial supply to the lower lobe of the right lung directly from the aorta or its main branches.

Total anomalous pulmonary venous connection (TAPVC),Type 1 (supracardiac)

All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 1 (supracardiac) TAPVC, the anomalous connection is at the supracardiac level and can be obstructed or nonobstructed.

210 Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac)

All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 2 (cardiac) TAPVC, the anomalous connection is to the heart, either to the right atrium directly or to the coronary sinus. Most patients with type 2 TAPVC are nonobstructed.

Total anomalous pulmonary venous connection (TAPVC),Type 3 (infracardiac)

All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 3 (infracardiac) TAPVC, the anomalous connection is at the infracardiac level (below the diaphragm), with the pulmonary

230 Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed)

venous return entering the right atrium ultimately via the inferior vena cava. In the vast majority of patients infracardiac TAPVC is obstructed.

All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 4 (mixed) TAPVC, the anomalous connection is at two or more of the above levels (supracardiac, cardiac, infracardiac) and can be obstructed or nonobstructed.

250 Cor triatriatum

In the classic form of cor triatriatum a membrane divides the left atrium (LA) into a posterior accessory chamber that receives the pulmonary veins and an anterior chamber (LA) that communicates with the mitral valve. In differentiating cor triatriatum from supravalvar mitral ring, in cor triatriatum the posterior compartment contains the pulmonary veins while the anterior contains the left atrial appendage and the mitral valve orifice; in supravalvar mitral ring, the anterior compartment contains only the mitral valve orifice. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.

260 Pulmonary venous stenosis

Any pathologic narrowing of one or more pulmonary veins. Can be further subdivided by etiology (congenital, acquired-postoperative, acquired-nonpostoperative) and extent of stenosis (diffusely hypoplastic, long segment focal/tubular stenosis, discrete stenosis).

270 Systemic venous anomaly

Anomalies of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from one or more anomalies of origin, duplication, course, or connection. Examples include abnormal or absent right SVC with LSVC, bilateral SVC, interrupted right or left IVC, azygos continuation of IVC, and anomalies of hepatic drainage. Bilateral SVC may have, among other configurations: 1) RSVC draining to the RA and the LSVC to the LA with completely unroofed coronary sinus, 2) RSVC draining to the RA and LSVC to the coronary sinus which drains (normally) into the RA, or 3) RSVC to the coronary sinus which drains (abnormally) into the LA and LSVC to LA. Anomalies of the inferior vena caval system include, among others: 1) left IVC to LA, 2) biatrial drainage, or 3) interrupted IVC (left or right) with azygos continuation to an LSVC or RSVC.

280 Systemic venous obstruction

Obstruction of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC),

290 TOF

brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from congenital or acquired stenosis or occlusion. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.

Indicate if the patient has the diagnosis of "TOF". Only use this diagnosis if it is NOT known if the patient has one of the following four more specific diagnoses: (1). "TOF, Pulmonary stenosis", (2). "TOF, AVC (AVSD)" , (3). "TOF, Absent pulmonary valve", (4). " Pulmonary atresia, VSD (Including TOF, PA)", or (5). " Pulmonary atresia, VSD-MAPCA (pseudotruncus)".{" TOF" is "Tetralogy of Fallot" and is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. \(\) (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")

2140 TOF, Pulmonary stenosis

Indicate if the patient has the diagnosis of "TOF, Pulmonary stenosis". Use this diagnosis if the patient has tetralogy of Fallot and pulmonary stenosis. Do not use this diagnosis if the patient has tetralogy of Fallot and pulmonary atresia. Do not use this diagnosis if the patient has tetralogy of Fallot and absent pulmonary valve. Do not use this diagnosis if the patient has tetralogy of Fallot and atrioventricular canal. {Tetralogy of Fallot is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")}

300 TOF, AVC (AVSD)

TOF with complete common atrioventricular canal defect is a rare variant of common atrioventricular canal defect with the associated conotruncal abnormality of TOF. The anatomy of the endocardial cushion defect is that of Rastelli type C in almost all cases.

310 TOF, Absent pulmonary valve

Indicate if the patient has the diagnosis of "TOF, Absent pulmonary valve". "TOF, Absent pulmonary valve" is "Tetralogy of Fallot with Absent pulmonary valve" and is defined as a malformation with all of the morphologic characteristics of tetralogy of Fallot (anterosuperior

deviation of the conal or outlet septum or its fibrous remnant, narrowing of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta), in which the ventriculo-arterial junction of the right ventricle with the main pulmonary artery features an atypical valve with rudimentary cusps that lack the anatomical semilunar features of normal valve cusps and which functionally do not achieve central coaptation. The physiologic consequence is usually a combination of variable degrees of both stenosis and regurgitation of the pulmonary valve. A developmental accompaniment of this anatomy and physiology is dilatation of the main pulmonary artery and central right and left pulmonary arteries, which when extreme, is associated with abnormal arborization of lobar and segmental pulmonary artery branches and with compression of the trachea and mainstem bronchi. One theory holds that absence of the arterial duct or ductal ligament (which is a nearly constant finding in cases of tetralogy of Fallot with absent pulmonary valve) in combination with pulmonary 'valve stenosis and regurgitation, comprise the physiologic conditions which predispose to central pulmonary artery dilatation during fetal development. (Tetralogy of Fallot with Absent Pulmonary Valve Syndrome is a term frequently used to describe the clinical presentation when it features both circulatory alterations and respiratory distress secondary to airway compression.)

320 Pulmonary atresia

Pulmonary atresia defects which do not readily fall into pulmonary atresia-intact ventricular septum or pulmonary atresia-VSD (with or without MAPCAs) categories. These may include complex lesions in which pulmonary atresia is a secondary diagnosis, for example, complex single ventricle malformations with associated pulmonary atresia.

330 Pulmonary atresia, IVS

Pulmonary atresia (PA) and intact ventricular septum (IVS) is a duct-dependent congenital malformation that forms a spectrum of lesions including atresia of the pulmonary valve, a varying degree of right ventricle and tricuspid valve hypoplasia, and anomalies of the coronary circulation. An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis. Associated Ebstein's anomaly of the tricuspid valve can be present; the tricuspid diameter is enlarged and the prognosis is poor.

340 Pulmonary atresia, VSD (Including TOF, PA)

Pulmonary atresia (PA) and ventricular septal defect (VSD) is a heterogeneous group of congenital cardiac malformations in which there is lack of luminal continuity and absence of blood flow from either ventricle (in cases with ventriculo-arterial discordance)

350 Pulmonary atresia, VSD-MAPCA (pseudotruncus)

and the pulmonary artery, in a biventricular heart that has an opening or a hole in the interventricular septum (VSD). The malformation forms a spectrum of lesions including tetralogy of Fallot with pulmonary atresia. Tetralogy of Fallot with PA is a specific type of PA-VSD where the intracardiac malformation is more accurately defined (extreme underdevelopment of the RV infundibulum with marked anterior and leftward displacement of the infundibular septum often fused with the anterior wall of the RV resulting in complete obstruction of blood flow into the pulmonary artery and associated with a large outlet, subaortic ventricular septal defect). In the vast majority of cases of PA-VSD the intracardiac anatomy is that of TOF. The pulmonary circulation in PA-VSD is variable in terms of origin of blood flow, presence or absence of native pulmonary arteries, presence or absence of major aortopulmonary collateral arteries (MAPCA(s)), and distal distribution (pulmonary parenchymal segment arborization) abnormalities. Native pulmonary arteries may be present or absent. If MAPCAs are present this code should not be used; instead, Pulmonary atresia, VSD-MAPCA (pseudotruncus) should be used.

MAPCA(s) are large and distinct arteries, highly variable in number, that usually arise from the descending thoracic aorta, but uncommonly may originate from the aortic arch or the subclavian, carotid or even the coronary arteries. MAPCA(s) may be associated with present or absent native pulmonary arteries. If present, the native pulmonary arteries may be hypoplastic, and either confluent or nonconfluent. Systemic pulmonary collateral arteries have been categorized into 3 types based on their site of origin and the way they connect to the pulmonary circulation: direct aortopulmonary collaterals, indirect aortopulmonary collaterals, and true bronchial arteries. Only the first two should be considered MAPCA(s). If MAPCA(s) are associated with PA-VSD or TOF, PA this code should be used.

360 MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD) Rarely MAPCA(s) may occur in patents who do not have PA-VSD, but have severe pulmonary stenosis. The intracardiac anatomy in patients who have MAPCA(s) without PA should be specifically coded in each case as well.

370 Ebstein's anomaly

Indicate if the patient has the diagnosis of "Ebstein's anomaly". Ebstein's anomaly is a malformation of the tricuspid valve and right ventricle that is characterized by a spectrum of several features: (1) incomplete delamination of tricuspid valve leaflets from the myocardium of the right ventricle; (2) downward (apical) displacement of the functional annulus; (3) dilation of the "atrialized" portion of the right ventricle

with variable degrees of hypertrophy and thinning of the wall; (4) redundancy, fenestrations, and tethering of the anterior leaflets; and (5) dilation of the right atrioventricular junction (the true tricuspid annulus). These anatomical and functional abnormalities cause tricuspid regurgitation (and rarely tricuspid stenosis) that results in right atrial and right ventricular dilatation and atrial and ventricular arrhythmias. With increasing degrees of anatomic severity of malformation, the fibrous transformation of leaflets from their muscular precursors remains incomplete, with the septal leaflet being most severely involved, the posterior leaflet less severely involved, and the anterior leaflet usually the least severely involved. Associated cardiac anomalies include an interatrial communication, the presence of accessory conduction pathways often associated with Wolff-Parkinson-White syndrome, and dilation of the right atrium and right ventricle in patients with severe Ebstein's anomaly. (Varying degrees of right ventricular outflow tract obstruction may be present, including pulmonary atresia in some cases. Such cases of Ebstein's anomaly with pulmonary atresia should be coded with a Primary Diagnosis of "Ebstein's anomaly" , and a Secondary Diagnosis of "Pulmonary atresia".) (Some patients with atrioventricular discordance and ventriculoarterial discordance in situs solitus [congenitally corrected transposition] have an Ebsteinlike deformity of the left-sided morphologically tricuspid valve. The nature of the displacement of the septal and posterior leaflets is similar to that in rightsided Ebstein's anomaly in patients with atrioventricular concordance and ventriculoarterial concordance in situs solitus. These patients with "Congenitally corrected TGA" and an Ebstein-like deformity of the left-sided morphologically tricuspid valve should be coded with a Primary Diagnosis of "Congenitally corrected TGA", and a Secondary Diagnosis of "Ebstein's anomaly".)

380	Tricuspid regurgitation, non-
	Ebstein's related

Non-Ebstein's tricuspid regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, absent papillary muscle/chordae) or acquired (post cardiac surgery or secondary to rheumatic fever, endocarditis, trauma, tumor, cardiomyopathy, iatrogenic or other causes).

390 Tricuspid stenosis

Tricuspid stenosis may be due to congenital factors (valvular hypoplasia, abnormal subvalvar apparatus, double-orifice valve, parachute deformity) or acquired (post cardiac surgery or secondary to carcinoid, rheumatic fever, tumor, systemic disease, iatrogenic, or other causes).

400 Tricuspid regurgitation and tricuspid stenosis

Tricuspid regurgitation present with tricuspid stenosis may be due to congenital factors or acquired.

410 Tricuspid valve, Other

Tricuspid valve pathology not otherwise specified in

420 Pulmonary stenosis, Valvar

diagnosis definitions 370, 380, 390 and 400.

Pulmonary stenosis, Valvar ranges from critical neonatal pulmonic valve stenosis with hypoplasia of the right ventricle to valvar pulmonary stenosis in the infant, child, or adult, usually better tolerated but potentially associated with infundibular stenosis. Pulmonary branch hypoplasia can be associated. Only 10% of neonates with Pulmonary stenosis, Valvar with intact ventricular septum have RV-to-coronary artery fistula(s). An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis; this occurs in only 2% of neonates with Pulmonary stenosis, Valvar with IVS.

430 Pulmonary artery stenosis (hypoplasia), Main (trunk)

Indicate if the patient has the diagnosis of "Pulmonary artery stenosis (hypoplasia), Main (trunk)". "Pulmonary artery stenosis (hypoplasia), Main (trunk)" is defined as a congenital or acquired anomaly with pulmonary trunk (main pulmonary artery) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Since the narrowing is distal to the pulmonic valve, it may also be known as supravalvar pulmonary stenosis.

440 Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation) Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)" is defined as a congenital or acquired anomaly with central pulmonary artery branch (within the hilar bifurcation involving the right or left pulmonary artery, or both) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Coarctation of the pulmonary artery is related to abnormal extension of the ductus arteriosus into a pulmonary branch, more frequently the left branch.

450 Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation) Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)" is defined as a congenital or acquired anomaly with peripheral pulmonary artery narrowing or hypoplasia (at or beyond the hilar bifurcation). The stenosis or hypoplasia may be isolated or associated with other cardiac lesions.

470 Pulmonary artery, Discontinuous

Indicate if the patient has the diagnosis of "Pulmonary artery, Discontinuous". Pulmonary artery, Discontinuous" is defined as a congenital or acquired anomaly with discontinuity between the branch pulmonary arteries or between a branch pulmonary artery and the main pulmonary artery trunk.

490 Pulmonary stenosis, Subvalvar

Subvalvar (infundibular) pulmonary stenosis is a

500 DCRV

narrowing of the outflow tract of the right ventricle below the pulmonic valve. It may be due to a localized fibrous diaphragm just below the valve, an obstructing muscle bundle or to a long narrow fibromuscular channel.

The double chambered right ventricle is characterized by a low infundibular (subvalvar) stenosis rather than the rare isolated infundibular stenosis that develops more superiorly in the infundibulum, and is often associated with one or several closing VSDs. In some cases, the VSD is already closed. The stenosis creates two chambers in the RV, one inferior including the inlet and trabecular portions of the RV and one superior including the infundibulum.

510 Pulmonary valve, Other

Other anomalies of the pulmonary valve may be listed here including but not restricted to absent pulmonary valve.

530 Pulmonary insufficiency

Pulmonary valve insufficiency or regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, etc.) or acquired (for example, post cardiac surgery for repair of tetralogy of Fallot, etc.).

540 Pulmonary insufficiency and pulmonary stenosis

Pulmonary valve insufficiency and pulmonary stenosis beyond the neonatal period, in infancy and childhood, may be secondary to leaflet tissue that has become thickened and myxomatous. Retraction of the commissure attachment frequently creates an associated supravalvar stenosis.

2130 Shunt failure

Indicate if the patient has the diagnosis of "Shunt failure ". This diagnostic subgroup includes failure of any of a variety of shunts ("Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)", "Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)", "Shunt, Systemic to pulmonary, Other", and "Sano Shunt"), secondary to any of the following etiologies: shunt thrombosis, shunt occlusion, shunt stenosis, shunt obstruction, and shunt outgrowth. This diagnosis ("Shunt failure") would be the primary diagnosis in a patient with, for example, " Hypoplastic left heart syndrome (HLHS)" who underwent a "Norwood procedure" with a "Modified Blalock-Taussig Shunt" and now requires reoperation for thrombosis of the "Modified Blalock-Taussig Shunt" . The underlying or fundamental diagnosis in this patient is "Hypoplastic left heart syndrome (HLHS)", but the primary diagnosis for the operation to be performed to treat the thrombosis of the "Modified Blalock-Taussig Shunt" would be "Shunt failure".

Please note that the choice "2130 Shunt failure" does not include "520 Conduit failure".

520 Conduit failure

Indicate if the patient has the diagnosis of "Conduit failure". This diagnostic subgroup includes failure of any of a variety of conduits (ventricular [right or left]-to-PA conduits, as well as a variety of other types of conduits [ventricular {right or left}-to-aorta, RA-to-RV, etc.]), secondary to any of the following etiologies: conduit outgrowth, obstruction, stenosis, insufficiency, or insufficiency and stenosis. This diagnosis ("Conduit failure") would be the primary diagnosis in a patient with, for example, "Truncus arteriosus" repaired in infancy who years later is hospitalized because of conduit stenosis/insufficiency. The underlying or fundamental diagnosis in this patient is "Truncus arteriosus", but the primary diagnosis for the operation to be performed during the hospitalization (in this case, " Conduit reoperation") would be "Conduit failure".

Please note that the choice "520 Conduit failure" does not include "2130 Shunt failure".

550 Aortic stenosis, Subvalvar

Subaortic obstruction can be caused by different lesions: subaortic membrane or tunnel, accessory mitral valve tissue, abnormal insertion of the mitral anterior leaflet to the ventricular septum, deviation of the outlet septum (seen in coarctation of the aorta and interrupted aortic arch), or a restrictive bulboventricular foramen in single ventricle complexes. The Shone complex consists of subvalvar aortic stenosis in association with supravalvar mitral ring, parachute mitral valve, and coarctation of aorta. Subvalvar aortic stenosis may be categorized into two types: localized subvalvar aortic stenosis, which consists of a fibrous or fibromuscular ridge, and diffuse tunnel subvalvar aortic stenosis, in which circumferential narrowing commences at the annular level and extends downward for 1-3 cm. Idiopathic hypertrophic subaortic stenosis (IHSS) is also know as hypertrophic obstructive cardiomyopathy (HOCM), and is characterized by a primary hypertrophy of the myocardium. The obstructive forms involve different degrees of dynamic subvalvar aortic obstruction from a thickened ventricular wall and anterior motion of the mitral valve. Definitive nomenclature and therapeutic options for IHSS are listed under cardiomyopathy.

560 Aortic stenosis, Valvar

Valvar aortic stenosis may be congenital or acquired. In its congenital form there are two types: critical (infantile), seen in the newborn in whom systemic perfusion depends on a patent ductus arteriosus, and noncritical, seen in infancy or later. Acquired valvar stenosis may be seen after as a result of rheumatic valvar disease, or from stenotic changes of an aortic valve prosthesis. Congenital valvar stenosis may result: (1) from complete fusion of commissures (acommissural) that results in a dome-shaped valve with

a pinpoint opening (seen most commonly in infants with critical aortic valve stenosis); (2) from a unicommissural valve with one defined commissure and eccentric orifice (often with two raphes radiating from the ostium indicating underdeveloped commissures of a tricuspid aortic valve); (3) from a bicuspid aortic valve, with leaflets that can be equal in size or discrepant, and in left-right or anterior-posterior position; and finally (4) from a dysplastic tricuspid valve, which may have a gelatinous appearance with thick rarely equal in size leaflets, often obscuring the commissures. The dysplastic, tricuspid or bicuspid form of aortic valve deformity may not be initially obstructive but may become stenotic later in life due to leaflet thickening and calcification.

570 Aortic stenosis, Supravalvar

Congenital supravalvar aortic stenosis is described as three forms: an hourglass deformity, a fibrous membrane, and a diffuse narrowing of the ascending aorta. The disease can be inherited as an autosomal dominant trait or part of Williams-Beuren syndrome in association with mental retardation, elfin facies, failure to thrive, and occasionally infantile hypercalcemia. Supravalvar aortic stenosis may involve the coronary artery ostia, and the aortic leaflets may be tethered. The coronary arteries can become tortuous and dilated due to elevated pressures and early atherosclerosis may ensue. Supravalvar aortic stenosis may also be acquired: (1) after a neoaortic reconstruction such as arterial switch, Ross operation, or Norwood procedure; (2) at a suture line from a previous aortotomy or cannulation; and (3) from a narrowed conduit.

590 Aortic valve atresia

Aortic valve atresia will most often be coded under the Hypoplastic left heart syndrome/complex diagnostic codes since it most often occurs as part of a spectrum of cardiac malformations. However, there is a small subset of patients with aortic valve atresia who have a well-developed left ventricle and mitral valve and a large VSD (nonrestrictive or restrictive). The diagnostic code "Aortic valve atresia" enables users to report those patients with aortic valve atresia and a well-developed systemic ventricle without recourse to either a hypoplastic left heart syndrome/complex diagnosis or a single ventricle diagnosis.

600 Aortic insufficiency

Congenital aortic regurgitation/insufficiency is rare as an isolated entity. There are rare reports of congenital malformation of the aortic valve that result in aortic insufficiency shortly after birth from an absent or underdeveloped aortic valve cusp. Aortic insufficiency is more commonly seen with other associated cardiac anomalies: (1) in stenotic aortic valves (commonly stenotic congenital bicuspid aortic valves) with some degree of aortic regurgitation due to aortic leaflet

abnormality; (2) in association with a VSD (especially in supracristal or conal type I VSD, more commonly seen in Asian populations); (3) secondary to a ortic-left ventricular tunnel; (4) secondary to tethering or retraction of aortic valve leaflets in cases of supravalvar aortic stenosis that may involve the aortic valve; and similarly (5) secondary to encroachment on an aortic cusp by a subaortic membrane; or (6) turbulence caused by a stenotic jet can create progressive aortic regurgitation. Aortic insufficiency may also result from: (1) post-procedure such as closed or open valvotomy or aortic valve repair, VSD closure, balloon valvotomy, or diagnostic catheterization; (2) in the neoaorta post arterial switch, pulmonary autograft (Ross) procedure, homograft placement, Norwood procedure, or Damus-Kaye-Stansel procedure; (3) as a result of endocarditis secondary to perforated or prolapsed leaflets or annular dehiscence; (4) secondary to annuloaortic ectasia with prolapsed or noncoapting leaflets; (5) secondary to trauma, blunt or penetrating; or (6) as a result of aortitis, bacterial, viral or autoimmune. Aortic regurgitation secondary to prosthetic failure should be coded first as either conduit failure or prosthetic valve failure, as applicable, and secondarily as aortic regurgitation secondary to prosthetic failure (perivalvar or due to structural failure). The underlying fundamental diagnosis that led to the initial conduit or valve prosthesis placement should also be described.

Aortic insufficiency and aortic stenosis

Aortic insufficiency is often seen in association with stenotic aortic valve, commonly the stenotic congenital bicuspid aortic valve. The degree of aortic regurgitation is due to the severity of the aortic leaflet abnormality.

620 Aortic valve, Other

This diagnostic subgroup may be used to delineate aortic valve cusp number (unicuspid, bicuspid, tricuspid, more than three cusps), commissural fusion (nromal, partially fused, completely fused), and valve leaflet (normal, thickened, dysplastic, calcified, gelatinous), annulus (normal, hypoplastic, calcified), or sinus description (normal, dilated). Note that any extensive descriptors chosen within those made available by a vendor will be converted, at harvest, to Aortic valve, Other.

630 Sinus of Valsalva aneurysm

The sinus of Valsalva is defined as that portion of the aortic root between the aortic root annulus and the sinotubular ridge. A congenital sinus of Valsalva aneurysm is a dilation usually of a single sinus of Valsalva. These most commonly originate from the right sinus (65%-85%), less commonly from the noncoronary sinus (10%-30%), and rarely from the left sinus (<5%). A true sinus of Valsalva aneurysm presents above the aortic annulus. The hierarchical coding system distinguishes between congenital versus

640 LV to aorta tunnel

650 Mitral stenosis, Supravalvar mitral ring

acquired, ruptured versus nonruptured, sinus of origin, and chamber/site of penetration (right atrium, right ventricle, left atrium, left ventricle, pulmonary artery, pericardium). A nonruptured congenital sinus of Valsalva aneurysm may vary from a mild dilation of a single aortic sinus to an extensive windsock deformity. Rupture of a congenital sinus of Valsalva aneurysm into an adjacent chamber occurs most commonly between the ages of 15-30 years. Rupture may occur spontaneously, after trauma, after strenuous physical exertion, or from acute bacterial endocarditis. Congenital etiology is supported by the frequent association of sinus of Valsalva aneurysms with VSDs. Other disease processes are also associated with sinus of Valsalva aneurysm and include: syphilis, endocarditis, cystic medial necrosis, atherosclerosis, and trauma. Acquired sinus of Valsalva aneurysms more frequently involve multiple sinuses of Valsalva; when present in multiple form they are more appropriately classified as aneurysms of the aortic root.

The aortico-left ventricular tunnel (LV-to-aorta tunnel) is an abnormal paravalvular (alongside or in the vicinity of a valve) communication between the aorta and left ventricle, commonly divided into 4 types: (1) type I, a simple tunnel with a slit-like opening at the aortic end and no aortic valve distortion; (2) type II, a large extracardiac aortic wall aneurysm of the tunnel with an oval opening at the aortic end, with or without ventricular distortion; (3) type III, intracardiac aneurysm of the septal portion of the tunnel, with or without right ventricular outflow obstruction; and (4) type IV, a combination of types II and III. Further differentiation within these types may be notation of right coronary artery arising from the wall of the tunnel. If a LV-to-aorta tunnel communicates with the right ventricle, many feel that the defect is really a ruptured sinus of Valsalva aneurysm.

Supravalvar mitral ring is formed by a circumferential ridge of tissue that is attached to the anterior mitral valve leaflet (also known as the aortic leaflet) slightly below its insertion on the annulus and to the atrium slightly above the attachment of the posterior mitral valve leaflet (also known as the mural leaflet). Depending on the diameter of the ring orifice, varying degrees of obstruction exist. The underlying valve is usually abnormal and frequently stenotic or hypoplastic. Supravalvar mitral ring is commonly associated with other stenotic lesions such as parachute or hammock valve (subvalvar stenosis), papillary muscle fusion (subvalvar stenosis), and double orifice mitral valve (valvar stenosis). Differentiation from cor triatriatum focuses on the compartments created by the supravalvar ring. In cor triatriatum the posterior

compartment contains the pulmonary veins; the anterior contains the left atrial appendage and the mitral valve orifice. In supravalvar mitral ring, the posterior compartment contains the pulmonary veins and the left atrial appendage; the anterior compartment contains only the mitral valve orifice. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

660 Mitral stenosis, Valvar

Valvar mitral stenosis may arise from congenital (annular and / or leaflet) or acquired causes, both surgical (after mitral valve repair or replacement or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia, myxomatomous degeneration, trauma, or cardiomyopathy). Mitral valve annular hypoplasia is distinguished from severe mitral valve hypoplasia and mitral valve atresia, which are typically components of hypoplastic left heart syndrome. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

670 Mitral stenosis, Subvalvar

Congenital subvalvar mitral stenosis may be due to obstructive pathology of either the chordae tendineae and / or papillary muscles which support the valve leaflets. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

680 Mitral stenosis, Subvalvar, Parachute In parachute mitral valve, all chordae are attached to a single papillary muscle originating from the posterior ventricular wall. When the interchordal spaces are partially obliterated valvar stenosis results. This defect also causes valvar insufficiency, most commonly due to a cleft leaflet, a poorly developed anterior leaflet, short chordae, or annular dilatation. This lesion is also part of Shone's anomaly, which consists of the parachute mitral valve, supravalvar mitral ring, subaortic stenosis, and coarctation of the aorta. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

695 Mitral stenosis

Stenotic lesions of the mitral valve not otherwise specified in the diagnosis definitions 650, 660, 670, and 680.

700 Mitral regurgitation and mitral stenosis

Mitral regurgitation and mitral stenosis may arise from congenital or acquired causes or after cardiac surgery. Additional details to aid in coding specific components 710 Mitral regurgitation

coding multiple mitral valve lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

Mitral regurgitation may arise from congenital (at the

of the diagnosis are available in the individual mitral stenosis or mitral regurgitation field definitions. When

annular, leaflet or subvalvar level) or acquired causes both surgical (after mitral valve repair or replacement, subaortic stenosis repair, atrioventricular canal repair, cardiac transplantation, or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia (with chordal rupture or papillary muscle infarct), myxomatomous degeneration including Barlow's syndrome, trauma, or cardiomyopathy). Congenital lesions at the annular level include annular dilatation or deformation (usually deformation is consequent to associated lesions). At the valve leaflet level, mitral regurgitation may be due to a cleft, hypoplasia or agenesis of leaflet(s), excessive leaflet tissue, or a double orifice valve. At the subvalvar level, mitral regurgitation may be secondary to chordae tendineae anomalies (agenesis, rupture, elongation, or shortening as in funnel valve), or to papillary muscle anomalies (hypoplasia or agenesis, shortening, elongation, single-parachute, or multiple-hammock valve). When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

Mitral valve pathology not otherwise coded in diagnosis definitions 650 through 710.

Hypoplastic left heart syndrome (HLHS) is a spectrum of cardiac malformations characterized by a severe underdevelopment of the left heart-aorta complex, consisting of aortic and/or mitral valve atresia, stenosis, or hypoplasia with marked hypoplasia or absence of the left ventricle, and hypoplasia of the ascending aorta and of the aortic arch with coarctation of the aorta. Hypoplastic left heart complex is a subset of patients at the favorable end of the spectrum of HLHS characterized by hypoplasia of the structures of the left heart-aorta complex, consisting of aortic and mitral valve hypoplasia without valve stenosis or atresia, hypoplasia of the left ventricle, hypoplasia of the left ventricular outflow tract, hypoplasia of the ascending aorta and of the aortic arch, with or without coarctation of the aorta.

Shone's syndrome is a syndrome of multilevel hypoplasia and obstruction of left sided cardiovascular structures including more than one of the following lesions: (1) supravalvar ring of the left atrium, (2) a

720 Mitral valve, Other

730 Hypoplastic left heart syndrome (HLHS)

2080 Shone's syndrome

parachute deformity of the mitral valve, (3) subaortic stenosis, and (4) aortic coarctation. The syndrome is based on the original report from Shone [1] that was based on analysis of 8 autopsied cases and described the tendency of these four obstructive, or potentially obstructive, conditions to coexist. Only 2 of the 8 cases exhibited all four conditions, with the other cases exhibiting only two or three of the anomalies [2]. [1] Shone JD. Sellers RD. Anderson RG. Adams P. Lillehei CW, Edwards JE. The developmental complex of " parachute mitral valve", supravalvar ring of left atrium, subaortic stenosis, and coarctation of the aorta. Am J Cardiol 1963; 11: 714-725. [2]. Tchervenkov CI, Jacobs JP, Weinberg PM, Aiello VD, Beland MJ, Colan SD, Elliott MJ, Franklin RC, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G. The nomenclature, definition and classification of hypoplastic left heart syndrome. Cardiology in the Young, 2006; 16(4): 339-368, August 2006.

Please note that the term "2080 Shone's syndrome" may be the "Fundamental Diagnosis" of a patient; however, the term "2080 Shone's syndrome" may not be the "Primary Diagnosis" of an operation. The term "2080 Shone's syndrome" may be a "Secondary Diagnosis" of an operation.

740 Cardiomyopathy (including dilated, restrictive, and hypertrophic)

Cardiomyopathy is a term applied to a wide spectrum of cardiac diseases in which the predominant feature is poor myocardial function in the absence of any anatomic abnormalities. Cardiomyopathies can be dividied into three relatively easily distinguishable entities: (1) dilated, characterized by ventricular dilatation and systolic dysfunction; (2) hypertrophic, characterized by physiologically inappropriate hypertrophy of the left ventricle; and (3) restrictive, characterized by diastolic dysfunction, with a presentation often identical to constrictive pericarditis. Also included in this diagnostic category are patients with a cardiomyopathy or syndrome confined to the right ventricle, for example: (1) arrhythmogenic right ventricular dysplasia; (2) Uhl's syndrome (hypoplasia of right ventricular myocardium, parchment heart); or (3) spongiform cardiomyopathy.

750 Cardiomyopathy, End-stage congenital heart disease

Myocardial abnormality in which there is systolic and/or diastolic dysfunction in the presence of structural congenital heart disease without any (or any further) surgically correctable lesions.

760 Pericardial effusion

Inflammatory stimulation of the pericardium that results in the accumulation of appreciable amounts of pericardial fluid (also known as effusive pericarditis). The effusion may be idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic,

		drug-induced).
770	Pericarditis	Inflammatory process of the pericardium that leads to either (1) effusive pericarditis with accumulation of appreciable amounts of pericardial fluid or (2) constrictive pericarditis that leads to pericardial thickening and compression of the cardiac chambers, ultimately with an associated significant reduction in cardiac function. Etiologies are varied and include idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced) pericarditis.
780	Pericardial disease, Other	A structural or functional abnormality of the visceral or parietal pericardium that may, or may not, have a significant impact on cardiac function. Included are absence or partial defects of the pericardium.
790	Single ventricle, DILV	Single morphologically left ventricle (smooth internal walls, lack chordal attachments of AV valves to the rudimentary septal surface) that receives both atrioventricular valves.
800	Single ventricle, DIRV	Single morphologically right ventricle (more heavily trabeculated, generally have chordal attachments of AV valve to the septal surfaces) that receives both atrioventricular valves.
810	Single ventricle, Mitral atresia	Single ventricle anomalies with mitral atresia. May also be associated with double outlet right ventricle, congenitally corrected transposition, pulmonary atresia, or pulmonary stenosis.
820	Single ventricle, Tricuspid atresia	Single ventricle anomalies with tricuspid atresia. May also be associated with complete transposition of the great arteries, congenitally corrected transposition of the great arteries, pulmonary atresia, pulmonary stenosis, subaortic stenosis, or ventricular septal defect (small or large).
830	Single ventricle, Unbalanced AV canal	Single ventricle anomalies with a common atrioventricular (AV) valve and only one completely well developed ventricle. If the common AV valve opens predominantly into the morphologic left ventricle, the defect is termed a left ventricular (LV)—type or LV-dominant AV septal defect. If the common AV valve opens predominantly into the morphologic right ventricle, the defect is termed a right ventricular (RV)—type or RV-dominant AV septal defect.
840	Single ventricle, Heterotaxia syndrome	Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or normal situation, visceral heterotaxy syndrome includes patients with an unusual degree of theoretic and abdominal visceral.

unusual degree of thoracic and abdominal visceral

symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome. Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or normal situation, visceral heterotaxy syndrome includes patients with an unusual degree of thoracic and abdominal visceral symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome.

850 Single ventricle, Other

If the single ventricle is of primitive or indeterminate type, other is chosen in coding. It is recognized that a considerable variety of other structural cardiac malformations (e.g., biventricular hearts with straddling atrioventricular valves, pulmonary atresia with intact ventricular septum, some complex forms of double outlet right ventricle) may at times be best managed in a fashion similar to that which is used to treat univentricular hearts. They are not to be coded in this section of the nomenclature, but according to the underlying lesions.

851 Single Ventricle + Total anomalous pulmonary venous connection (TAPVC) Indicate if the patient has the diagnosis of "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)". In the event of Single Ventricle occurring in association with Total anomalous pulmonary venous connection (TAPVC), code "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)", and then use additional (secondary) diagnostic codes to describe the Single Ventricle and the Total anomalous pulmonary venous connection (TAPVC) separately to provide further documentation about the Single Ventricle and Total anomalous pulmonary venous connection (TAPVC) types. {"Total anomalous pulmonary venous connection (TAPVC)" is defined as a heart where all of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium.} {The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart". (The functionally univentricular heart is defined as a spectrum of cardiac malformations in which entire ventricular mass is functionally univentricular; in other words, whenever only one ventricle is capable, for whatever reason, of supporting either the systemic or the pulmonary circulation.) The consensus of the EACTS and STS Congenital Heart Surgery Database Committees is that the nomenclature proposal for single ventricle hearts would encompass hearts with double inlet atrioventricular connection (both double inlet left ventricle [DILV] and double inlet right ventricle [DIRV]), hearts with absence of one atrioventricular connection (mitral atresia and tricuspid atresia), hearts with a common atrioventricular valve and only one completely well-developed ventricle (unbalanced common atrioventricular canal defect), hearts with only one fully well-developed ventricle and heterotaxia syndrome (single ventricle heterotaxia syndrome), and finally other rare forms of univentricular hearts that do not fit in one of the specified major categories. In the version of the IPCCC derived from the nomenclature of the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and the STS, patients classified in this section of the nomenclature, therefore, include all those who would be coded using the Short List for "Single Ventricle", specifically: (1) Single ventricle; (2) Single ventricle, DILV; (3) Single ventricle, DIRV; (4) Single ventricle, Heterotaxia syndrome; (5) Single ventricle, Mitral atresia; (6) Single ventricle, Tricuspid atresia; (7) Single ventricle, Unbalanced AV canal. (Despite the recognition that hypoplastic left heart syndrome is a

common form of functionally univentricular heart, with a single or dominant ventricle of right ventricular morphology, the EACTS-STS version of the IPCCC includes an entirely separate section for consideration of hypoplastic left heart syndrome. Also, it is recognized that a considerable variety of other structural cardiac malformations, such as pulmonary atresia with intact ventricular septum, biventricular hearts with straddling atrioventricular valves, and some complex forms of double outlet right ventricle (DORV), may at times be best managed in a fashion similar to that which is used to treat other functionally univentricular hearts. Nomenclature for description of those entities, however, is not included in this Single Ventricle section of the EACTS-STS version of the IPCCC.) [1] [1]. Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.

870 Congenitally corrected TGA

Indicate if the patient has the diagnosis of "Congenitally corrected TGA". Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.

Congenitally corrected TGA, IVS

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS". "Congenitally corrected TGA, IVS" is "Congenitally corrected transposition with an intact ventricular septum", in other words, "

Congenitally corrected transposition with no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculoarterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP. Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

874 Congenitally corrected TGA, IVS-LVOTO

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS-LVOTO". "Congenitally corrected TGA, IVS-LVOTO" is "Congenitally corrected transposition with an intact ventricular septum and left ventricular outflow tract obstruction", in other words, " Congenitally corrected transposition with left ventricular outflow tract obstruction and no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculoarterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

876 Congenitally corrected TGA, VSD

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD". "Congenitally corrected TGA, VSD" is "Congenitally corrected transposition with a

VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP. Franklin RCG. Wilkinson JL. Cochrane AD. Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

878 Congenitally corrected TGA, VSD-LVOTO

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD-LVOTO". "Congenitally corrected TGA, VSD-LVOTO" is "Congenitally corrected transposition with a VSD and left ventricular outflow tract obstruction". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

880 TGA, IVS

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects

890 TGA, IVS-LVOTO

with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum and associated left ventricular obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

A malformation of the heart in which there is atrioventricular concordance and ventricular septal defects discordance with one or more ventricular septal defects and left ventricular outflow tract obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, VSD type, there is an associated subaortic or doubly-committed VSD and no pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and

900 TGA, VSD

910 TGA, VSD-LVOTO

930 DORV, VSD type

940 DORV, TOF type

950 DORV, TGA type

pulmonary valves (juxtaarterial). In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate sngle ventricle listing.

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TOF type, there is an associated subaortic or doubly-committed VSD and pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). DORV can occur in association with pulmonary atresia, keeping in mind in coding that in the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles (in this situation DORV is coded as a primary diagnosis). Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate Single ventricle listing.

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TGA type, there is an associated subpulmonary VSD. Most frequently, there is no pulmonary outflow tract obstruction (Taussig-Bing heart). The aorta is usually to the right and slightly anterior to or side-by-side with the pulmonary artery. Associated aortic outflow tract stenosis (subaortic. aortic arch obstruction) is commonly associated with the Taussig-Bing heart and if present should be coded as a secondary diagnosis. Rarely, there is associated pulmonary outflow tract obstruction. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

960 DORV, Remote VSD (uncommitted VSD)

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, Remote VSD type, there is a remote or noncommitted VSD. The VSD is far removed from both the aortic and pulmonary valves, usually within the inlet septum. Many of these VSD's are in hearts with DORV and common atrioventricular canal/septal defect. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

2030 DORV + AVSD (AV Canal)

Indicate if the patient has the diagnosis of "DORV + AVSD (AV Canal)". In the event of DORV occurring in association with AVSD (AV Canal), code "DORV + AVSD (AV Canal)", and then use additional (secondary) diagnostic codes to describe the DORV and the AVSD (AV Canal) separately to provide further documentation about the DORV and AVSD (AV Canal) types. {"DORV" is "Double outlet right ventricle" and is defined as a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle.} In this case, the DORV exists in combination with an atrioventricular septal defect and common atrioventricular junction guarded by a common atrioventricular valve.

975 DORV, IVS

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In the rare case of double outlet right ventricle with IVS the ventricular septum is intact. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connections with DORV are to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

980 DOLV

Double outlet left ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the left ventricle. In the nomenclature developed for DOLV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with

990 Coarctation of aorta

1000 Aortic arch hypoplasia

92 VSD + Aortic arch hypoplasia

94 VSD + Coarctation of aorta

1010 Coronary artery anomaly,

DOLV is to be coded under congenitally corrected TGA. DOLV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

Indicate if the patient has the diagnosis of "Coarctation of aorta". A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.

Hypoplasia of the aortic arch is hypoplasia of the proximal or distal transverse arch or the aortic isthmus. The isthmus (arch between the left subclavian and insertion of the patent ductus arteriosus / ligamentum arteriosum) is hypoplastic if its diameter is less than 40% of the diameter of the ascending aorta. The proximal transverse arch (arch between the innominate and left carotid arteries) and distal transverse arch (arch between the left carotid and left subclavian arteries) are hypoplastic if their diameters are less than 60% and 50%, respectively, of the diameter of the ascending aorta.

A ventricular septal defect, any type, associated with hypoplasia of the aortic arch. (See diagnosis definition 1000 for a definition of hypoplasia of the aortic arch.)

Indicate if the patient has the diagnosis of "VSD + Coarctation of aorta". In the event of a VSD occurring in association with Coarctation of aorta, code "VSD + Coarctation of aorta", and then use additional (secondary) diagnostic codes to describe the VSD and the Coarctation of aorta separately to provide further documentation about the individual VSD and Coarctation of aorta types. {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)} {A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.}

Anomalous aortic origins of the coronary arteries

Anomalous aortic origin of coronary artery from aorta (AAOCA)

include a spectrum of anatomic variations of the normal coronary artery origins. Coronary artery anomalies of aortic origin to be coded under this diagnostic field include: anomalies of take-off (high take-off), origin (sinus), branching, and number. An anomalous course of the coronary artery vessels is also significant, particularly those coronary arteries that arise or course between the great vessels.

1020 Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA)

In patients with anomalous pulmonary origin of the coronary artery, the coronary artery (most commonly the left coronary artery) arises from the pulmonary artery rather than from the aorta. Rarely, the right coronary artery, the circumflex, or both coronary arteries may arise from the pulmonary artery.

1030 Coronary artery anomaly, Fistula

The most common of coronary artery anomalies, a coronary arteriovenous fistula is a communication between a coronary artery and either a chamber of the heart (coronary-cameral fistula) or any segment of the systemic or pulmonary circulation (coronary arteriovenous fistula). They may be congenital or acquired (traumatic, infectious, iatrogenic) in origin, and are mostly commonly seen singly, but occasionally multiple fistulas are present. Nomenclature schemes have been developed that further categorize the fistulas by vessel of origin and chamber of termination, and one angiographic classification scheme by Sakakibara has surgical implications. Coronary artery fistulas can be associated with other congenital heart anomalies such as tetralogy of Fallot, atrial septal defect, ventricular septal defect, and pulmonary atresia with intact ventricular septum, among others. The major cardiac defect should be listed as the primary diagnosis and the coronary artery fistula should be as an additional secondary diagnoses.

1040 Coronary artery anomaly, Aneurysm Coronary artery aneurysms are defined as dilations of a coronary vessel 1.5 times the adjacent normal coronaries. There are two forms, saccular and fusiform (most common), and both may be single or multiple. These aneurysms may be congenital or acquired (atherosclerotic, Kawasaki, systemic diseases other than Kawasaki, iatrogenic, infectious, or traumatic) in origin.

1050 Coronary artery anomaly, Other Coronary artery anomalies which may fall within this category include coronary artery bridging and coronary artery stenosis, as well as secondary coronary artery variations seen in congenital heart defects such as tetralogy of Fallot, transposition of the great arteries, and truncus arteriosus (with the exception of variations that can be addressed by a more specific coronary artery anomaly code).

1070 Interrupted aortic arch

Indicate if the patient has the diagnosis of "Interrupted

aortic arch". Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.

2020 Interrupted aortic arch + VSD

Indicate if the patient has the diagnosis of "Interrupted aortic arch + VSD". In the event of interrupted aortic arch occurring in association with VSD, code " Interrupted aortic arch + VSD", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the VSD separately to provide further documentation about the individual interrupted aortic arch and VSD types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)}

2000 Interrupted aortic arch + AP window (aortopulmonary window)

Indicate if the patient has the diagnosis of "Interrupted aortic arch + AP window (aortopulmonary window)". In the event of interrupted aortic arch occurring in association with AP window, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the AP window separately to provide further documentation about the individual interrupted aortic arch and AP window types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to

the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries. \ {An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)}

1080 Patent ductus arteriosus

Indicate if the patient has the diagnosis of "Patent ductus arteriosus". The ductus arteriosus (arterial duct) is an essential feature of fetal circulation, connecting the main pulmonary trunk with the descending aorta, distal to the origin of the left subclavian artery. In most patients it is on the left side. If a right aortic arch is present, it may be on the right or the left; very rarely it is bilateral. When luminal patency of the duct persists post-natally, it is referred to as patent ductus arteriosus (patent arterial duct). The length and diameter may vary considerably from case to case. The media of the ductus consists mainly of smooth muscle that is arranged spirally, and the intima is much thicker than that of the aorta. (A patent ductus arteriosus is a vascular arterial connection between the thoracic aorta and the pulmonary artery. Most commonly a PDA has its origin from the descending thoracic aorta, just distal and opposite the origin of the left subclavian artery. The insertion of the ductus is most commonly into the very proximal left pulmonary artery at its junction with

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		the main pulmonary artery. Origination and insertion sites can be variable, however.)
1090	Vascular ring	The term vascular ring refers to a group of congenital vascular anomalies that encircle and comperss the esophagus and trachea. The compression may be from a complete anatomic ring (double aortic arch or right aortic arch with a left ligamentum) or from a compressive effect of an aberrant vessel (innominate artery compression syndrome).
1100	Pulmonary artery sling	In pulmonary artery sling, the left pulmonary artery originates from the right pulmonary artery and courses posteriorly between the trachea and esophagus in its route to the left lung hilum, causing a sling-like compression of the trachea.
1110	Aortic aneurysm (including pseudoaneurysm)	An aneurysm of the aorta is defined as a localized dilation or enlargement of the aorta at any site along its length (from aortic annulus to aortoiliac bifurcation). A true aortic aneurysm involves all layers of the aortic wall. A false aortic aneurysm (pseudoaneurysm) is defined as a dilated segment of the aorta not containing all layers of the aortic wall and may include postoperative or post-procedure false aneurysms at anastomotic sites, traumatic aortic injuries or transections, and infectious processes leading to a contained rupture.
1120	Aortic dissection	Aortic dissection is a separation of the layers of the aortic wall. Extension of the plane of the dissection may progress to free rupture into the pericardium, mediastinum, or pleural space if not contained by the outer layers of the media and adventitia. Dissections may be classified as acute or chronic (if they have been present for more than 14 days)
1130	Lung disease, Benign	Lung disease arising from any etiology (congenital or acquired) which does not result in death or lung or heart-lung transplant; examples might be non-life threatening asthma or emphysema, benign cysts.
1140	Lung disease, Malignant	Lung disease arising from any etiology (congenital or acquired, including pulmonary parenchymal disease, pulmonary vascular disease, congenital heart disease, neoplastm, etc.) which may result in death or lung or heart-lung transplant.
1150) Pectus	Pectus excavatum is a chest wall deformity in which the sternum is depressed. Pectus carinatum is a protrusion of the sternum.
1160	Tracheal stenosis	Tracheal stenosis is a reduction in the anatomic luminal diameter of the trachea by more than 50% of the remaining trachea. This stenosis may be congenital or acquired (as in post-intubation or traumatic tracheal stenosis).
1170	Airway disease	Included in this diagnostic category would be airway

		pathology not included under the definition of tracheal stenosis such as tracheomalacia, bronchotracheomalacia, tracheal right upper lobe, bronchomalacia, subglottic stenosis, bronchial stenosis, etc.
1430	Pleural disease, Benign	Benign diseases of the mediastinal or visceral pleura.
1440	Pleural disease, Malignant	Malignant diseases of the mediastinal or visceral pleura.
1450	Pneumothorax	A collection of air or gas in the pleural space.
1460	Pleural effusion	Abnormal accumulation of fluid in the pleural space.
1470	Chylothorax	The presence of lymphatic fluid in the pleural space secondary to a leak from the thoracic duct or its branches. Chylothorax is a specific type of pleural effusion.
1480	Empyema	A collection of purulent material in the pleural space, usually secondary to an infection.
1490	Esophageal disease, Benign	Any benign disease of the esophagus.
1500	Esophageal disease, Malignant	Any malignant disease of the esophagus.
1505	Mediastinal disease	Any disease of the mediastinum awaiting final benign/malignant pathology determination.
1510	Mediastinal disease, Benign	Any benign disease of the mediastinum.
1520	Mediastinal disease, Malignant	Any malignant disease of the mediastinum.
1540	Diaphragm paralysis	Paralysis of diaphragm, unilateral or bilateral.
1550	Diaphragm disease, Other	Any disease of the diaphragm other than paralysis.
1180	Arrhythmia	Any cardiac rhythm other than normal sinus rhythm.
2040	Arrhythmia, Atrial	Indicate if the patient has the diagnosis of "Arrhythmia, Atrial". "Arrhythmia, Atrial" ROOT Definition = Non-sinus atrial rhythm with or without atrioventricular conduction. [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 373.
2050	Arrhythmia, Junctional	Indicate if the patient has the diagnosis of "Arrhythmia, Junctional". "Arrhythmias arising from the atrioventricular junction; may be bradycardia, tachycardia, premature beats, or escape rhythm [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –

		330, December 9, 2008, page 379.
2060	Arrhythmia, Ventricular	Indicate if the patient has the diagnosis of "Arrhythmia, Ventricular". "Arrhythmia, Ventricular" ROOT Definition = Abnormal rhythm originating from the ventricles [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 393.
1185	Arrhythmia, Heart block	Atrioventricular block may be congenital or acquired, and may be of varying degree (first, second, or third degree).
1190	Arrhythmia, Heart block, Acquired	Atrioventricular block, when acquired, may be post- surgical, or secondary to myocarditis or other etiologies; the block may be first, second or third degree.
1200	Arrhythmia, Heart block, Congenital	Atrioventricular block, when congenital, may be first, second or third degree block.
1220	Arrhythmia, Pacemaker, Indication for replacement	Indications for pacemaker replacement may include end of generator life, malfunction, or infection.
1230	Atrial Isomerism, Left	In isomerism, both appendages are of like morphology or structure; in left atrial isomerism both the right atrium and left atrium appear to be a left atrium structurally.
1240	Atrial Isomerism, Right	In isomerism, both appendages are of like morphology or structure; in right atrial isomerism both the right atrium and left atrium appear to be a right atrium structurally.
2090	Dextrocardia	Indicate if the patient has the diagnosis of "Dextrocardia". "Dextrocardia" is most usually considered synonymous with a right-sided ventricular mass, whilst 'dextroversion' is frequently defined as a configuration where the ventricular apex points to the right. In a patient with the usual atrial arrangement, or situs solitus, dextroversion, therefore, implies a turning to the right of the heart [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi:

530, December 9, 2008, page 379.

2100 Levocardia

10.1017/S1047951107001138, September 2007.

Indicate if the patient has the diagnosis of "Levocardia"

2110 Mesocardia

2120 Situs inversus

"Levocardia" usually considered synonymous with a left-sided ventricular mass, whilst "levoversion" is frequently defined as a configuration where the ventricular apex points to the left [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

Indicate if the patient has the diagnosis of "Mesocardia" '. "Mesocardia" is most usually considered synonymous with the ventricular mass occupying the midline [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

Indicate if the patient has the diagnosis of "Situs inversus" of the atrial chambers. The development of morphologically right-sided structures on one side of the body, and morphologically left-sided structures on the other side, is termed lateralization. Normal lateralization, the usual arrangement, is also known as " situs solitus". The mirror-imaged arrangement is also known as "situs inversus". The term "visceroatrial situs" is often used to refer to the situs of the viscera and atria when their situs is in agreement. The arrangement of the organs themselves, and the arrangement of the atrial chambers, is not always the same. Should such disharmony be encountered, the sidedness of the organs and atrial chambers must be separately specified [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the

		Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
1250	Aneurysm, Ventricular, Right (including pseudoaneurysm)	An aneurysm of the right ventricle is defined as a localized dilation or enlargement of the right ventricular wall.
1260	Aneurysm, Ventricular, Left (including pseudoaneurysm)	An aneurysm of the left ventricle is defined as a localized dilation or enlargement of the left ventricular wall.
1270	Aneurysm, Pulmonary artery	An aneurysm of the pulmonary artery is defined as a localized dilation or enlargement of the pulmonary artery trunk and its central branches (right and left pulmonary artery).
1280	Aneurysm, Other	A localized dilation or enlargement of a cardiac vessel or chamber not coded in specific fields available for aortic aneurysm, sinus of Valsalva aneurysm, coronary artery aneurysm, right ventricular aneurysm, left ventricular aneurysm, or pulmonary artery aneurysm.
1290	Hypoplastic RV	Small size of the right ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the right ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
1300	Hypoplastic LV	Small size of the left ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the left ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
2070	Postoperative bleeding	Indicate if the patient has the diagnosis of "Postoperative bleeding".
1310	Mediastinitis	Inflammation/infection of the mediastinum, the cavity between the lungs which holds the heart, great vessels, trachea, esophagus, thymus, and connective tissues. In the United States mediastinits occurs most commonly following chest surgery.
1320	Endocarditis	An infection of the endocardial surface of the heart, which may involve one or more heart valves (native or

placed at previous surgery.

Heart disease, usually valvular (e.g., mitral or aortic), following an infection with group A streptococci

prosthetic) or septal defects or prosthetic patch material

Indicate if the patient has the diagnosis of "Prosthetic valve failure". This diagnosis is the primary diagnosis to be entered for patients undergoing replacement of a previously placed valve (not conduit) prosthesis, whatever type (e.g., bioprosthetic, mechanical, etc.). Failure may be due to, among others, patient somatic growth, malfunction of the prosthesis, or calcification or overgrowth of the prosthesis (e.g., pannus formation). Secondary or fundamental diagnosis would relate to the underlying valve disease entity. As an example, a patient undergoing removal or replacement of a prosthetic pulmonary valve previously placed for pulmonary insufficiency after repair of tetralogy of Fallot would have as a primary diagnosis "Prosthetic valve failure", as a secondary diagnosis "Pulmonary insufficiency", and as a fundamental diagnosis " Tetralogy of Fallot".

A myocardial infarction is the development of myocardial necrosis caused by a critical imbalance between the oxygen supply and demand of the myocardium. While a myocardial infarction may be caused by any process that causes this imbalance it most commonly results from plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Myocardial infarction is a usual accompaniment of anomalous left coronary artery from the pulmonary artery (ALCAPA).

An abnormal growth of tissue in or on the heart, demonstrating partial or complete lack of structural organization, and no functional coordination with normal cardiac tissue. Commonly, a mass is recognized which is distinct from the normal structural components of the heart. A primary cardiac tumor is one that arises directly from tissues of the heart, (e.g., myxoma, fibroelastoma, rhabdomyoma, fibroma, lipoma, pheochromocytoma, teratoma, hemangioma, mesothesioloma, sarcoma). A secondary cardiac tumor is one that arises from tissues distant from the heart, with subsequent spread to the otherwise normal tissues of the heart, (e.g., renal cell tumor with caval extension from the kidney to the level of the heart or tumor with extension from other organs or areas of the body (hepatic, adrenal, uterine, infradiaphragmatic)). N.B., in the nomenclature system developed, cardiac thrombus and cardiac vegetation are categorized as primary cardiac tumors.

An abnormal intrapulmonary connection (fistula)

1325 Rheumatic heart disease

1330 Prosthetic valve failure

1340 Myocardial infarction

1350 Cardiac tumor

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1360 Pulmonary AV fistula

between an artery and vein that occurs in the blood

		vessels of the lungs. Pulmonary AV fistulas may be seen in association with congenital heart defects; the associated cardiac defect should be coded as well.
1370	Pulmonary embolism	A pulmonary embolus is a blockage of an artery in the lungs by fat, air, clumped tumor cells, or a blood clot.
1385	Pulmonary vascular obstructive disease	Pulmonary vascular obstructive disease (PVOD) other than those specifically defined elsewhere (Eisenmenger's pulmonary vascular obstructive disease, primary pulmonary hypertension, persistent fetal circulation). The spectrum includes PVOD arising from (1) pulmonary arterial hypertension or (2) pulmonary venous hypertension or (3) portal hypertension, or (4) collage vascular disease, or (5) drug or toxin induced, or (6) diseases of the respiratory system, or (7) chronic thromboembolic disease, among others.
1390	Pulmonary vascular obstructive disease (Eisenmenger's)	"Eisenmenger syndrome" could briefly be described as "Acquired severe pulmonary vascular disease associated with congenital heart disease (Eisenmenger)". Eisenmenger syndrome is an acquired condition. In Eisenmenger-type pulmonary vascular obstructive disease, long-term left-to-right shunting (e.g., through a ventricular or atrial septal defect, patent ductus arteriosus, aortopulmonary window) can lead to chronic pulmonary hypertension with resultant pathological changes in the pulmonary vessels. The vessels become thick-walled, stiff, noncompliant, and may be obstructed. In Eisenmenger syndrome, the long-term left-to-right shunting will reverse and become right to left. Please note that the specific heart defect should be coded as a secondary diagnosis.
1400	Primary pulmonary hypertension	Primary pulmonary hypertension is a rare disease characterized by elevated pulmonary artery hypertension with no apparent cause. Two forms are included in the nomenclature, a sporadic form and a familial form which can be linked to the BMPR-II gene.
1410	Persistent fetal circulation	Persistence of the blood flow pattern seen in fetal life, in which high pulmonary vascular resistance in the lungs results in decreased blood flow to the lungs. Normally, after birth pulmonary pressure falls with a fall in pulmonary vascular resistance and there is increased perfusion of the lungs. Persistent fetal circulation, also known as persistent pulmonary hypertension of the newborn, can be related to lung or diaphragm malformations or lung immaturity.
1420	Meconium aspiration	Aspiration of amniotic fluid stained with meconium before, during, or after birth can lead to pulmonary sequelae including (1) pneumothorax, (2) pneumomediastinum, (3) pneumopericardium, (4) lung infection, and (5) meconium aspiration syndrome (MAS) with persistent pulmonary hypertension.

1560	Cardiac, Other	Any cardiac diagnosis not specifically delineated in other diagnostic codes.
1570	Thoracic and/or mediastinal, Other	Any thoracic and/or mediastinal disease not specifically delineated in other diagnostic codes.
1580	Peripheral vascular, Other	Any peripheral vascular disease (congenital or acquired) or injury (from trauma or iatrogenic); vessels involved may include, but are not limited to femoral artery, femorial vein, iliac artery, brachial artery, etc.
7000	Normal heart	Normal heart.
7777	Miscellaneous, Other	Any disease (congenital or acquired) not specifically delineated in other diagnostic codes.
4010	Status post - PFO, Primary closure	Status post - Suture closure of patent foramen ovale (PFO).
4020	Status post - ASD repair, Primary closure	Status post - Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
4030	Status post - ASD repair, Patch	Status post - Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD.
4040	Status post - ASD repair, Device	Status post - Closure of any type ASD (including PFO) using a device.
6110	Status post - ASD repair, Patch + PAPVC repair	
4050	Status post - ASD, Common atrium (single atrium), Septation	Status post - Septation of common (single) atrium using any type patch material.
4060	Status post - ASD creation/enlargement	Status post - Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
4070	Status post - ASD partial closure	Status post - Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
4080	Status post - Atrial septal fenestration	Status post - Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
4085	Status post - Atrial fenestration closure	Status post - Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
4100	Status post - VSD repair, Primary closure	Status post - Suture closure of any type VSD.
4110	Status post - VSD repair, Patch	Status post - Patch closure (using any type of patch material) of any type VSD.
4120	Status post - VSD repair,	Status post - Closure of any type VSD using a device.

Device

4130	Status post - VSD, Multiple,
	Repair

Status post - Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.

- 4140 Status post VSD creation/enlargement
- Status post Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
- 4150 Status post Ventricular septal fenestration

Status post - Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.

- 4170 Status post AVC (AVSD) repair, Complete (CAVSD)
- Status post Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
- 4180 Status post AVC (AVSD) repair, Intermediate (Transitional)
- Status post Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
- 4190 Status post AVC (AVSD) repair, Partial (Incomplete) (PAVSD)
- Status post Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
- 6300 Status post Valvuloplasty, Common atrioventricular valve
- 6250 Status post Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve
- 6230 Status post Valve replacement, Common atrioventricular valve
- 4210 Status post AP window repair
- Status post Repair of AP window using one- or twopatch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
- 4220 Status post Pulmonary artery origin from ascending aorta (hemitruncus) repair
- Status post Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
- 4230 Status post Truncus Status post Truncus arteriosus repair that most

arteriosus repair

frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).

- 4240 Status post Valvuloplasty, Truncal valve
- Status post Truncal valve repair, any type.
- 6290 Status post Valvuloplasty converted to valve replacement in the same operation, Truncal valve
 - e Status post Replacement of the truncal valve with a prosthetic valve.
- 4250 Status post Valve replacement, Truncal valve
 6220 Status post Truncus +
- Interrupted aortic arch repair
 (IAA) repair
- 4260 Status post PAPVC repair
- Status post PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
- 4270 Status post PAPVC, Scimitar, Repair
- Status post In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
- 6120 Status post PAPVC repair,
 Baffle redirection to left
 atrium with systemic vein
 translocation (Warden) (SVC
 sewn to right atrial appendage)
- 4280 Status post TAPVC repair

Status post - Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.

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6200	Status post - TAPVC repair + Shunt - systemic-to- pulmonary	
4290	Status post - Cor triatriatum repair	Status post - Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
4300	Status post - Pulmonary venous stenosis repair	Status post - Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
4310	Status post - Atrial baffle procedure (non-Mustard, non- Senning)	Status post - The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.
4330	Status post - Anomalous systemic venous connection repair	Status post - With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
4340	Status post - Systemic venous stenosis repair	Status post - Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
4350	Status post - TOF repair, No ventriculotomy	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4360	Status post - TOF repair, Ventriculotomy, Nontransanular patch	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision though the length of the incision onto the

incision, though the length of the incision onto the

4370 Status post - TOF repair, Ventriculotomy, Transanular patch ventricle itself may be minimal.

Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.

4380 Status post - TOF repair, RV-PA conduit

Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.

4390 Status post - TOF - AVC (AVSD) repair

Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.

4400 Status post - TOF - Absent pulmonary valve repair

Status post - Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.

4420 Status post - Pulmonary atresia - VSD (including TOF, PA) repair Status post - For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.

4430 Status post - Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair Status post - In the presence of MAPCAs, this code implies implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA conduit.

4440 Status post - Unifocalization MAPCA(s)

Status post - Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.

4450	Status post - Occlusion MAPCA(s)	Status post - Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
4460	Status post - Valvuloplasty, Tricuspid	Status post - Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle transplocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, pursestring annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
6280	Status post - Valvuloplasty converted to valve replacement in the same operation, Tricuspid	
4465	Status post - Ebstein's repair	Status post - To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
4470	Status post - Valve replacement, Tricuspid (TVR)	Status post - Replacement of the tricuspid valve with a prosthetic valve.
4480	Status post - Valve closure, Tricuspid (exclusion, univentricular approach)	Status post - In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
4490	Status post - Valve excision, Tricuspid (without replacement)	Status post - Excision of the tricuspid valve without placement of a valve prosthesis.
4500	Status post - Valve surgery, Other, Tricuspid	Status post - Other tricuspid valve surgery not specified in procedure codes.
4510	Status post - RVOT procedure	Status post - Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stanosis), right ventricular patch.

arterioplasty.

infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery

4520	Status post - 1 1/2 ventricular repair	Status post - Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
4530	Status post - PA, reconstruction (plasty), Main (trunk)	Status post - Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
4540	Status post - PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Status post - Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
4550	Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Status post - Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
4570	Status post - DCRV repair	Status post - Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
4590	Status post - Valvuloplasty, Pulmonic	Status post - Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
6270	Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
4600	Status post - Valve replacement, Pulmonic (PVR)	Status post - Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
4630	Status post - Valve excision, Pulmonary (without	Status post - Excision of the pulmonary valve without placement of a valve prosthesis.

	replacement)	
4640	Status post - Valve closure, Semilunar	Status post - Closure of a semilunar valve (pulmonic or aortic) by any technique.
4650	Status post - Valve surgery, Other, Pulmonic	Status post - Other pulmonic valve surgery not specified in procedure codes.
4610	Status post - Conduit placement, RV to PA	Status post - Placement of a conduit, any type, from RV to PA.
4620	Status post - Conduit placement, LV to PA	Status post - Placement of a conduit, any type, from LV to PA.
5774	Status post - Conduit placement, Ventricle to aorta	Status post - Placement of a conduit from the right or left ventricle to the aorta.
5772	Status post - Conduit placement, Other	Status post - Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
4580	Status post - Conduit reoperation	Status post - Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc).
4660	Status post - Valvuloplasty, Aortic	Status post - Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
6240	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic	
6310	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	
6320	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-	

Konno procedure

replacement, Aortic (AVR)

4670 Status post - Valve

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4680	Status post - Valve replacement, Aortic (AVR), Mechanical	Status post - Replacement of the aortic valve with a mechanical prosthetic valve.
4690	Status post - Valve replacement, Aortic (AVR), Bioprosthetic	Status post - Replacement of the aortic valve with a bioprosthetic prosthetic valve.
4700	Status post - Valve replacement, Aortic (AVR), Homograft	Status post - Replacement of the aortic valve with a homograft prosthetic valve.
4715	Status post - Aortic root replacement, Bioprosthetic	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
4720	Status post - Aortic root replacement, Mechanical	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechnical prosthesis in a composite conduit.
4730	Status post - Aortic root replacement, Homograft	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
4735	Status post - Aortic root replacement, Valve sparing	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
4740	Status post - Ross procedure	Status post - Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
4750	Status post - Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
4760	Status post - Ross-Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
4770	Status post - Other annular enlargement procedure	Status post - Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manougian and Nicks aortic annular enlargement procedures.
4780	Status post - Aortic stenosis, Subvalvar, Repair	Status post - Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy,

myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation), Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.

- 6100 Status post Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS
- 4790 Status post Aortic stenosis, Supravalvar, Repair

Status post - Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.

- 4800 Status post Valve surgery, Other, Aortic
- 4810 Status post Sinus of Valsalva, Aneurysm repair

Status post - Other aortic valve surgery not specified in other procedure codes.

Status post - Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.

4820 Status post - LV to aorta tunnel repair

Status post - LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.

4830 Status post - Valvuloplasty, Mitral Status post - Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissuorotomy, leaflet repair, or papillary muscle repair.

6260 Status post - Valvuloplasty converted to valve

replacement in the same operation, Mitral

4840 Status post - Mitral stenosis, Supravalvar mitral ring repair Status post - Supravalvar mitral ring repair.

4850 Status post - Valve replacement, Mitral (MVR)

Status post - Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.

4860 Status post - Valve surgery, Other, Mitral Status post - Other mitral valve surgery not specified in procedure codes.

4870 Status post - Norwood procedure

Status post - The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neoaortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection.

When coding the procedure "Norwood procedure", the primary procedure of the operation should be "Norwood procedure". The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:

- 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)
- 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)
- 3. Shunt, Systemic to pulmonary, Other
- 4. Conduit placement, RV to PA
- 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)
- 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)
- 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
 8. HemiFontan

4880 Status post - HLHS biventricular repair

Status post - Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.

6160 Status post - Hybrid

Status post - A "Hybrid Procedure" is defined as a

Approach "Stage 1", Application of RPA & LPA bands

6170 Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)

6180 Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands

6140 Status post - Hybrid approach
"Stage 2", Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Aortic arch
repair (Norwood [Stage 1] +
Superior Cavopulmonary
anastomosis(es) + PA
Debanding)

6150 Status post - Hybrid approach
"Stage 2", Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Without aortic

procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

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Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of

	arch repair	procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
1590	Status post - Transplant, Heart	Status post - Heart transplantation, any technique, allograft or xenograft.
1610	Status post - Transplant, Heart and lung	Status post - Heart and lung (single or double) transplantation.
4910	Status post - Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Status post - Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.
4920	Status post - Pericardial drainage procedure	Status post - Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
4930	Status post - Pericardiectomy	Status post - Surgical removal of the pericardium.
4940	Status post - Pericardial procedure, Other	Status post - Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
4950	Status post - Fontan, Atrio- pulmonary connection	Status post - Fontan-type procedure with atrio- pulmonary connection.
4960	Status post - Fontan, Atrioventricular connection	Status post - Fontan-type procedure with atrioventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
4970	Status post - Fontan, TCPC, Lateral tunnel, Fenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
4980	Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
5000	Status post - Fontan, TCPC, External conduit, Fenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
5010	Status post - Fontan, TCPC, External conduit, Nonfenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
5025	Status post - Fontan revision or conversion (Re-do Fontan)	Status post - Revision of a previous Fontan procedure to a total cavopulmonary connection.

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5030	Status post - Fontan, Other	Status post - Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
6340	O Status post - Fontan + Atrioventricular valvuloplasty	
503:	5 Status post - Ventricular septation	Status post - Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
5050	O Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Status post - Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
5060	O Status post - Congenitally corrected TGA repair, Atrial switch and Rastelli	Status post - Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
5070	O Status post - Congenitally corrected TGA repair, VSD closure	Status post - Repair of congenitally corrected TGA by VSD closure only.
5080	O Status post - Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Status post - Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
5090	O Status post - Congenitally corrected TGA repair, Other	Status post - Any procedures for correction of CCTGA not otherwised specified in other listed procedure codes.
5110	O Status post - Arterial switch operation (ASO)	Status post - Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
5120	O Status post - Arterial switch operation (ASO) and VSD repair	Status post - Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
512:	3 Status post - Arterial switch procedure + Aortic arch repair	Status post - Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
5125	5 Status post - Arterial switch procedure and VSD repair + Aortic arch repair	Status post - Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.

5130	Status post - Sennin	g
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Status post - Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.

5140 Status post - Mustard

Status post - Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.

5145 Status post - Atrial baffle procedure, Mustard or Senning revision Status post - Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).

5150 Status post - Rastelli

Status post - Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.

5160 Status post - REV

Status post - The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous

patch of autologous pericardium is used to close the

		inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.
6190	Status post - Aortic root translocation over left ventricle (Including Nikaidoh procedure)	
6210	Status post - TGA, Other procedures (Kawashima, LV- PA conduit, other)	
5180	Status post - DORV, Intraventricular tunnel repair	Status post - Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima
5200	Status post - DOLV repair	Status post - Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
5210	Status post - Coarctation repair, End to end	Status post - Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
5220	Status post - Coarctation repair, End to end, Extended	Status post - Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
5230	Status post - Coarctation repair, Subclavian flap	Status post - Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
5240	Status post - Coarctation repair, Patch aortoplasty	Status post - Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
5250	Status post - Coarctation repair, Interposition graft	Status post - Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
5260	Status post - Coarctation repair, Other	Status post - Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
5275	Status post - Coarctation repair + VSD repair	Status post - Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.

5280	Status post - Aortic arch repair	Status post - Aortic arch repair, any technique.
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5285	Status post - Aortic arch repair + VSD repair	Status post - Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
5290	Status post - Coronary artery fistula ligation	Status post - Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
5291	Status post - Anomalous origin of coronary artery from pulmonary artery repair	Status post - Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
5300	Status post - Coronary artery bypass	Status post - Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
5305	Status post - Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
5310	Ctat a mant Camana and a	
3310	Status post - Coronary artery procedure, Other	Status post - Any coronary artery procedure not specifically listed.
5320		
	procedure, Other Status post - Interrupted aortic	specifically listed. Status post - Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft,
5320	procedure, Other Status post - Interrupted aortic arch repair Status post - PDA closure,	specifically listed. Status post - Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD. Status post - Closure of a PDA by any surgical technique (ligation, division, clip) using any approach
5320 5330	procedure, Other Status post - Interrupted aortic arch repair Status post - PDA closure, Surgical Status post - PDA closure,	specifically listed. Status post - Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD. Status post - Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc). Status post - Closure of a PDA by device using
532053305340	procedure, Other Status post - Interrupted aortic arch repair Status post - PDA closure, Surgical Status post - PDA closure, Device Status post - Vascular ring	specifically listed. Status post - Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD. Status post - Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc). Status post - Closure of a PDA by device using transcatheter techniques. Status post - Repair of vascular ring (any type, except
5320533053405360	procedure, Other Status post - Interrupted aortic arch repair Status post - PDA closure, Surgical Status post - PDA closure, Device Status post - Vascular ring repair	specifically listed. Status post - Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD. Status post - Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc). Status post - Closure of a PDA by device using transcatheter techniques. Status post - Repair of vascular ring (any type, except pulmonary artery sling) by any technique. Status post - Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g.,
5320 5330 5340 5360 5365	procedure, Other Status post - Interrupted aortic arch repair Status post - PDA closure, Surgical Status post - PDA closure, Device Status post - Vascular ring repair Status post - Aortopexy Status post - Pulmonary artery	specifically listed. Status post - Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD. Status post - Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc). Status post - Closure of a PDA by device using transcatheter techniques. Status post - Repair of vascular ring (any type, except pulmonary artery sling) by any technique. Status post - Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea). Status post - Pulmonary artery sling repair by any

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5400	Status post - Lung biopsy	Status post - Lung biopsy, any technique.
1600	Status post - Transplant, Lung(s)	Status post - Lung or lobe transplantation of any type.
5420	Status post - Lung procedure, Other	Status post - Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
5430	Status post - Pectus repair	Status post - Repair of pectus excavatum or carinatum by any technique.
5440	Status post - Tracheal procedure	Status post - Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
5450	Status post - Pacemaker implantation, Permanent	Status post - Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc).
5460	Status post - Pacemaker procedure	Status post - Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
6350	Status post - Explantation of pacing system	
5470	Status post - ICD (AICD) implantation	Status post - Implantation of an (automatic) implantable cardioverter defibrillator system.
5480	Status post - ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Status post - Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
5490	Status post - Arrhythmia surgery - atrial, Surgical Ablation	Status post - Surgical ablation (any type) of any atrial arrhythmia.
5500	Status post - Arrhythmia surgery - ventricular, Surgical Ablation	Status post - Surgical ablation (any type) of any ventricular arrhythmia.
6500	Status post - Cardiovascular catheterization procedure, Diagnostic	
6520	Status post - Cardiovascular catheterization procedure, Diagnostic, Angiographic	

data obtained

- 6550 Status post Cardiovascular catheterization procedure,
 Diagnostic, Electrophysiology alteration
- 6540 Status post Cardiovascular catheterization procedure,
 Diagnostic, Hemodynamic alteration
- 6510 Status post Cardiovascular catheterization procedure,
 Diagnostic, Hemodynamic data obtained
- 6530 Status post Cardiovascular catheterization procedure,
 Diagnostic, Transluminal test occlusion
- 6410 Status post Cardiovascular catheterization procedure,
 Therapeutic
- 6670 Status post Cardiovascular catheterization procedure,
 Therapeutic, Adjunctive therapy
- 6570 Status post Cardiovascular catheterization procedure,
 Therapeutic, Balloon dilation
- 6590 Status post Cardiovascular catheterization procedure,
 Therapeutic, Balloon valvotomy
- 6600 Status post Cardiovascular catheterization procedure,
 Therapeutic, Coil implantation
- 6610 Status post Cardiovascular catheterization procedure,
 Therapeutic, Device implantation
- 6640 Status post Cardiovascular catheterization procedure,
 Therapeutic, Perforation (establishing interchamber and/or intervessel communication)
- 6580 Status post Cardiovascular catheterization procedure,
 Therapeutic, Septostomy
- 6620 Status post Cardiovascular

		catheterization procedure, Therapeutic, Stent insertion	
6	6630	Status post - Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation	
6	6650	Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion	
6	6660	Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve	
6	6680	Status post - Cardiovascular electrophysiological catheterization procedure	
6	690	Status post - Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation	
5	5590	Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	Status post - Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5	600	Status post - Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)	Status post - A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5	610	Status post - Shunt, Systemic to pulmonary, Other	Status post - Placement of any other systemic-to- pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
5	630	Status post - Shunt, Ligation and takedown	Status post - Takedown of any shunt.
6	5095	Status post - Shunt, Reoperation	
5	640	Status post - PA banding (PAB)	Status post - Placement of a pulmonary artery band, any type.
5	650	Status post - PA debanding	Status post - Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
5	6660	Status post - Damus-Kaye- Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	Status post - In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
5	6670	Status post - Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional	Status post - Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery

	Glenn)	anastomosis.
5680	Status post - Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Status post - Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
5690	Status post - Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Status post - Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
5700	Status post - HemiFontan	Status post - A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
6330	Status post - Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
6130	Status post - Superior Cavopulmonary anastomosis(es) + PA reconstruction	
5710	Status post - Palliation, Other	Status post - Any other palliative procedure not specifically listed.
6360	Status post - ECMO cannulation	
6370	Status post - ECMO decannulation	
5910	Status post - ECMO procedure	Status post - Any ECMO procedure (cannulation, decannulation, etc.).
5900	Status post - Intraaortic balloon pump (IABP) insertion	Status post - Insertion of intraaortic balloon pump by any technique.

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5920	Status post - Right/left heart assist device procedure	Status post - Any right, left, or biventricular assist device procedure (placement, removal etc.).
6390	Status post - VAD explantation	
6380	Status post - VAD implantation	
6420	Status post - Echocardiography procedure, Sedated transesophageal echocardiogram	
6430	Status post - Echocardiography procedure, Sedated transthoracic echocardiogram	
6435	Status post - Non- cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	
6440	Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
6450	Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
6460	Status post - Radiology procedure on cardiac patient, Diagnostic radiology	
6470	Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
6480	Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
6490	Status post - Interventional radiology procedure on cardiac patient	
5720	Status post - Aneurysm, Ventricular, Right, Repair	Status post - Repair of right ventricular aneurysm, any technique.
5730	Status post - Aneurysm, Ventricular, Left, Repair	Status post - Repair of left ventricular aneurysm, any technique.
5740	Status post - Aneurysm, Pulmonary artery, Repair	Status post - Repair of pulmonary artery aneurysm, any technique.

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5760	Status post - Cardiac tumor resection	Status post - Resection of cardiac tumor, any type.
5780	Status post - Pulmonary AV fistula repair/occlusion	Status post - Repair or occlusion of a pulmonary arteriovenous fistula.
5790	Status post - Ligation, Pulmonary artery	Status post - Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
5802	Status post - Pulmonary embolectomy, Acute pulmonary embolus	Status post - Acute pulmonary embolism (clot) removal, through catheter or surgery.
5804	Status post - Pulmonary embolectomy, Chronic pulmonary embolus	Status post - Chronic pulmonary embolism (clot) removal, through catheter or surgery.
5810	Status post - Pleural drainage procedure	Status post - Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
5820	Status post - Pleural procedure, Other	Status post - Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
5830	Status post - Ligation, Thoracic duct	Status post - Ligation of the thoracic duct; most commonly for persistent chylothorax.
5840	Status post - Decortication	Status post - Decortication of the lung by any technique.
5850	Status post - Esophageal procedure	Status post - Any procedure performed on the esophagus.
5860	Status post - Mediastinal procedure	Status post - Any non-cardiovascular mediastinal procedure not otherwise listed.
5870	Status post - Bronchoscopy	Status post - Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
5880	Status post - Diaphragm plication	Status post - Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
5890	Status post - Diaphragm procedure, Other	Status post - Any diaphragm procedure not specifically listed.
5930	Status post - VATS (video- assisted thoracoscopic surgery)	Status post - Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
5940	Status post - Minimally invasive procedure	Status post - Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
5950	Status post - Bypass for noncardiac lesion	Status post - Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the

		tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
5960	Status post - Delayed sternal closure	Status post - Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
5970	Status post - Mediastinal exploration	Status post - Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
5980	Status post - Sternotomy wound drainage	Status post - Drainage of the sternotomy wound.
5990	Status post - Thoracotomy, Other	Status post - Any procedure performed through a thoracotomy incision not otherwise listed.
6000	Status post - Cardiotomy, Other	Status post - Any procedure involving an incision in the heart that is not otherwise listed.
6010	Status post - Cardiac procedure, Other	Status post - Any cardiac procedure, bypass or non- bypass, that is not otherwise listed.
6020	Status post - Thoracic and/or mediastinal procedure, Other	Status post - Any thoracic and/or mediastinal procedure not otherwise listed.
6030	Status post - Peripheral vascular procedure, Other	Status post - Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
6040	Status post - Miscellaneous procedure, Other	Status post - Any miscellaneous procedure not otherwise listed.
6050	Status post - Organ procurement	Status post - Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
11777	Status post - Other procedure	Status post - Any procedure on any organ system not otherwise listed.

Long Name: Other Card-Congenital Diagnosis 3 SeqNo: 5330

Short Name: OCarCongDiag3 Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate the third of the three most significant congenital diagnoses.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Congenital Format: Text (categorical values

specified by STS)

ParentShortName: OCarCong DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

10 PFO Small interatrial communication in the region of the

foramen ovale characterized by no deficiency of the septum primum and a normal limbus with no deficiency

of the septum secundum.

20 ASD, Secundum An ASD confined to the region of the fossa ovalis; its

most common etiology is a deficiency of the septum primum, but deficiency of the limbus or septum

secundum may also contribute.

30 ASD, Sinus venosus Indicate if the patient has the diagnosis of "ASD, Sinus

venosus". An "ASD, Sinus venosus" is defined as a defect with a vena cava or pulmonary vein (or veins) that overrides the atrial septum or the superior interatrial fold (septum secundum) producing an interatrial or anomalous venoatrial communication. Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of

the true atrial septum.

40 ASD, Coronary sinus Deficiency of the wall (sinus septum) separating the left

atrium from the coronary sinus, often allowing blood to shunt from the left atrium to the right atrium via the coronary sinus ostium. May or may not be associated

with a persistent left superior vena cava.

50 ASD, Common atrium (single

atrium)

Complete absence of the interatrial septum. "Single atrium" is applied to defects with no associated malformation of the atrioventricular valves. "Common

atrium" is applied to defects with associated malformation of the atrioventricular valves.

1 VSD, Type 1 (Subarterial) A VSD that lies beneath the semilunar valve(s) in the

(Supracristal) (Conal septal conal or outlet septum.

defect) (Infundibular)

- 73 VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)
- 75 VSD, Type 3 (Inlet) (AV canal type)
- 77 VSD, Type 4 (Muscular)
- 79 VSD, Type: Gerbode type (LV-RA communication)
- 80 VSD, Multiple
- 100 AVC (AVSD), Complete (CAVSD)

A VSD that is confluent with and involves the membranous septum and is bordered by an atrioventricular valve, not including type 3 VSDs.

A VSD that involves the inlet of the right ventricular septum immediately inferior to the AV valve apparatus.

A VSD completely surrounded by muscle.

A rare form of VSD in which the defect is at the membranous septum; the communication is between the left ventricle and right atrium.

More than one VSD exists. Each individual VSD may be coded separately to specify the individual VSD types.

Indicate if the patient has the diagnosis of "AVC (AVSD), Complete (CAVSD)". An "AVC (AVSD), Complete (CAVSD)" is a "complete atrioventricular canal" or a "complete atrioventricular septal defect" and occurs in a heart with the phenotypic feature of a common atrioventricular junction. An "AVC (AVSD), Complete (CAVSD)" is defined as an AVC with a common AV valve and both a defect in the atrial septum just above the AV valve (ostium primum ASD [a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve]) and a defect in the ventricular septum just below the AV valve. The AV valve is one valve that bridges both the right and left sides of the heart. Balanced AVC is an AVC with two essentially appropriately sized ventricles. Unbalanced AVC is an AVC defect with two ventricles in which one ventricle is inappropriately small. Such a patient may be thought to be a candidate for biventricular repair, or, alternatively, may be managed as having a functionally univentricular heart. AVC lesions with unbalanced ventricles so severe as to preclude biventricular repair should be classified as single ventricles. Rastelli type A: The common superior (anterior) bridging leaflet is effectively split in two at the septum. The left superior (anterior) leaflet is entirely over the left ventricle and the right superior (anterior) leaflet is similarly entirely over the right ventricle. The division of the common superior (anterior) bridging leaflet into left and right components is caused by extensive attachment of the superior (anterior) bridging leaflet to the crest of the ventricular septum by chordae tendineae. Rastelli type B: Rare, involves anomalous papillary muscle attachment from the right side of the ventricular septum to the left side of the common superior (anterior) bridging leaflet. Rastelli type C: Marked bridging of the ventricular septum by the superior (anterior) bridging leaflet, which floats freely (often termed a "free-floater") over the

ventricular septum without chordal attachment to the crest of the ventricular septum.

110 AVC (AVSD), Intermediate (transitional)

An AVC with two distinct left and right AV valve orifices but also with both an ASD just above and a VSD just below the AV valves. While these AV valves in the intermediate form do form two separate orifices they remain abnormal valves. The VSD is often restrictive.

120 AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum)

An AVC with an ostium primum ASD (a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve) and varying degrees of malformation of the left AV valve leading to varying degrees of left AV valve regurgitation. No VSD is present.

140 AP window (aortopulmonary window)

Indicate if the patient has the diagnosis of "AP window (aortopulmonary window)". An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)

150 Pulmonary artery origin from ascending aorta (hemitruncus)

One pulmonary artery arises from the ascending aorta and the other pulmonary artery arises from the right ventricle. DOES NOT include origin of the right or left pulmonary artery from the innominate artery or the aortic arch via a patent ductus arteriosus or collateral artery.

160 Truncus arteriosus

Indicate if the patient has the diagnosis of "Truncus

170 Truncal valve insufficiency

2010 Truncus arteriosus + Interrupted aortic arch

arteriosus". A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. Often, the infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. In such instances, there may be no ventricular septal defect or a very small ventricular septal defect, in which case the left ventricle and mitral valve may be extremely hypoplastic.

Functional abnormality - insufficiency - of the truncal valve. May be further subdivided into grade of insufficiency (I, II, III, IV or mild, moderate, severe).

Indicate if the patient has the diagnosis of "Truncus arteriosus + Interrupted aortic arch". {A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. The infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. If in such case there is no ventricular septal defect, then the left ventricle and mitral valve may be extremely hypoplastic.} {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.}

180 Partial anomalous pulmonary venous connection (PAPVC)

Some, but not all of the pulmonary veins connect to the right atrium or to one or more of its venous tributaries. This definition excludes sinus venosus defects with normally connected but abnormally draining pulmonary veins (the pulmonary veins may drain abnormally into the right atrium via the atrial septal defect).

190 Partial anomalous pulmonary

The right pulmonary vein(s) connect anomalously to the

venous connection (PAPVC), scimitar

inferior vena cava or to the right atrium at the insertion of the inferior vena cava. The descending vertical vein resembles a scimitar (Turkish sword) on frontal chest x-ray. Frequently associated with: hypoplasia of the right lung with bronchial anomalies; dextroposition and/or dextrorotation of the heart; hypoplasia of the right pulmonary artery; and anomalous subdiaphragmatic systemic arterial supply to the lower lobe of the right lung directly from the aorta or its main branches.

Total anomalous pulmonary venous connection (TAPVC), Type 1 (supracardiac) All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 1 (supracardiac) TAPVC, the anomalous connection is at the supracardiac level and can be obstructed or nonobstructed.

210 Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac)

All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 2 (cardiac) TAPVC, the anomalous connection is to the heart, either to the right atrium directly or to the coronary sinus. Most patients with type 2 TAPVC are nonobstructed.

Total anomalous pulmonary venous connection (TAPVC),Type 3 (infracardiac)

All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 3 (infracardiac) TAPVC, the anomalous connection is at the infracardiac level (below the diaphragm), with the pulmonary venous return entering the right atrium ultimately via the inferior vena cava. In the vast majority of patients infracardiac TAPVC is obstructed.

230 Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed)

All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 4 (mixed) TAPVC, the anomalous connection is at two or more of the above levels (supracardiac, cardiac, infracardiac) and can be obstructed or nonobstructed.

250 Cor triatriatum

In the classic form of cor triatriatum a membrane divides the left atrium (LA) into a posterior accessory chamber that receives the pulmonary veins and an anterior chamber (LA) that communicates with the mitral valve. In differentiating cor triatriatum from supravalvar mitral ring, in cor triatriatum the posterior compartment contains the pulmonary veins while the anterior contains the left atrial appendage and the mitral valve orifice; in supravalvar mitral ring, the anterior compartment contains only the mitral valve orifice. Cor triatriatum dexter (prominent venous valve producing

obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.

260 Pulmonary venous stenosis

Any pathologic narrowing of one or more pulmonary veins. Can be further subdivided by etiology (congenital, acquired-postoperative, acquired-nonpostoperative) and extent of stenosis (diffusely hypoplastic, long segment focal/tubular stenosis, discrete stenosis).

270 Systemic venous anomaly

Anomalies of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from one or more anomalies of origin, duplication, course, or connection. Examples include abnormal or absent right SVC with LSVC, bilateral SVC, interrupted right or left IVC, azygos continuation of IVC, and anomalies of hepatic drainage. Bilateral SVC may have, among other configurations: 1) RSVC draining to the RA and the LSVC to the LA with completely unroofed coronary sinus, 2) RSVC draining to the RA and LSVC to the coronary sinus which drains (normally) into the RA, or 3) RSVC to the coronary sinus which drains (abnormally) into the LA and LSVC to LA. Anomalies of the inferior vena caval system include, among others: 1) left IVC to LA, 2) biatrial drainage, or 3) interrupted IVC (left or right) with azygos continuation to an LSVC or RSVC.

280 Systemic venous obstruction

Obstruction of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from congenital or acquired stenosis or occlusion. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.

290 TOF

Indicate if the patient has the diagnosis of "TOF". Only use this diagnosis if it is NOT known if the patient has one of the following four more specific diagnoses: (1). "TOF, Pulmonary stenosis", (2). "TOF, AVC (AVSD)", (3). "TOF, Absent pulmonary valve", (4). "Pulmonary atresia, VSD (Including TOF, PA)", or (5). "Pulmonary atresia, VSD-MAPCA (pseudotruncus)". {"TOF" is "Tetralogy of Fallot" and is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a

ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. \{\) (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")

2140 TOF, Pulmonary stenosis

Indicate if the patient has the diagnosis of "TOF, Pulmonary stenosis". Use this diagnosis if the patient has tetralogy of Fallot and pulmonary stenosis. Do not use this diagnosis if the patient has tetralogy of Fallot and pulmonary atresia. Do not use this diagnosis if the patient has tetralogy of Fallot and absent pulmonary valve. Do not use this diagnosis if the patient has tetralogy of Fallot and atrioventricular canal. {Tetralogy of Fallot is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery;

vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary

atresia-VSD.")}

additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior

300 TOF, AVC (AVSD)

TOF with complete common atrioventricular canal defect is a rare variant of common atrioventricular canal defect with the associated conotruncal abnormality of TOF. The anatomy of the endocardial cushion defect is that of Rastelli type C in almost all cases.

310 TOF, Absent pulmonary valve

Indicate if the patient has the diagnosis of "TOF, Absent pulmonary valve". "TOF, Absent pulmonary valve" is " Tetralogy of Fallot with Absent pulmonary valve" and is defined as a malformation with all of the morphologic characteristics of tetralogy of Fallot (anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta), in which the ventriculo-arterial junction of the right ventricle with the main pulmonary artery features an atypical valve with rudimentary cusps that lack the anatomical semilunar features of normal valve cusps and which functionally do not achieve central coaptation. The physiologic consequence is usually a combination of variable degrees of both stenosis and regurgitation of the pulmonary valve. A developmental accompaniment of this anatomy and physiology is dilatation of the main pulmonary artery and central right and left pulmonary arteries, which when extreme, is associated with abnormal arborization of lobar and segmental pulmonary artery branches and with compression of the trachea and mainstem bronchi. One theory holds that absence of the arterial duct or ductal ligament (which is a nearly constant finding in cases of tetralogy of Fallot with absent pulmonary valve) in combination with pulmonary 'valve stenosis and regurgitation, comprise

pulmonary artery dilatation during fetal development. (Tetralogy of Fallot with Absent Pulmonary Valve Syndrome is a term frequently used to describe the clinical presentation when it features both circulatory alterations and respiratory distress secondary to airway compression.)

the physiologic conditions which predispose to central

Pulmonary atresia defects which do not readily fall into pulmonary atresia-intact ventricular septum or pulmonary atresia-VSD (with or without MAPCAs) categories. These may include complex lesions in which pulmonary atresia is a secondary diagnosis, for example, complex single ventricle malformations with associated pulmonary atresia.

Pulmonary atresia (PA) and intact ventricular septum (IVS) is a duct-dependent congenital malformation that forms a spectrum of lesions including atresia of the pulmonary valve, a varying degree of right ventricle and tricuspid valve hypoplasia, and anomalies of the coronary circulation. An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis. Associated Ebstein's anomaly of the tricuspid valve can be present; the tricuspid diameter is enlarged and the prognosis is poor.

Pulmonary atresia (PA) and ventricular septal defect (VSD) is a heterogeneous group of congenital cardiac malformations in which there is lack of luminal continuity and absence of blood flow from either ventricle (in cases with ventriculo-arterial discordance) and the pulmonary artery, in a biventricular heart that has an opening or a hole in the interventricular septum (VSD). The malformation forms a spectrum of lesions including tetralogy of Fallot with pulmonary atresia. Tetralogy of Fallot with PA is a specific type of PA-VSD where the intracardiac malformation is more accurately defined (extreme underdevelopment of the RV infundibulum with marked anterior and leftward displacement of the infundibular septum often fused with the anterior wall of the RV resulting in complete obstruction of blood flow into the pulmonary artery and associated with a large outlet, subaortic ventricular septal defect). In the vast majority of cases of PA-VSD the intracardiac anatomy is that of TOF. The pulmonary circulation in PA-VSD is variable in terms of origin of blood flow, presence or absence of native pulmonary arteries, presence or absence of major aortopulmonary collateral arteries (MAPCA(s)), and distal distribution (pulmonary parenchymal segment arborization) abnormalities. Native pulmonary arteries may be present or absent. If MAPCAs are present this code should not be used; instead, Pulmonary atresia, VSD-

320 Pulmonary atresia

330 Pulmonary atresia, IVS

Pulmonary atresia, VSD (Including TOF, PA)

350 Pulmonary atresia, VSD-MAPCA (pseudotruncus) MAPCA (pseudotruncus) should be used.

MAPCA(s) are large and distinct arteries, highly variable in number, that usually arise from the descending thoracic aorta, but uncommonly may originate from the aortic arch or the subclavian, carotid or even the coronary arteries. MAPCA(s) may be associated with present or absent native pulmonary arteries. If present, the native pulmonary arteries may be hypoplastic, and either confluent or nonconfluent. Systemic pulmonary collateral arteries have been categorized into 3 types based on their site of origin and the way they connect to the pulmonary circulation: direct aortopulmonary collaterals, indirect aortopulmonary collaterals, and true bronchial arteries. Only the first two should be considered MAPCA(s). If MAPCA(s) are associated with PA-VSD or TOF. PA this code should be used.

360 MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD) Rarely MAPCA(s) may occur in patents who do not have PA-VSD, but have severe pulmonary stenosis. The intracardiac anatomy in patients who have MAPCA(s) without PA should be specifically coded in each case as well.

370 Ebstein's anomaly

Indicate if the patient has the diagnosis of "Ebstein's anomaly". Ebstein's anomaly is a malformation of the tricuspid valve and right ventricle that is characterized by a spectrum of several features: (1) incomplete delamination of tricuspid valve leaflets from the myocardium of the right ventricle; (2) downward (apical) displacement of the functional annulus; (3) dilation of the "atrialized" portion of the right ventricle with variable degrees of hypertrophy and thinning of the wall; (4) redundancy, fenestrations, and tethering of the anterior leaflets; and (5) dilation of the right atrioventricular junction (the true tricuspid annulus). These anatomical and functional abnormalities cause tricuspid regurgitation (and rarely tricuspid stenosis) that results in right atrial and right ventricular dilatation and atrial and ventricular arrhythmias. With increasing degrees of anatomic severity of malformation, the fibrous transformation of leaflets from their muscular precursors remains incomplete, with the septal leaflet being most severely involved, the posterior leaflet less severely involved, and the anterior leaflet usually the least severely involved. Associated cardiac anomalies include an interatrial communication, the presence of accessory conduction pathways often associated with Wolff-Parkinson-White syndrome, and dilation of the right atrium and right ventricle in patients with severe Ebstein's anomaly. (Varying degrees of right ventricular outflow tract obstruction may be present, including pulmonary atresia in some cases. Such cases of Ebstein's anomaly with pulmonary atresia should be

coded with a Primary Diagnosis of "Ebstein's anomaly", and a Secondary Diagnosis of "Pulmonary atresia".) (Some patients with atrioventricular discordance and ventriculoarterial discordance in situs solitus [congenitally corrected transposition] have an Ebstein-like deformity of the left-sided morphologically tricuspid valve. The nature of the displacement of the septal and posterior leaflets is similar to that in right-sided Ebstein's anomaly in patients with atrioventricular concordance and ventriculoarterial concordance in situs solitus. These patients with "Congenitally corrected TGA" and an Ebstein-like deformity of the left-sided morphologically tricuspid valve should be coded with a Primary Diagnosis of "Congenitally corrected TGA", and a Secondary Diagnosis of "Ebstein's anomaly".)

380 Tricuspid regurgitation, non-Ebstein's related Non-Ebstein's tricuspid regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, absent papillary muscle/chordae) or acquired (post cardiac surgery or secondary to rheumatic fever, endocarditis, trauma, tumor, cardiomyopathy, iatrogenic or other causes).

390 Tricuspid stenosis

Tricuspid stenosis may be due to congenital factors (valvular hypoplasia, abnormal subvalvar apparatus, double-orifice valve, parachute deformity) or acquired (post cardiac surgery or secondary to carcinoid, rheumatic fever, tumor, systemic disease, iatrogenic, or other causes).

400 Tricuspid regurgitation and tricuspid stenosis

Tricuspid regurgitation present with tricuspid stenosis may be due to congenital factors or acquired.

410 Tricuspid valve, Other

Tricuspid valve pathology not otherwise specified in diagnosis definitions 370, 380, 390 and 400.

420 Pulmonary stenosis, Valvar

Pulmonary stenosis, Valvar ranges from critical neonatal pulmonic valve stenosis with hypoplasia of the right ventricle to valvar pulmonary stenosis in the infant, child, or adult, usually better tolerated but potentially associated with infundibular stenosis. Pulmonary branch hypoplasia can be associated. Only 10% of neonates with Pulmonary stenosis, Valvar with intact ventricular septum have RV-to-coronary artery fistula(s). An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis; this occurs in only 2% of neonates with Pulmonary stenosis, Valvar with IVS.

430 Pulmonary artery stenosis (hypoplasia), Main (trunk)

Indicate if the patient has the diagnosis of "Pulmonary artery stenosis (hypoplasia), Main (trunk)". "Pulmonary artery stenosis (hypoplasia), Main (trunk)" is defined as a congenital or acquired anomaly with pulmonary trunk (main pulmonary artery) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Since the

440 Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation) narrowing is distal to the pulmonic valve, it may also be known as supravalvar pulmonary stenosis.

Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)" is defined as a congenital or acquired anomaly with central pulmonary artery branch (within the hilar bifurcation involving the right or left pulmonary artery, or both) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Coarctation of the pulmonary artery is related to abnormal extension of the ductus arteriosus into a pulmonary branch, more frequently the left branch.

450 Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation) Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)" is defined as a congenital or acquired anomaly with peripheral pulmonary artery narrowing or hypoplasia (at or beyond the hilar bifurcation). The stenosis or hypoplasia may be isolated or associated with other cardiac lesions.

470 Pulmonary artery, Discontinuous

Indicate if the patient has the diagnosis of "Pulmonary artery, Discontinuous". Pulmonary artery, Discontinuous" is defined as a congenital or acquired anomaly with discontinuity between the branch pulmonary arteries or between a branch pulmonary artery and the main pulmonary artery trunk.

490 Pulmonary stenosis, Subvalvar

Subvalvar (infundibular) pulmonary stenosis is a narrowing of the outflow tract of the right ventricle below the pulmonic valve. It may be due to a localized fibrous diaphragm just below the valve, an obstructing muscle bundle or to a long narrow fibromuscular channel.

500 DCRV

The double chambered right ventricle is characterized by a low infundibular (subvalvar) stenosis rather than the rare isolated infundibular stenosis that develops more superiorly in the infundibulum, and is often associated with one or several closing VSDs. In some cases, the VSD is already closed. The stenosis creates two chambers in the RV, one inferior including the inlet and trabecular portions of the RV and one superior including the infundibulum.

510 Pulmonary valve, Other

Other anomalies of the pulmonary valve may be listed here including but not restricted to absent pulmonary

530 Pulmonary insufficiency

Pulmonary valve insufficiency or regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, etc.) or acquired (for example, post cardiac surgery for repair of tetralogy of Fallot, etc.).

540 Pulmonary insufficiency and pulmonary stenosis

Pulmonary valve insufficiency and pulmonary stenosis beyond the neonatal period, in infancy and childhood, may be secondary to leaflet tissue that has become thickened and myxomatous. Retraction of the commissure attachment frequently creates an associated supravalvar stenosis.

2130 Shunt failure

Indicate if the patient has the diagnosis of "Shunt failure ". This diagnostic subgroup includes failure of any of a variety of shunts ("Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)", "Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)", "Shunt, Systemic to pulmonary, Other", and "Sano Shunt"), secondary to any of the following etiologies: shunt thrombosis, shunt occlusion, shunt stenosis, shunt obstruction, and shunt outgrowth. This diagnosis ("Shunt failure") would be the primary diagnosis in a patient with, for example, " Hypoplastic left heart syndrome (HLHS)" who underwent a "Norwood procedure" with a "Modified Blalock-Taussig Shunt" and now requires reoperation for thrombosis of the "Modified Blalock-Taussig Shunt" . The underlying or fundamental diagnosis in this patient is "Hypoplastic left heart syndrome (HLHS)", but the primary diagnosis for the operation to be performed to treat the thrombosis of the "Modified Blalock-Taussig Shunt" would be "Shunt failure".

Please note that the choice "2130 Shunt failure" does not include "520 Conduit failure".

Indicate if the patient has the diagnosis of "Conduit failure". This diagnostic subgroup includes failure of any of a variety of conduits (ventricular [right or left]-to-PA conduits, as well as a variety of other types of conduits [ventricular {right or left}-to-aorta, RA-to-RV, etc.]), secondary to any of the following etiologies: conduit outgrowth, obstruction, stenosis, insufficiency, or insufficiency and stenosis. This diagnosis ("Conduit failure") would be the primary diagnosis in a patient with, for example, "Truncus arteriosus" repaired in infancy who years later is hospitalized because of conduit stenosis/insufficiency. The underlying or fundamental diagnosis in this patient is "Truncus arteriosus", but the primary diagnosis for the operation to be performed during the hospitalization (in this case, " Conduit reoperation") would be "Conduit failure".

Please note that the choice "520 Conduit failure" does not include "2130 Shunt failure".

550 Aortic stenosis, Subvalvar

Subaortic obstruction can be caused by different lesions: subaortic membrane or tunnel, accessory mitral valve tissue, abnormal insertion of the mitral anterior

520 Conduit failure

septum (seen in coarctation of the aorta and interrupted aortic arch), or a restrictive bulboventricular foramen in single ventricle complexes. The Shone complex consists of subvalvar aortic stenosis in association with supravalvar mitral ring, parachute mitral valve, and coarctation of aorta. Subvalvar aortic stenosis may be categorized into two types: localized subvalvar aortic stenosis, which consists of a fibrous or fibromuscular ridge, and diffuse tunnel subvalvar aortic stenosis, in which circumferential narrowing commences at the annular level and extends downward for 1-3 cm. Idiopathic hypertrophic subaortic stenosis (IHSS) is also know as hypertrophic obstructive cardiomyopathy (HOCM), and is characterized by a primary hypertrophy of the myocardium. The obstructive forms involve different degrees of dynamic subvalvar aortic obstruction from a thickened ventricular wall and anterior motion of the mitral valve. Definitive nomenclature and therapeutic options for IHSS are listed under cardiomyopathy.

leaflet to the ventricular septum, deviation of the outlet

560 Aortic stenosis, Valvar

Valvar aortic stenosis may be congenital or acquired. In its congenital form there are two types: critical (infantile), seen in the newborn in whom systemic perfusion depends on a patent ductus arteriosus, and noncritical, seen in infancy or later. Acquired valvar stenosis may be seen after as a result of rheumatic valvar disease, or from stenotic changes of an aortic valve prosthesis. Congenital valvar stenosis may result: (1) from complete fusion of commissures (acommissural) that results in a dome-shaped valve with a pinpoint opening (seen most commonly in infants with critical aortic valve stenosis); (2) from a unicommissural valve with one defined commissure and eccentric orifice (often with two raphes radiating from the ostium indicating underdeveloped commissures of a tricuspid aortic valve); (3) from a bicuspid aortic valve, with leaflets that can be equal in size or discrepant, and in left-right or anterior-posterior position; and finally (4) from a dysplastic tricuspid valve, which may have a gelatinous appearance with thick rarely equal in size leaflets, often obscuring the commissures. The dysplastic, tricuspid or bicuspid form of aortic valve deformity may not be initially obstructive but may become stenotic later in life due to leaflet thickening and calcification.

570 Aortic stenosis, Supravalvar

Congenital supravalvar aortic stenosis is described as three forms: an hourglass deformity, a fibrous membrane, and a diffuse narrowing of the ascending aorta. The disease can be inherited as an autosomal dominant trait or part of Williams-Beuren syndrome in association with mental retardation, elfin facies, failure to thrive, and occasionally infantile hypercalcemia.

590 Aortic valve atresia

600 Aortic insufficiency

Supravalvar aortic stenosis may involve the coronary artery ostia, and the aortic leaflets may be tethered. The coronary arteries can become tortuous and dilated due to elevated pressures and early atherosclerosis may ensue. Supravalvar aortic stenosis may also be acquired: (1) after a neoaortic reconstruction such as arterial switch, Ross operation, or Norwood procedure; (2) at a suture line from a previous aortotomy or cannulation; and (3) from a narrowed conduit.

Aortic valve atresia will most often be coded under the Hypoplastic left heart syndrome/complex diagnostic codes since it most often occurs as part of a spectrum of cardiac malformations. However, there is a small subset of patients with aortic valve atresia who have a well-developed left ventricle and mitral valve and a large VSD (nonrestrictive or restrictive). The diagnostic code "Aortic valve atresia" enables users to report those patients with aortic valve atresia and a well-developed systemic ventricle without recourse to either a hypoplastic left heart syndrome/complex diagnosis or a single ventricle diagnosis.

Congenital aortic regurgitation/insufficiency is rare as an isolated entity. There are rare reports of congenital malformation of the aortic valve that result in aortic insufficiency shortly after birth from an absent or underdeveloped aortic valve cusp. Aortic insufficiency is more commonly seen with other associated cardiac anomalies: (1) in stenotic aortic valves (commonly stenotic congenital bicuspid aortic valves) with some degree of aortic regurgitation due to aortic leaflet abnormality; (2) in association with a VSD (especially in supracristal or conal type I VSD, more commonly seen in Asian populations); (3) secondary to aortic-left ventricular tunnel; (4) secondary to tethering or retraction of aortic valve leaflets in cases of supravalvar aortic stenosis that may involve the aortic valve; and similarly (5) secondary to encroachment on an aortic cusp by a subaortic membrane; or (6) turbulence caused by a stenotic jet can create progressive aortic regurgitation. Aortic insufficiency may also result from: (1) post-procedure such as closed or open valvotomy or aortic valve repair, VSD closure, balloon valvotomy, or diagnostic catheterization; (2) in the neoaorta post arterial switch, pulmonary autograft (Ross) procedure, homograft placement, Norwood procedure, or Damus-Kaye-Stansel procedure; (3) as a result of endocarditis secondary to perforated or prolapsed leaflets or annular dehiscence; (4) secondary to annuloaortic ectasia with prolapsed or noncoapting leaflets; (5) secondary to trauma, blunt or penetrating; or (6) as a result of aortitis, bacterial, viral or autoimmune. Aortic regurgitation secondary to prosthetic failure should be coded first as either conduit failure or prosthetic valve

610 Aortic insufficiency and aortic stenosis

Aortic insufficiency is often seen in association with stenotic aortic valve, commonly the stenotic congenital bicuspid aortic valve. The degree of aortic regurgitation is due to the severity of the aortic leaflet abnormality.

regurgitation secondary to prosthetic failure (perivalvar

fundamental diagnosis that led to the initial conduit or valve prosthesis placement should also be described.

failure, as applicable, and secondarily as aortic

or due to structural failure). The underlying

620 Aortic valve, Other

This diagnostic subgroup may be used to delineate aortic valve cusp number (unicuspid, bicuspid, tricuspid, more than three cusps), commissural fusion (nromal, partially fused, completely fused), and valve leaflet (normal, thickened, dysplastic, calcified, gelatinous), annulus (normal, hypoplastic, calcified), or sinus description (normal, dilated). Note that any extensive descriptors chosen within those made available by a vendor will be converted, at harvest, to Aortic valve, Other.

630 Sinus of Valsalva aneurysm

The sinus of Valsalva is defined as that portion of the aortic root between the aortic root annulus and the sinotubular ridge. A congenital sinus of Valsalva aneurysm is a dilation usually of a single sinus of Valsalva. These most commonly originate from the right sinus (65%-85%), less commonly from the noncoronary sinus (10%-30%), and rarely from the left sinus (<5%). A true sinus of Valsalva aneurysm presents above the aortic annulus. The hierarchical coding system distinguishes between congenital versus acquired, ruptured versus nonruptured, sinus of origin, and chamber/site of penetration (right atrium, right ventricle, left atrium, left ventricle, pulmonary artery, pericardium). A nonruptured congenital sinus of Valsalva aneurysm may vary from a mild dilation of a single aortic sinus to an extensive windsock deformity. Rupture of a congenital sinus of Valsalva aneurysm into an adjacent chamber occurs most commonly between the ages of 15-30 years. Rupture may occur spontaneously, after trauma, after strenuous physical exertion, or from acute bacterial endocarditis. Congenital etiology is supported by the frequent association of sinus of Valsalva aneurysms with VSDs. Other disease processes are also associated with sinus of Valsalva aneurysm and include: syphilis, endocarditis, cystic medial necrosis, atherosclerosis, and trauma. Acquired sinus of Valsalva aneurysms more frequently involve multiple sinuses of Valsalva; when present in multiple form they are more appropriately classified as aneurysms of the aortic root.

640 LV to aorta tunnel

The aortico-left ventricular tunnel (LV-to-aorta tunnel) is an abnormal paravalvular (alongside or in the vicinity of a valve) communication between the aorta and left

650 Mitral stenosis, Supravalvar mitral ring

ventricle, commonly divided into 4 types: (1) type I, a simple tunnel with a slit-like opening at the aortic end and no aortic valve distortion; (2) type II, a large extracardiac aortic wall aneurysm of the tunnel with an oval opening at the aortic end, with or without ventricular distortion; (3) type III, intracardiac aneurysm of the septal portion of the tunnel, with or without right ventricular outflow obstruction; and (4) type IV, a combination of types II and III. Further differentiation within these types may be notation of right coronary artery arising from the wall of the tunnel. If a LV-to-aorta tunnel communicates with the right ventricle, many feel that the defect is really a ruptured sinus of Valsalva aneurysm.

Supravalvar mitral ring is formed by a circumferential ridge of tissue that is attached to the anterior mitral valve leaflet (also known as the aortic leaflet) slightly below its insertion on the annulus and to the atrium slightly above the attachment of the posterior mitral valve leaflet (also known as the mural leaflet). Depending on the diameter of the ring orifice, varying degrees of obstruction exist. The underlying valve is usually abnormal and frequently stenotic or hypoplastic. Supravalvar mitral ring is commonly associated with other stenotic lesions such as parachute or hammock valve (subvalvar stenosis), papillary muscle fusion (subvalvar stenosis), and double orifice mitral valve (valvar stenosis). Differentiation from cor triatriatum focuses on the compartments created by the supravalvar ring. In cor triatriatum the posterior compartment contains the pulmonary veins; the anterior contains the left atrial appendage and the mitral valve orifice. In supravalvar mitral ring, the posterior compartment contains the pulmonary veins and the left atrial appendage; the anterior compartment contains only the mitral valve orifice. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

660 Mitral stenosis, Valvar

Valvar mitral stenosis may arise from congenital (annular and / or leaflet) or acquired causes, both surgical (after mitral valve repair or replacement or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia, myxomatomous degeneration, trauma, or cardiomyopathy). Mitral valve annular hypoplasia is distinguished from severe mitral valve hypoplasia and mitral valve atresia, which are typically components of hypoplastic left heart syndrome. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the

670 Mitral stenosis, Subvalvar

primary defect.

Congenital subvalvar mitral stenosis may be due to obstructive pathology of either the chordae tendineae and / or papillary muscles which support the valve leaflets. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

680 Mitral stenosis, Subvalvar, Parachute In parachute mitral valve, all chordae are attached to a single papillary muscle originating from the posterior ventricular wall. When the interchordal spaces are partially obliterated valvar stenosis results. This defect also causes valvar insufficiency, most commonly due to a cleft leaflet, a poorly developed anterior leaflet, short chordae, or annular dilatation. This lesion is also part of Shone's anomaly, which consists of the parachute mitral valve, supravalvar mitral ring, subaortic stenosis, and coarctation of the aorta. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

695 Mitral stenosis

Stenotic lesions of the mitral valve not otherwise specified in the diagnosis definitions 650, 660, 670, and 680.

700 Mitral regurgitation and mitral stenosis

Mitral regurgitation and mitral stenosis may arise from congenital or acquired causes or after cardiac surgery. Additional details to aid in coding specific components of the diagnosis are available in the individual mitral stenosis or mitral regurgitation field definitions. When coding multiple mitral valve lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

710 Mitral regurgitation

Mitral regurgitation may arise from congenital (at the annular, leaflet or subvalvar level) or acquired causes both surgical (after mitral valve repair or replacement, subaortic stenosis repair, atrioventricular canal repair, cardiac transplantation, or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia (with chordal rupture or papillary muscle infarct), myxomatomous degeneration including Barlow's syndrome, trauma, or cardiomyopathy). Congenital lesions at the annular level include annular dilatation or deformation (usually deformation is consequent to associated lesions). At the valve leaflet level, mitral regurgitation may be due to a cleft, hypoplasia or agenesis of leaflet(s), excessive leaflet tissue, or a double orifice valve. At the subvalvar level, mitral regurgitation may be secondary to chordae tendineae anomalies (agenesis, rupture, elongation, or

720 Mitral valve, Other

730 Hypoplastic left heart syndrome (HLHS)

2080 Shone's syndrome

shortening as in funnel valve), or to papillary muscle anomalies (hypoplasia or agenesis, shortening, elongation, single-parachute, or multiple-hammock valve). When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

Mitral valve pathology not otherwise coded in diagnosis definitions 650 through 710.

Hypoplastic left heart syndrome (HLHS) is a spectrum of cardiac malformations characterized by a severe underdevelopment of the left heart-aorta complex, consisting of aortic and/or mitral valve atresia, stenosis, or hypoplasia with marked hypoplasia or absence of the left ventricle, and hypoplasia of the ascending aorta and of the aortic arch with coarctation of the aorta. Hypoplastic left heart complex is a subset of patients at the favorable end of the spectrum of HLHS characterized by hypoplasia of the structures of the left heart-aorta complex, consisting of aortic and mitral valve hypoplasia without valve stenosis or atresia, hypoplasia of the left ventricle, hypoplasia of the left ventricular outflow tract, hypoplasia of the ascending aorta and of the aortic arch, with or without coarctation of the aorta.

Shone's syndrome is a syndrome of multilevel hypoplasia and obstruction of left sided cardiovascular structures including more than one of the following lesions: (1) supravalvar ring of the left atrium, (2) a parachute deformity of the mitral valve, (3) subaortic stenosis, and (4) aortic coarctation. The syndrome is based on the original report from Shone [1] that was based on analysis of 8 autopsied cases and described the tendency of these four obstructive, or potentially obstructive, conditions to coexist. Only 2 of the 8 cases exhibited all four conditions, with the other cases exhibiting only two or three of the anomalies [2]. [1] Shone JD, Sellers RD, Anderson RG, Adams P, Lillehei CW, Edwards JE. The developmental complex of " parachute mitral valve", supravalvar ring of left atrium, subaortic stenosis, and coarctation of the aorta. Am J Cardiol 1963; 11: 714-725. [2]. Tchervenkov CI, Jacobs JP, Weinberg PM, Aiello VD, Beland MJ, Colan SD, Elliott MJ, Franklin RC, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G. The nomenclature, definition and classification of hypoplastic left heart syndrome. Cardiology in the Young, 2006; 16(4): 339–368, August 2006.

Please note that the term "2080 Shone's syndrome" may be the "Fundamental Diagnosis" of a patient; however, the term "2080 Shone's syndrome" may not be the "

Primary Diagnosis" of an operation. The term "2080

		Shone's syndrome" may be a "Secondary Diagnosis" of an operation.
740	Cardiomyopathy (including dilated, restrictive, and hypertrophic)	Cardiomyopathy is a term applied to a wide spectrum of cardiac diseases in which the predominant feature is poor myocardial function in the absence of any anatomic abnormalities. Cardiomyopathies can be dividied into three relatively easily distinguishable entities: (1) dilated, characterized by ventricular dilatation and systolic dysfunction; (2) hypertrophic, characterized by physiologically inappropriate hypertrophy of the left ventricle; and (3) restrictive, characterized by diastolic dysfunction, with a presentation often identical to constrictive pericarditis. Also included in this diagnostic category are patients with a cardiomyopathy or syndrome confined to the right ventricle, for example: (1) arrhythmogenic right ventricular dysplasia; (2) Uhl's syndrome (hypoplasia of right ventricular myocardium, parchment heart); or (3) spongiform cardiomyopathy.
750	Cardiomyopathy, End-stage congenital heart disease	Myocardial abnormality in which there is systolic and/or diastolic dysfunction in the presence of structural congenital heart disease without any (or any further) surgically correctable lesions.
760	Pericardial effusion	Inflammatory stimulation of the pericardium that results in the accumulation of appreciable amounts of pericardial fluid (also known as effusive pericarditis). The effusion may be idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced).
770	Pericarditis	Inflammatory process of the pericardium that leads to either (1) effusive pericarditis with accumulation of appreciable amounts of pericardial fluid or (2) constrictive pericarditis that leads to pericardial thickening and compression of the cardiac chambers, ultimately with an associated significant reduction in cardiac function. Etiologies are varied and include idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced) pericarditis.
780	Pericardial disease, Other	A structural or functional abnormality of the visceral or parietal pericardium that may, or may not, have a significant impact on cardiac function. Included are absence or partial defects of the pericardium.
790	Single ventricle, DILV	Single morphologically left ventricle (smooth internal walls, lack chordal attachments of AV valves to the rudimentary septal surface) that receives both atrioventricular valves.
800	Single ventricle, DIRV	Single morphologically right ventricle (more heavily trabeculated, generally have chordal attachments of AV valve to the septal surfaces) that receives both atrioventricular valves.

STS Adult Cardiac Database Version: 2.73

810 Single ventricle, Mitral atresia

Single ventricle anomalies with mitral atresia. May also be associated with double outlet right ventricle, congenitally corrected transposition, pulmonary atresia, or pulmonary stenosis.

820 Single ventricle, Tricuspid atresia

Single ventricle anomalies with tricuspid atresia. May also be associated with complete transposition of the great arteries, congenitally corrected transposition of the great arteries, pulmonary atresia, pulmonary stenosis, subaortic stenosis, or ventricular septal defect (small or large).

830 Single ventricle, Unbalanced AV canal

Single ventricle anomalies with a common atrioventricular (AV) valve and only one completely well developed ventricle. If the common AV valve opens predominantly into the morphologic left ventricle, the defect is termed a left ventricular (LV)–type or LV-dominant AV septal defect. If the common AV valve opens predominantly into the morphologic right ventricle, the defect is termed a right ventricular (RV)–type or RV-dominant AV septal defect.

840 Single ventricle, Heterotaxia syndrome

Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or normal situation, visceral heterotaxy syndrome includes patients with an unusual degree of thoracic and abdominal visceral symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome. Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or normal situation, visceral heterotaxy syndrome includes

850 Single ventricle, Other

851 Single Ventricle + Total anomalous pulmonary venous connection (TAPVC) patients with an unusual degree of thoracic and abdominal visceral symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome.

If the single ventricle is of primitive or indeterminate type, other is chosen in coding. It is recognized that a considerable variety of other structural cardiac malformations (e.g., biventricular hearts with straddling atrioventricular valves, pulmonary atresia with intact ventricular septum, some complex forms of double outlet right ventricle) may at times be best managed in a fashion similar to that which is used to treat univentricular hearts. They are not to be coded in this section of the nomenclature, but according to the underlying lesions.

Indicate if the patient has the diagnosis of "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)". In the event of Single Ventricle occurring in association with Total anomalous pulmonary venous connection (TAPVC), code "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)", and then use additional (secondary) diagnostic codes to describe the Single Ventricle and the Total anomalous pulmonary venous connection (TAPVC) separately to provide further documentation about the Single Ventricle and Total anomalous pulmonary venous connection (TAPVC) types. {"Total anomalous pulmonary venous connection (TAPVC)" is defined as a heart where all of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium.} {The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart". (The functionally univentricular heart is defined as a spectrum of cardiac malformations in which entire ventricular mass is

functionally univentricular; in other words, whenever only one ventricle is capable, for whatever reason, of supporting either the systemic or the pulmonary circulation.) The consensus of the EACTS and STS Congenital Heart Surgery Database Committees is that the nomenclature proposal for single ventricle hearts would encompass hearts with double inlet atrioventricular connection (both double inlet left ventricle [DILV] and double inlet right ventricle [DIRV]), hearts with absence of one atrioventricular connection (mitral atresia and tricuspid atresia), hearts with a common atrioventricular valve and only one completely well-developed ventricle (unbalanced common atrioventricular canal defect), hearts with only one fully well-developed ventricle and heterotaxia syndrome (single ventricle heterotaxia syndrome), and finally other rare forms of univentricular hearts that do not fit in one of the specified major categories. In the version of the IPCCC derived from the nomenclature of the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and the STS, patients classified in this section of the nomenclature, therefore, include all those who would be coded using the Short List for "Single Ventricle", specifically: (1) Single ventricle; (2) Single ventricle, DILV; (3) Single ventricle, DIRV; (4) Single ventricle, Heterotaxia syndrome; (5) Single ventricle, Mitral atresia; (6) Single ventricle, Tricuspid atresia; (7) Single ventricle, Unbalanced AV canal. (Despite the recognition that hypoplastic left heart syndrome is a common form of functionally univentricular heart, with a single or dominant ventricle of right ventricular morphology, the EACTS-STS version of the IPCCC includes an entirely separate section for consideration of hypoplastic left heart syndrome. Also, it is recognized that a considerable variety of other structural cardiac malformations, such as pulmonary atresia with intact ventricular septum, biventricular hearts with straddling atrioventricular valves, and some complex forms of double outlet right ventricle (DORV), may at times be best managed in a fashion similar to that which is used to treat other functionally univentricular hearts. Nomenclature for description of those entities, however, is not included in this Single Ventricle section of the EACTS-STS version of the IPCCC.) [1] [1]. Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor

870 Congenitally corrected TGA

JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9-21, February 2006.

Indicate if the patient has the diagnosis of "Congenitally corrected TGA". Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B. Stellin G. Tchervenkov CI. Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.

872 Congenitally corrected TGA, IVS

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS". "Congenitally corrected TGA, IVS" is "Congenitally corrected transposition with an intact ventricular septum", in other words, " Congenitally corrected transposition with no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculoarterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

874 Congenitally corrected TGA,

Indicate if the patient has the diagnosis of "Congenitally

IVS-LVOTO

corrected TGA, IVS-LVOTO". "Congenitally corrected TGA, IVS-LVOTO" is "Congenitally corrected transposition with an intact ventricular septum and left ventricular outflow tract obstruction", in other words, " Congenitally corrected transposition with left ventricular outflow tract obstruction and no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculoarterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

876 Congenitally corrected TGA, VSD

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD". "Congenitally corrected TGA, VSD" is "Congenitally corrected transposition with a VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

878 Congenitally corrected TGA, VSD-LVOTO

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD-LVOTO". "Congenitally

corrected transposition with a VSD and left ventricular outflow tract obstruction". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

corrected TGA, VSD-LVOTO" is "Congenitally

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum and associated left ventricular obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects.

880 TGA, IVS

890 TGA, IVS-LVOTO

900 TGA, VSD

910 TGA, VSD-LVOTO

930 DORV, VSD type

940 DORV, TOF type

There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects and left ventricular outflow tract obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, VSD type, there is an associated subaortic or doubly-committed VSD and no pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate sngle ventricle listing.

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TOF type, there is an associated subaortic or doubly-committed VSD and pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). DORV can occur in association with pulmonary atresia, keeping in mind in coding that in the nomenclature developed for DORV, there must be usual atrial arrangements and concordant

950 DORV, TGA type

atrioventricular connections, and normal or near-normal sized ventricles (in this situation DORV is coded as a primary diagnosis). Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate Single ventricle listing.

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TGA type, there is an associated subpulmonary VSD. Most frequently, there is no pulmonary outflow tract obstruction (Taussig-Bing heart). The aorta is usually to the right and slightly anterior to or side-by-side with the pulmonary artery. Associated aortic outflow tract stenosis (subaortic, aortic arch obstruction) is commonly associated with the Taussig-Bing heart and if present should be coded as a secondary diagnosis. Rarely, there is associated pulmonary outflow tract obstruction. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, Remote VSD type, there is a remote or noncommitted VSD. The VSD is far removed from both the aortic and pulmonary valves, usually within the inlet septum. Many of these VSD's are in hearts with DORV and common atrioventricular canal/septal defect. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

Indicate if the patient has the diagnosis of "DORV + AVSD (AV Canal)". In the event of DORV occurring in association with AVSD (AV Canal), code "DORV + AVSD (AV Canal)", and then use additional (secondary) diagnostic codes to describe the DORV and

960 DORV, Remote VSD (uncommitted VSD)

2030 DORV + AVSD (AV Canal)

975 DORV, IVS

980 DOLV

990 Coarctation of aorta

1000 Aortic arch hypoplasia

the AVSD (AV Canal) separately to provide further documentation about the DORV and AVSD (AV Canal) types. {"DORV" is "Double outlet right ventricle" and is defined as a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In this case, the DORV exists in combination with an atrioventricular septal defect and common atrioventricular junction guarded by a common atrioventricular valve.

Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In the rare case of double outlet right ventricle with IVS the ventricular septum is intact. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connections with DORV are to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

Double outlet left ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the left ventricle. In the nomenclature developed for DOLV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DOLV is to be coded under congenitally corrected TGA. DOLV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

Indicate if the patient has the diagnosis of "Coarctation of aorta". A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.

Hypoplasia of the aortic arch is hypoplasia of the proximal or distal transverse arch or the aortic isthmus. The isthmus (arch between the left subclavian and insertion of the patent ductus arteriosus / ligamentum arteriosum) is hypoplastic if its diameter is less than 40% of the diameter of the ascending aorta. The proximal transverse arch (arch between the innominate and left carotid arteries) and distal transverse arch (arch between the left carotid and left subclavian arteries) are hypoplastic if their diameters are less than 60% and 50%, respectively, of the diameter of the ascending

aorta.

92 VSD + Aortic arch hypoplasia

A ventricular septal defect, any type, associated with hypoplasia of the aortic arch. (See diagnosis definition 1000 for a definition of hypoplasia of the aortic arch.)

94 VSD + Coarctation of aorta

Indicate if the patient has the diagnosis of "VSD + Coarctation of aorta". In the event of a VSD occurring in association with Coarctation of aorta, code "VSD + Coarctation of aorta", and then use additional (secondary) diagnostic codes to describe the VSD and the Coarctation of aorta separately to provide further documentation about the individual VSD and Coarctation of a rta types. {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)} {A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.}

1010 Coronary artery anomaly, Anomalous aortic origin of coronary artery from aorta (AAOCA) Anomalous aortic origins of the coronary arteries include a spectrum of anatomic variations of the normal coronary artery origins. Coronary artery anomalies of aortic origin to be coded under this diagnostic field include: anomalies of take-off (high take-off), origin (sinus), branching, and number. An anomalous course of the coronary artery vessels is also significant, particularly those coronary arteries that arise or course between the great vessels.

1020 Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA) In patients with anomalous pulmonary origin of the coronary artery, the coronary artery (most commonly the left coronary artery) arises from the pulmonary artery rather than from the aorta. Rarely, the right coronary artery, the circumflex, or both coronary arteries may arise from the pulmonary artery.

1030 Coronary artery anomaly, Fistula

The most common of coronary artery anomalies, a coronary arteriovenous fistula is a communication between a coronary artery and either a chamber of the heart (coronary-cameral fistula) or any segment of the systemic or pulmonary circulation (coronary arteriovenous fistula). They may be congenital or acquired (traumatic, infectious, iatrogenic) in origin, and are mostly commonly seen singly, but occasionally

multiple fistulas are present. Nomenclature schemes have been developed that further categorize the fistulas by vessel of origin and chamber of termination, and one angiographic classification scheme by Sakakibara has surgical implications. Coronary artery fistulas can be associated with other congenital heart anomalies such as tetralogy of Fallot, atrial septal defect, ventricular septal defect, and pulmonary atresia with intact ventricular septum, among others. The major cardiac defect should be listed as the primary diagnosis and the coronary artery fistula should be as an additional secondary diagnoses.

1040 Coronary artery anomaly, Aneurysm Coronary artery aneurysms are defined as dilations of a coronary vessel 1.5 times the adjacent normal coronaries. There are two forms, saccular and fusiform (most common), and both may be single or multiple. These aneurysms may be congenital or acquired (atherosclerotic, Kawasaki, systemic diseases other than Kawasaki, iatrogenic, infectious, or traumatic) in origin.

1050 Coronary artery anomaly, Other Coronary artery anomalies which may fall within this category include coronary artery bridging and coronary artery stenosis, as well as secondary coronary artery variations seen in congenital heart defects such as tetralogy of Fallot, transposition of the great arteries, and truncus arteriosus (with the exception of variations that can be addressed by a more specific coronary artery anomaly code).

1070 Interrupted aortic arch

Indicate if the patient has the diagnosis of "Interrupted aortic arch". Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.

2020 Interrupted aortic arch + VSD

Indicate if the patient has the diagnosis of "Interrupted aortic arch + VSD". In the event of interrupted aortic arch occurring in association with VSD, code "
Interrupted aortic arch + VSD", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the VSD separately to provide further documentation about the individual interrupted aortic arch and VSD types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to

2000 Interrupted aortic arch + AP window (aortopulmonary window)

the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)}

Indicate if the patient has the diagnosis of "Interrupted aortic arch + AP window (aortopulmonary window)". In the event of interrupted aortic arch occurring in association with AP window, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the AP window separately to provide further documentation about the individual interrupted aortic arch and AP window types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries. \ {An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little

1080 Patent ductus arteriosus

superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)}

Indicate if the patient has the diagnosis of "Patent ductus arteriosus". The ductus arteriosus (arterial duct) is an essential feature of fetal circulation, connecting the main pulmonary trunk with the descending aorta, distal to the origin of the left subclavian artery. In most patients it is on the left side. If a right aortic arch is present, it may be on the right or the left; very rarely it is bilateral. When luminal patency of the duct persists post-natally, it is referred to as patent ductus arteriosus (patent arterial duct). The length and diameter may vary considerably from case to case. The media of the ductus consists mainly of smooth muscle that is arranged spirally, and the intima is much thicker than that of the aorta. (A patent ductus arteriosus is a vascular arterial connection between the thoracic aorta and the pulmonary artery. Most commonly a PDA has its origin from the descending thoracic aorta, just distal and opposite the origin of the left subclavian artery. The insertion of the ductus is most commonly into the very proximal left pulmonary artery at its junction with the main pulmonary artery. Origination and insertion sites can be variable, however.)

The term vascular ring refers to a group of congenital vascular anomalies that encircle and comperss the esophagus and trachea. The compression may be from a complete anatomic ring (double aortic arch or right aortic arch with a left ligamentum) or from a compressive effect of an aberrant vessel (innominate artery compression syndrome).

In pulmonary artery sling, the left pulmonary artery originates from the right pulmonary artery and courses posteriorly between the trachea and esophagus in its route to the left lung hilum, causing a sling-like compression of the trachea.

An aneurysm of the aorta is defined as a localized dilation or enlargement of the aorta at any site along its length (from aortic annulus to aortoiliac bifurcation). A true aortic aneurysm involves all layers of the aortic wall. A false aortic aneurysm (pseudoaneurysm) is defined as a dilated segment of the aorta not containing all layers of the aortic wall and may include postoperative or post-procedure false aneurysms at

1090 Vascular ring

1100 Pulmonary artery sling

1110 Aortic aneurysm (including pseudoaneurysm)

		anastomotic sites, traumatic aortic injuries or transections, and infectious processes leading to a contained rupture.
1120	Aortic dissection	Aortic dissection is a separation of the layers of the aortic wall. Extension of the plane of the dissection may progress to free rupture into the pericardium, mediastinum, or pleural space if not contained by the outer layers of the media and adventitia. Dissections may be classified as acute or chronic (if they have been present for more than 14 days)
1130	Lung disease, Benign	Lung disease arising from any etiology (congenital or acquired) which does not result in death or lung or heart-lung transplant; examples might be non-life threatening asthma or emphysema, benign cysts.
1140	Lung disease, Malignant	Lung disease arising from any etiology (congenital or acquired, including pulmonary parenchymal disease, pulmonary vascular disease, congenital heart disease, neoplastm, etc.) which may result in death or lung or heart-lung transplant.
1150	Pectus	Pectus excavatum is a chest wall deformity in which the sternum is depressed. Pectus carinatum is a protrusion of the sternum.
1160	Tracheal stenosis	Tracheal stenosis is a reduction in the anatomic luminal diameter of the trachea by more than 50% of the remaining trachea. This stenosis may be congenital or acquired (as in post-intubation or traumatic tracheal stenosis).
1170	Airway disease	Included in this diagnostic category would be airway pathology not included under the definition of tracheal stenosis such as tracheomalacia, bronchotracheomalacia, tracheal right upper lobe, bronchomalacia, subglottic stenosis, bronchial stenosis, etc.
1430	Pleural disease, Benign	Benign diseases of the mediastinal or visceral pleura.
1440	Pleural disease, Malignant	Malignant diseases of the mediastinal or visceral pleura.
1450	Pneumothorax	A collection of air or gas in the pleural space.
1460	Pleural effusion	Abnormal accumulation of fluid in the pleural space.
1470	Chylothorax	The presence of lymphatic fluid in the pleural space secondary to a leak from the thoracic duct or its branches. Chylothorax is a specific type of pleural effusion.
1480	Empyema	A collection of purulent material in the pleural space, usually secondary to an infection.
1490	Esophageal disease, Benign	Any benign disease of the esophagus.
1500	Esophageal disease, Malignant	Any malignant disease of the esophagus.
1505	Mediastinal disease	Any disease of the mediastinum awaiting final benign/malignant pathology determination.

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1510	Mediastinal disease, Benign	Any benign disease of the mediastinum.
1520	Mediastinal disease, Malignant	Any malignant disease of the mediastinum.
1540	Diaphragm paralysis	Paralysis of diaphragm, unilateral or bilateral.
1550	Diaphragm disease, Other	Any disease of the diaphragm other than paralysis.
1180	Arrhythmia	Any cardiac rhythm other than normal sinus rhythm.
2040	Arrhythmia, Atrial	Indicate if the patient has the diagnosis of "Arrhythmia, Atrial". "Arrhythmia, Atrial" ROOT Definition = Non-sinus atrial rhythm with or without atrioventricular conduction. [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 373.
2050	Arrhythmia, Junctional	Indicate if the patient has the diagnosis of "Arrhythmia, Junctional". "Arrhythmias arising from the atrioventricular junction; may be bradycardia, tachycardia, premature beats, or escape rhythm [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 379.
2060	Arrhythmia, Ventricular	Indicate if the patient has the diagnosis of "Arrhythmia, Ventricular". "Arrhythmia, Ventricular" ROOT Definition = Abnormal rhythm originating from the ventricles [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 393.
1185	Arrhythmia, Heart block	Atrioventricular block may be congenital or acquired, and may be of varying degree (first, second, or third degree).
1190	Arrhythmia, Heart block, Acquired	Atrioventricular block, when acquired, may be post- surgical, or secondary to myocarditis or other etiologies; the block may be first, second or third degree.
1200	Arrhythmia, Heart block, Congenital	Atrioventricular block, when congenital, may be first, second or third degree block.
1220	Arrhythmia, Pacemaker,	Indications for pacemaker replacement may include end

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Indication for replacement of generator life, malfunction, or infection.

1230 Atrial Isomerism, Left In isomerism, both appendages are of like morphology or structure; in left atrial isomerism both the right atrium and left atrium appear to be a left atrium structurally.

1240 Atrial Isomerism, Right In isomerism, both appendages are of like morphology or structure; in right atrial isomerism both the right atrium and left atrium appear to be a right atrium structurally.

Indicate if the patient has the diagnosis of "Dextrocardia ". "Dextrocardia" is most usually considered synonymous with a right-sided ventricular mass, whilst ' 'dextroversion' is frequently defined as a configuration where the ventricular apex points to the right. In a patient with the usual atrial arrangement, or situs solitus, dextroversion, therefore, implies a turning to the right of the heart [1]. [1]. Jacobs JP, Anderson RH, Weinberg P. Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G. editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

Indicate if the patient has the diagnosis of "Levocardia" . "Levocardia" usually considered synonymous with a left-sided ventricular mass, whilst "levoversion" is frequently defined as a configuration where the ventricular apex points to the left [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

Indicate if the patient has the diagnosis of "Mesocardia". "Mesocardia" is most usually considered synonymous with the ventricular mass occupying the midline [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW,

2090 Dextrocardia

2100 Levocardia

2110 Mesocardia

2120 Situs inversus

Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

Indicate if the patient has the diagnosis of "Situs inversus" of the atrial chambers. The development of morphologically right-sided structures on one side of the body, and morphologically left-sided structures on the other side, is termed lateralization. Normal lateralization, the usual arrangement, is also known as " situs solitus". The mirror-imaged arrangement is also known as "situs inversus". The term "visceroatrial situs" is often used to refer to the situs of the viscera and atria when their situs is in agreement. The arrangement of the organs themselves, and the arrangement of the atrial chambers, is not always the same. Should such disharmony be encountered, the sidedness of the organs and atrial chambers must be separately specified [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.

- 1250 Aneurysm, Ventricular, Right (including pseudoaneurysm)
- An aneurysm of the right ventricle is defined as a localized dilation or enlargement of the right ventricular wall.
- 1260 Aneurysm, Ventricular, Left (including pseudoaneurysm)
- An aneurysm of the left ventricle is defined as a localized dilation or enlargement of the left ventricular
- 1270 Aneurysm, Pulmonary artery
- An aneurysm of the pulmonary artery is defined as a localized dilation or enlargement of the pulmonary artery trunk and its central branches (right and left pulmonary artery).

1280 Aneurysm, Other

A localized dilation or enlargement of a cardiac vessel or chamber not coded in specific fields available for aortic aneurysm, sinus of Valsalva aneurysm, coronary artery aneurysm, right ventricular aneurysm, left ventricular aneurysm, or pulmonary artery aneurysm.

		ventreatar anearysm, or parmonary artery anearysm.
1290	Hypoplastic RV	Small size of the right ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the right ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
1300	Hypoplastic LV	Small size of the left ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the left ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
2070	Postoperative bleeding	Indicate if the patient has the diagnosis of "Postoperative bleeding".
1310	Mediastinitis	Inflammation/infection of the mediastinum, the cavity between the lungs which holds the heart, great vessels, trachea, esophagus, thymus, and connective tissues. In the United States mediastinits occurs most commonly following chest surgery.
1320	Endocarditis	An infection of the endocardial surface of the heart, which may involve one or more heart valves (native or prosthetic) or septal defects or prosthetic patch material placed at previous surgery.
1325	Rheumatic heart disease	Heart disease, usually valvular (e.g., mitral or aortic), following an infection with group A streptococci
1330	Prosthetic valve failure	Indicate if the patient has the diagnosis of "Prosthetic valve failure". This diagnosis is the primary diagnosis to be entered for patients undergoing replacement of a previously placed valve (not conduit) prosthesis, whatever type (e.g., bioprosthetic, mechanical, etc.). Failure may be due to, among others, patient somatic growth, malfunction of the prosthesis, or calcification or overgrowth of the prosthesis (e.g., pannus formation). Secondary or fundamental diagnosis would relate to the underlying valve disease entity. As an example, a patient undergoing removal or replacement of a prosthetic pulmonary valve previously placed for pulmonary insufficiency after repair of tetralogy of Fallet would have as a primary diagnosis "Prosthetic

Fallot would have as a primary diagnosis "Prosthetic valve failure", as a secondary diagnosis "Pulmonary insufficiency", and as a fundamental diagnosis "

Tetralogy of Fallot".

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1340 Myocardial infarction	A myocardial infarction is the development of myocardial necrosis caused by a critical imbalance between the oxygen supply and demand of the myocardium. While a myocardial infarction may be caused by any process that causes this imbalance it most commonly results from plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Myocardial infarction is a usual accompaniment of anomalous left coronary artery from the pulmonary artery (ALCAPA).	
1350 Cardiac tumor	An abnormal growth of tissue in or on the heart, demonstrating partial or complete lack of structural organization, and no functional coordination with normal cardiac tissue. Commonly, a mass is recognized which is distinct from the normal structural components of the heart. A primary cardiac tumor is one that arises directly from tissues of the heart, (e.g., myxoma, fibroelastoma, rhabdomyoma, fibroma, lipoma, pheochromocytoma, teratoma, hemangioma, mesothesioloma, sarcoma). A secondary cardiac tumor is one that arises from tissues distant from the heart, with subsequent spread to the otherwise normal tissues of the heart, (e.g., renal cell tumor with caval extension from the kidney to the level of the heart or tumor with extension from other organs or areas of the body (hepatic, adrenal, uterine, infradiaphragmatic)). N.B., in the nomenclature system developed, cardiac thrombus and cardiac vegetation are categorized as primary cardiac tumors.	
1360 Pulmonary AV fistula	An abnormal intrapulmonary connection (fistula) between an artery and vein that occurs in the blood vessels of the lungs. Pulmonary AV fistulas may be seen in association with congenital heart defects; the associated cardiac defect should be coded as well.	
1370 Pulmonary embolism	A pulmonary embolus is a blockage of an artery in the lungs by fat, air, clumped tumor cells, or a blood clot.	
1385 Pulmonary vascular obstructive disease	Pulmonary vascular obstructive disease (PVOD) other than those specifically defined elsewhere (Eisenmenger's pulmonary vascular obstructive disease, primary pulmonary hypertension, persistent fetal circulation). The spectrum includes PVOD arising from (1) pulmonary arterial hypertension or (2) pulmonary venous hypertension or (3) portal hypertension, or (4) collage vascular disease, or (5) drug or toxin induced, or (6) diseases of the respiratory system, or (7) chronic thromboembolic disease, among others.	
1390 Pulmonary vascular	"Eisenmenger syndrome" could briefly be described as	

obstructive disease (Eisenmenger's)

"Acquired severe pulmonary vascular disease associated

with congenital heart disease (Eisenmenger)". Eisenmenger syndrome is an acquired condition. In

		Eisenmenger-type pulmonary vascular obstructive disease, long-term left-to-right shunting (e.g., through a ventricular or atrial septal defect, patent ductus arteriosus, aortopulmonary window) can lead to chronic pulmonary hypertension with resultant pathological changes in the pulmonary vessels. The vessels become thick-walled, stiff, noncompliant, and may be obstructed. In Eisenmenger syndrome, the long-term left-to-right shunting will reverse and become right to left. Please note that the specific heart defect should be coded as a secondary diagnosis.
1400	Primary pulmonary hypertension	Primary pulmonary hypertension is a rare disease characterized by elevated pulmonary artery hypertension with no apparent cause. Two forms are included in the nomenclature, a sporadic form and a familial form which can be linked to the BMPR-II gene.
1410	Persistent fetal circulation	Persistence of the blood flow pattern seen in fetal life, in which high pulmonary vascular resistance in the lungs results in decreased blood flow to the lungs. Normally, after birth pulmonary pressure falls with a fall in pulmonary vascular resistance and there is increased perfusion of the lungs. Persistent fetal circulation, also known as persistent pulmonary hypertension of the newborn, can be related to lung or diaphragm malformations or lung immaturity.
1420	Meconium aspiration	Aspiration of amniotic fluid stained with meconium before, during, or after birth can lead to pulmonary sequelae including (1) pneumothorax, (2) pneumomediastinum, (3) pneumopericardium, (4) lung infection, and (5) meconium aspiration syndrome (MAS) with persistent pulmonary hypertension.
1560	Cardiac, Other	Any cardiac diagnosis not specifically delineated in other diagnostic codes.
1570	Thoracic and/or mediastinal, Other	Any thoracic and/or mediastinal disease not specifically delineated in other diagnostic codes.
1580	Peripheral vascular, Other	Any peripheral vascular disease (congenital or acquired) or injury (from trauma or iatrogenic); vessels involved may include, but are not limited to femoral artery, femorial vein, iliac artery, brachial artery, etc.
7000	Normal heart	Normal heart.
7777	Miscellaneous, Other	Any disease (congenital or acquired) not specifically delineated in other diagnostic codes.
4010	Status post - PFO, Primary closure	Status post - Suture closure of patent foramen ovale (PFO).
4020	Status post - ASD repair, Primary closure	Status post - Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
4030	Status post - ASD repair, Patch	Status post - Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus

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		ASD.
4040	Status post - ASD repair, Device	Status post - Closure of any type ASD (including PFO) using a device.
6110	Status post - ASD repair, Patch + PAPVC repair	
4050	Status post - ASD, Common atrium (single atrium), Septation	Status post - Septation of common (single) atrium using any type patch material.
4060	Status post - ASD creation/enlargement	Status post - Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
4070	Status post - ASD partial closure	Status post - Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
4080	Status post - Atrial septal fenestration	Status post - Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
4085	Status post - Atrial fenestration closure	Status post - Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
4100	Status post - VSD repair, Primary closure	Status post - Suture closure of any type VSD.
4110	Status post - VSD repair, Patch	Status post - Patch closure (using any type of patch material) of any type VSD.
4120	Status post - VSD repair, Device	Status post - Closure of any type VSD using a device.
4130	Status post - VSD, Multiple, Repair	Status post - Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
4140	Status post - VSD creation/enlargement	Status post - Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
4150	Status post - Ventricular septal fenestration	Status post - Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.

4170	Status post - AVC (AVSD) repair, Complete (CAVSD)	Status post - Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
4180	Status post - AVC (AVSD) repair, Intermediate (Transitional)	Status post - Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
4190	Status post - AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Status post - Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
6300	Status post - Valvuloplasty, Common atrioventricular valve	
6250	Status post - Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	
6230	Status post - Valve replacement, Common atrioventricular valve	
4210	Status post - AP window repair	Status post - Repair of AP window using one- or two- patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
4220	Status post - Pulmonary artery origin from ascending aorta (hemitruncus) repair	Status post - Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
4230	Status post - Truncus arteriosus repair	Status post - Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
4240	Status post - Valvuloplasty, Truncal valve	Status post - Truncal valve repair, any type.
6290	Status post - Valvuloplasty converted to valve replacement in the same operation, Truncal valve	
4250	Status post - Valve replacement, Truncal valve	Status post - Replacement of the truncal valve with a prosthetic valve.
6220	Status post - Truncus + Interrupted aortic arch repair	

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4260 Status post - PAPVC repair

Status post - PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.

4270 Status post - PAPVC, Scimitar, Repair Status post - In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.

- 6120 Status post PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)
- 4280 Status post TAPVC repair

Status post - Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.

- 6200 Status post TAPVC repair + Shunt - systemic-topulmonary
- 4290 Status post Cor triatriatum repair

Status post - Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.

4300 Status post - Pulmonary venous stenosis repair

Status post - Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.

4310 Status post - Atrial baffle procedure (non-Mustard, non-Senning)

Status post - The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.

4330 Status post - Anomalous

Status post - With the exception of atrial baffle

	systemic venous connection repair	procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
4340	Status post - Systemic venous stenosis repair	Status post - Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
4350	Status post - TOF repair, No ventriculotomy	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4360	Status post - TOF repair, Ventriculotomy, Nontransanular patch	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4370	Status post - TOF repair, Ventriculotomy, Transanular patch	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4380	Status post - TOF repair, RV-PA conduit	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
4390	Status post - TOF - AVC (AVSD) repair	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect.

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		atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
4400	Status post - TOF - Absent pulmonary valve repair	Status post - Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
4420	Status post - Pulmonary atresia - VSD (including TOF, PA) repair	Status post - For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.
4430	Status post - Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair	Status post - In the presence of MAPCAs, this code implies implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA conduit.
4440	Status post - Unifocalization MAPCA(s)	Status post - Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.
4450	Status post - Occlusion MAPCA(s)	Status post - Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
4460	Status post - Valvuloplasty, Tricuspid	Status post - Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle transplocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, pursestring annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid

Repair of associated atrial septal defect or

6280 Status post - Valvuloplasty converted to valve replacement in the same operation, Tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.

4465	Status post - Ebstein's repair	Status post - To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
4470	Status post - Valve replacement, Tricuspid (TVR)	Status post - Replacement of the tricuspid valve with a prosthetic valve.
4480	Status post - Valve closure, Tricuspid (exclusion, univentricular approach)	Status post - In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
4490	Status post - Valve excision, Tricuspid (without replacement)	Status post - Excision of the tricuspid valve without placement of a valve prosthesis.
4500	Status post - Valve surgery, Other, Tricuspid	Status post - Other tricuspid valve surgery not specified in procedure codes.
4510	Status post - RVOT procedure	Status post - Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
4520	Status post - 1 1/2 ventricular repair	Status post - Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
4530	Status post - PA, reconstruction (plasty), Main (trunk)	Status post - Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
4540	Status post - PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Status post - Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch BA handing (single or bilatoral) was performed

branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated

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		with debanding, both codes should be listed.
4550	Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Status post - Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
4570	Status post - DCRV repair	Status post - Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
4590	Status post - Valvuloplasty, Pulmonic	Status post - Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
6270	Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
4600	Status post - Valve replacement, Pulmonic (PVR)	Status post - Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
4630	Status post - Valve excision, Pulmonary (without replacement)	Status post - Excision of the pulmonary valve without placement of a valve prosthesis.
4640	Status post - Valve closure, Semilunar	Status post - Closure of a semilunar valve (pulmonic or aortic) by any technique.
4650	Status post - Valve surgery, Other, Pulmonic	Status post - Other pulmonic valve surgery not specified in procedure codes.
4610	Status post - Conduit placement, RV to PA	Status post - Placement of a conduit, any type, from RV to PA.
4620	Status post - Conduit placement, LV to PA	Status post - Placement of a conduit, any type, from LV to PA.
5774	Status post - Conduit placement, Ventricle to aorta	Status post - Placement of a conduit from the right or left ventricle to the aorta.
5772	Status post - Conduit placement, Other	Status post - Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
4580	Status post - Conduit reoperation	Status post - Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth,

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4660	Status post - Valvuloplasty,	
	Aortic	

stenosis, insufficiency, infection, etc).

Status post - Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).

- 6240 Status post Valvuloplasty converted to valve replacement in the same operation, Aortic
- 6310 Status post Valvuloplasty converted to valve replacement in the same operation, Aortic with Ross procedure
- 6320 Status post Valvuloplasty converted to valve replacement in the same operation, Aortic with Ross-Konno procedure
- 4670 Status post Valve replacement, Aortic (AVR)

Status post - Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.

- 4680 Status post Valve replacement, Aortic (AVR), Mechanical
- Status post Replacement of the aortic valve with a mechanical prosthetic valve.
- 4690 Status post Valve replacement, Aortic (AVR), Bioprosthetic
- Status post Replacement of the aortic valve with a bioprosthetic prosthetic valve.
- 4700 Status post Valve replacement, Aortic (AVR), Homograft
- Status post Replacement of the aortic valve with a homograft prosthetic valve.
- 4715 Status post Aortic root replacement, Bioprosthetic
- Status post Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
- 4720 Status post Aortic root replacement, Mechanical
- Status post Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechnical prosthesis in a composite conduit.
- 4730 Status post Aortic root
- Status post Replacement of the aortic root (that portion

	replacement, Homograft	of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
4735	Status post - Aortic root replacement, Valve sparing	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
4740	Status post - Ross procedure	Status post - Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
4750	Status post - Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
4760	Status post - Ross-Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
4770	Status post - Other annular enlargement procedure	Status post - Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manougian and Nicks aortic annular enlargement procedures.
4780	Status post - Aortic stenosis, Subvalvar, Repair	Status post - Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation), Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
6100	Status post - Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	
4790	Status post - Aortic stenosis, Supravalvar, Repair	Status post - Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three

		sinuses are patched separately.
4800	Status post - Valve surgery, Other, Aortic	Status post - Other aortic valve surgery not specified in other procedure codes.
4810	Status post - Sinus of Valsalva, Aneurysm repair	Status post - Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
4820	Status post - LV to aorta tunnel repair	Status post - LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
4830	Status post - Valvuloplasty, Mitral	Status post - Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissuorotomy, leaflet repair, or papillary muscle repair.
6260	Status post - Valvuloplasty converted to valve replacement in the same operation, Mitral	
4840	Status post - Mitral stenosis, Supravalvar mitral ring repair	Status post - Supravalvar mitral ring repair.
4850	Status post - Valve replacement, Mitral (MVR)	Status post - Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
4860	Status post - Valve surgery, Other, Mitral	Status post - Other mitral valve surgery not specified in procedure codes.
4870	Status post - Norwood procedure	Status post - The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neoaortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic to pulmonary extens of a right controlled

connection.

systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary

When coding the procedure "Norwood procedure", the

primary procedure of the operation should be "Norwood procedure". The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:

- 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)
- 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)
- 3. Shunt, Systemic to pulmonary, Other
- 4. Conduit placement, RV to PA
- 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)
- 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)
- 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
- 8. HemiFontan

4880 Status post - HLHS biventricular repair Status post - Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.

6160 Status post - Hybrid Approach "Stage 1", Application of RPA & LPA bands Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

6170 Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

6180 Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

6140 Status post - Hybrid approach
"Stage 2", Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Aortic arch
repair (Norwood [Stage 1] +
Superior Cavopulmonary
anastomosis(es) + PA
Debanding)

Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.

6150 Status post - Hybrid approach
"Stage 2", Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Without aortic
arch repair

Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.

1590 Status post - Transplant, Heart

Status post - Heart transplantation, any technique, allograft or xenograft.

1610 Status post - Transplant, Heart and lung Status post - Heart and lung (single or double) transplantation.

4910 Status post - Partial left ventriculectomy (LV volume reduction surgery) (Batista) Status post - Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.

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4920	Status post - Pericardial drainage procedure	Status post - Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
4930	Status post - Pericardiectomy	Status post - Surgical removal of the pericardium.
4940	Status post - Pericardial procedure, Other	Status post - Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
4950	Status post - Fontan, Atrio- pulmonary connection	Status post - Fontan-type procedure with atrio- pulmonary connection.
4960	Status post - Fontan, Atrioventricular connection	Status post - Fontan-type procedure with atrioventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
4970	Status post - Fontan, TCPC, Lateral tunnel, Fenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
4980	Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
5000	Status post - Fontan, TCPC, External conduit, Fenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
5010	Status post - Fontan, TCPC, External conduit, Nonfenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
5025	Status post - Fontan revision or conversion (Re-do Fontan)	Status post - Revision of a previous Fontan procedure to a total cavopulmonary connection.
5030	Status post - Fontan, Other	Status post - Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
6340	Status post - Fontan + Atrioventricular valvuloplasty	
5035	Status post - Ventricular septation	Status post - Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
5050	Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Status post - Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
5060	Status post - Congenitally corrected TGA repair, Atrial switch and Rastelli	Status post - Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.

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5070	Status post - Congenitally corrected TGA repair, VSD closure	Status post - Repair of congenitally corrected TGA by VSD closure only.
5080	Status post - Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Status post - Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
5090	Status post - Congenitally corrected TGA repair, Other	Status post - Any procedures for correction of CCTGA not otherwised specified in other listed procedure codes.
5110	Status post - Arterial switch operation (ASO)	Status post - Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
5120	Status post - Arterial switch operation (ASO) and VSD repair	Status post - Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
5123	Status post - Arterial switch procedure + Aortic arch repair	Status post - Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
5125	Status post - Arterial switch procedure and VSD repair + Aortic arch repair	Status post - Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
5130	Status post - Senning	Status post - Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
5140	Status post - Mustard	Status post - Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
5145	Status post - Atrial baffle procedure, Mustard or Senning revision	Status post - Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).

5150	Status r	nost -	Rastelli
5150	Diaius L	JUST -	rastem

5160 Status post - REV

Status post - Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.

Status post - The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.

- 6190 Status post Aortic root translocation over left ventricle (Including Nikaidoh procedure)
- 6210 Status post TGA, Other procedures (Kawashima, LV-PA conduit, other)
- 5180 Status post DORV, Intraventricular tunnel repair
- 5200 Status post DOLV repair

Status post - Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima

Status post - Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli

		procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
5210	Status post - Coarctation repair, End to end	Status post - Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
5220	Status post - Coarctation repair, End to end, Extended	Status post - Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
5230	Status post - Coarctation repair, Subclavian flap	Status post - Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
5240	Status post - Coarctation repair, Patch aortoplasty	Status post - Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
5250	Status post - Coarctation repair, Interposition graft	Status post - Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
5260	Status post - Coarctation repair, Other	Status post - Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
5275	Status post - Coarctation repair + VSD repair	Status post - Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
5280	Status post - Aortic arch repair	Status post - Aortic arch repair, any technique.
5285	Status post - Aortic arch repair + VSD repair	Status post - Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
5290	Status post - Coronary artery fistula ligation	Status post - Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
5291	Status post - Anomalous origin of coronary artery from pulmonary artery repair	Status post - Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
5300	Status post - Coronary artery bypass	Status post - Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery

		pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
5305	Status post - Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
5310	Status post - Coronary artery procedure, Other	Status post - Any coronary artery procedure not specifically listed.
5320	Status post - Interrupted aortic arch repair	Status post - Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD.
5330	Status post - PDA closure, Surgical	Status post - Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc).
5340	Status post - PDA closure, Device	Status post - Closure of a PDA by device using transcatheter techniques.
5360	Status post - Vascular ring repair	Status post - Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
5365	Status post - Aortopexy	Status post - Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
5370	Status post - Pulmonary artery sling repair	Status post - Pulmonary artery sling repair by any technique.
5380	Status post - Aortic aneurysm repair	Status post - Aortic aneurysm repair by any technique.
5390	Status post - Aortic dissection repair	Status post - Aortic dissection repair by any technique.
5400	Status post - Lung biopsy	Status post - Lung biopsy, any technique.
1600	Status post - Transplant, Lung(s)	Status post - Lung or lobe transplantation of any type.
5420	Status post - Lung procedure, Other	Status post - Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
5430	Status post - Pectus repair	Status post - Repair of pectus excavatum or carinatum by any technique.
5440	Status post - Tracheal procedure	Status post - Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.

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5450	Status post - Pacemaker implantation, Permanent	Status post - Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc).
5460	Status post - Pacemaker procedure	Status post - Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
6350	Status post - Explantation of pacing system	
5470	Status post - ICD (AICD) implantation	Status post - Implantation of an (automatic) implantable cardioverter defibrillator system.
5480	Status post - ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Status post - Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
5490	Status post - Arrhythmia surgery - atrial, Surgical Ablation	Status post - Surgical ablation (any type) of any atrial arrhythmia.
5500	Status post - Arrhythmia surgery - ventricular, Surgical Ablation	Status post - Surgical ablation (any type) of any ventricular arrhythmia.
6500	Status post - Cardiovascular catheterization procedure, Diagnostic	
6520	Status post - Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	
6550	Status post - Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
6540	Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	
6510	Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	
6530	Status post - Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion	
6410	Status post - Cardiovascular	

catheterization procedure, Therapeutic

- 6670 Status post Cardiovascular catheterization procedure,
 Therapeutic, Adjunctive therapy
- 6570 Status post Cardiovascular catheterization procedure,
 Therapeutic, Balloon dilation
- 6590 Status post Cardiovascular catheterization procedure,
 Therapeutic, Balloon valvotomy
- 6600 Status post Cardiovascular catheterization procedure,
 Therapeutic, Coil implantation
- 6610 Status post Cardiovascular catheterization procedure,
 Therapeutic, Device implantation
- 6640 Status post Cardiovascular catheterization procedure,
 Therapeutic, Perforation
 (establishing interchamber and/or intervessel communication)
- 6580 Status post Cardiovascular catheterization procedure,
 Therapeutic, Septostomy
- 6620 Status post Cardiovascular catheterization procedure,
 Therapeutic, Stent insertion
- 6630 Status post Cardiovascular catheterization procedure,
 Therapeutic, Stent re-dilation
- 6650 Status post Cardiovascular catheterization procedure,
 Therapeutic, Transcatheter
 Fontan completion
- 6660 Status post Cardiovascular catheterization procedure,
 Therapeutic, Transcatheter implantation of valve
- 6680 Status post Cardiovascular electrophysiological catheterization procedure
- 6690 Status post Cardiovascular electrophysiological

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	catheterization procedure, Therapeutic ablation	
5590	Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	Status post - Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5600	Status post - Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)	Status post - A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5610	Status post - Shunt, Systemic to pulmonary, Other	Status post - Placement of any other systemic-to- pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
5630	Status post - Shunt, Ligation and takedown	Status post - Takedown of any shunt.
6095	Status post - Shunt, Reoperation	
5640	Status post - PA banding (PAB)	Status post - Placement of a pulmonary artery band, any type.
5650	Status post - PA debanding	Status post - Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
5660	Status post - Damus-Kaye- Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	Status post - In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
5670	Status post - Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Status post - Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
5680	Status post - Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Status post - Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
5690	Status post - Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Status post - Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
5700	Status post - HemiFontan	Status post - A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary

arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.

6330	Status post - Superior
	cavopulmonary
	anastomosis(es) (Glenn or
	HemiFontan) +
	Atrioventricular valvuloplasty

- 6130 Status post Superior Cavopulmonary anastomosis(es) + PA reconstruction
- 5710 Status post Palliation, Other

6360 Status post - ECMO cannulation

- 6370 Status post ECMO decannulation
- 5910 Status post ECMO procedure
- 5900 Status post Intraaortic balloon pump (IABP) insertion
- 5920 Status post Right/left heart assist device procedure
- 6390 Status post VAD explantation
- 6380 Status post VAD implantation
- 6420 Status post -Echocardiography procedure, Sedated transesophageal echocardiogram
- 6430 Status post Echocardiography procedure,
 Sedated transthoracic
 echocardiogram
- 6435 Status post Noncardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia

Status post - Any other palliative procedure not specifically listed.

Status post - Any ECMO procedure (cannulation, decannulation, etc.).

Status post - Insertion of intraaortic balloon pump by any technique.

Status post - Any right, left, or biventricular assist device procedure (placement, removal etc.).

6440	Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
6450	Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
6460	Status post - Radiology procedure on cardiac patient, Diagnostic radiology	
6470	Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
6480	Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
6490	Status post - Interventional radiology procedure on cardiac patient	
5720	Status post - Aneurysm, Ventricular, Right, Repair	Status post - Repair of right ventricular aneurysm, any technique.
5730	Status post - Aneurysm, Ventricular, Left, Repair	Status post - Repair of left ventricular aneurysm, any technique.
5740	Status post - Aneurysm, Pulmonary artery, Repair	Status post - Repair of pulmonary artery aneurysm, any technique.
5760	Status post - Cardiac tumor resection	Status post - Resection of cardiac tumor, any type.
5780	Status post - Pulmonary AV fistula repair/occlusion	Status post - Repair or occlusion of a pulmonary arteriovenous fistula.
5790	Status post - Ligation, Pulmonary artery	Status post - Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
5802	Status post - Pulmonary embolectomy, Acute pulmonary embolus	Status post - Acute pulmonary embolism (clot) removal, through catheter or surgery.
5804	Status post - Pulmonary embolectomy, Chronic pulmonary embolus	Status post - Chronic pulmonary embolism (clot) removal, through catheter or surgery.
5810	Status post - Pleural drainage procedure	Status post - Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
5820	Status post - Pleural procedure, Other	Status post - Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc,

		antibiotic or other), among others.
5830	Status post - Ligation, Thoracic duct	Status post - Ligation of the thoracic duct; most commonly for persistent chylothorax.
5840	Status post - Decortication	Status post - Decortication of the lung by any technique.
5850	Status post - Esophageal procedure	Status post - Any procedure performed on the esophagus.
5860	Status post - Mediastinal procedure	Status post - Any non-cardiovascular mediastinal procedure not otherwise listed.
5870	Status post - Bronchoscopy	Status post - Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
5880	Status post - Diaphragm plication	Status post - Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
5890	Status post - Diaphragm procedure, Other	Status post - Any diaphragm procedure not specifically listed.
5930	Status post - VATS (video- assisted thoracoscopic surgery)	Status post - Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
5940	Status post - Minimally invasive procedure	Status post - Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
5950	Status post - Bypass for noncardiac lesion	Status post - Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
5960	Status post - Delayed sternal closure	Status post - Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
5970	Status post - Mediastinal exploration	Status post - Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
5980	Status post - Sternotomy wound drainage	Status post - Drainage of the sternotomy wound.
5990	Status post - Thoracotomy, Other	Status post - Any procedure performed through a thoracotomy incision not otherwise listed.
6000	Status post - Cardiotomy, Other	Status post - Any procedure involving an incision in the heart that is not otherwise listed.

6010	Status post - Cardiac procedure, Other	Status post - Any cardiac procedure, bypass or non- bypass, that is not otherwise listed.
6020	Status post - Thoracic and/or mediastinal procedure, Other	Status post - Any thoracic and/or mediastinal procedure not otherwise listed.
6030	Status post - Peripheral vascular procedure, Other	Status post - Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
6040	Status post - Miscellaneous procedure, Other	Status post - Any miscellaneous procedure not otherwise listed.
6050	Status post - Organ procurement	Status post - Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
11777	Status post - Other procedure	Status post - Any procedure on any organ system not otherwise listed.

Long Name:Other Card-Congenital Procedure 1SeqNo:5340Short Name:OCarCongProc1Core:YesSection Name:Other Cardiac ProceduresHarvest:Yes

DBTableName AdultData

Definition: Indicate the first of the three most significant congenital procedures.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Congenital Format: Text (categorical values

specified by STS)

ParentShortName: OCarCong DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code:	<u>Value:</u>	<u>Definition:</u>
10	PFO, Primary closure	Suture closure of patent foramen ovale (PFO).
20	ASD repair, Primary closure	Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
30	ASD repair, Patch	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD.
40	ASD repair, Device	Closure of any type ASD (including PFO) using a device.
2110	ASD repair, Patch + PAPVC repair	
50	ASD, Common atrium (single atrium), Septation	Septation of common (single) atrium using any type patch material.
60	ASD creation/enlargement	Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or

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	surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
ASD partial closure	Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
Atrial septal fenestration	Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
Atrial fenestration closure	Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
VSD repair, Primary closure	Suture closure of any type VSD.
VSD repair, Patch	Patch closure (using any type of patch material) of any type VSD.
VSD repair, Device	Closure of any type VSD using a device.
VSD, Multiple, Repair	Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
VSD creation/enlargement	Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
Ventricular septal fenestration	Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.
AVC (AVSD) repair, Complete (CAVSD)	Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
AVC (AVSD) repair, Intermediate (Transitional)	Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
Valvuloplasty, Common atrioventricular valve	
Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	
Valve replacement, Common atrioventricular valve	
	Atrial septal fenestration Atrial fenestration closure VSD repair, Primary closure VSD repair, Patch VSD repair, Device VSD, Multiple, Repair VSD creation/enlargement Ventricular septal fenestration AVC (AVSD) repair, Complete (CAVSD) AVC (AVSD) repair, Intermediate (Transitional) AVC (AVSD) repair, Intermediate (PAVSD) Valvuloplasty, Common atrioventricular valve Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve Valve replacement, Common

STS Adult Cardiac Database

210	AP window repair	Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
220	Pulmonary artery origin from ascending aorta (hemitruncus) repair	Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
230	Truncus arteriosus repair	Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
240	Valvuloplasty, Truncal valve	Truncal valve repair, any type.
2290	Valvuloplasty converted to valve replacement in the same operation, Truncal valve	
250	Valve replacement, Truncal valve	Replacement of the truncal valve with a prosthetic valve.
2220	Truncus + Interrupted aortic arch repair (IAA) repair	
260	PAPVC repair	PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
270	PAPVC, Scimitar, Repair	In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
2120	PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)	
280	TAPVC repair	Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an

associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.

- 2200 TAPVC repair + Shunt systemic-to-pulmonary
- 290 Cor triatriatum repair

Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.

300 Pulmonary venous stenosis repair

Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.

310 Atrial baffle procedure (non-Mustard, non-Senning)

The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.

330 Anomalous systemic venous connection repair

With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).

340 Systemic venous stenosis repair

Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.

350 TOF repair, No ventriculotomy

Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.

360 TOF repair, Ventriculotomy, Nontransanular patch

Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally

through the pulmonary annulus, this must be considered

		"transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
370	TOF repair, Ventriculotomy, Transanular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
380	TOF repair, RV-PA conduit	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
390	TOF - AVC (AVSD) repair	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
400	TOF - Absent pulmonary valve repair	Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
420	Pulmonary atresia - VSD (including TOF, PA) repair	For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.
430	Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair	In the presence of MAPCAs, this code implies implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA conduit.
440	Unifocalization MAPCA(s)	Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization

450	Occlusion MAPCA(s)	Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
460	Valvuloplasty, Tricuspid	Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle transplocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
2280	Valvuloplasty converted to valve replacement in the same operation, Tricuspid	
465	Ebstein's repair	To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
470	Valve replacement, Tricuspid (TVR)	Replacement of the tricuspid valve with a prosthetic valve.
480	Valve closure, Tricuspid (exclusion, univentricular approach)	In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
490	Valve excision, Tricuspid (without replacement)	Excision of the tricuspid valve without placement of a valve prosthesis.
500	Valve surgery, Other, Tricuspid	Other tricuspid valve surgery not specified in procedure codes.
510	RVOT procedure	Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
520	1 1/2 ventricular repair	Partial biventricular repair; includes intracardiac repair

procedure may be done on or off bypass.

		with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
530	PA, reconstruction (plasty), Main (trunk)	Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
540	PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
550	PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
570	DCRV repair	Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
590	Valvuloplasty, Pulmonic	Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
2270	Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
600	Valve replacement, Pulmonic (PVR)	Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
630	Valve excision, Pulmonary (without replacement)	Excision of the pulmonary valve without placement of a valve prosthesis.
640	Valve closure, Semilunar	Closure of a semilunar valve (pulmonic or aortic) by any technique.
650	Valve surgery, Other,	Other pulmonic valve surgery not specified in

	Pulmonic	procedure codes.
610	Conduit placement, RV to PA	Placement of a conduit, any type, from RV to PA.
620	Conduit placement, LV to PA	Placement of a conduit, any type, from LV to PA.
1774	Conduit placement, Ventricle to aorta	Placement of a conduit from the right or left ventricle to the aorta.
1772	Conduit placement, Other	Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
580	Conduit reoperation	Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc).
660	Valvuloplasty, Aortic	Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
2240	Valvuloplasty converted to valve replacement in the same operation, Aortic	
2310	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	
2320	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross- Konno procedure	
670	Valve replacement, Aortic (AVR)	Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
680	Valve replacement, Aortic (AVR), Mechanical	Replacement of the aortic valve with a mechanical prosthetic valve.
690	Valve replacement, Aortic (AVR), Bioprosthetic	Replacement of the aortic valve with a bioprosthetic prosthetic valve.
700	Valve replacement, Aortic (AVR), Homograft	Replacement of the aortic valve with a homograft prosthetic valve.
715	Aortic root replacement, Bioprosthetic	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit,

		often composite.
720	Aortic root replacement, Mechanical	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechnical prosthesis in a composite conduit.
730	Aortic root replacement, Homograft	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
735	Aortic root replacement, Valve sparing	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
740	Ross procedure	Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
750	Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
760	Ross-Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
770	Other annular enlargement procedure	Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manougian and Nicks aortic annular enlargement procedures.
780	Aortic stenosis, Subvalvar, Repair	Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation), Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
2100	Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	
790	Aortic stenosis, Supravalvar,	Repair of supravalvar aortic stenosis involving all

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	Repair	techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
800	Valve surgery, Other, Aortic	Other aortic valve surgery not specified in other procedure codes.
810	Sinus of Valsalva, Aneurysm repair	Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
820	LV to aorta tunnel repair	LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
830	Valvuloplasty, Mitral	Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissuorotomy, leaflet repair, or papillary muscle repair.
2260	Valvuloplasty converted to valve replacement in the same operation, Mitral	
840	Mitral stenosis, Supravalvar mitral ring repair	Supravalvar mitral ring repair.
850	Valve replacement, Mitral (MVR)	Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
860	Valve surgery, Other, Mitral	Other mitral valve surgery not specified in procedure codes.
870	Norwood procedure	The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neoaortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated

systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection.

When coding the procedure "Norwood procedure", the primary procedure of the operation should be "Norwood procedure". The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:

- 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)
- 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)
- 3. Shunt, Systemic to pulmonary, Other
- 4. Conduit placement, RV to PA
- 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)
- 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)
- 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
- 8. HemiFontan

880 HLHS biventricular repair

Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.

2160 Hybrid Approach "Stage 1", Application of RPA & LPA bands A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

2170 Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures

2180 Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

2140 Hybrid approach "Stage 2",
 Aortopulmonary
 amalgamation + Superior
 Cavopulmonary
 anastomosis(es) + PA
 Debanding + Aortic arch
 repair (Norwood [Stage 1] +
 Superior Cavopulmonary
 anastomosis(es) + PA
 Debanding)

A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

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2150 Hybrid approach "Stage 2",
Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Without aortic
arch repair

A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure" . A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.

890 Transplant, Heart

Heart transplantation, any technique, allograft or xenograft.

900 Transplant, Heart and lung

Heart and lung (single or double) transplantation.

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910	Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.
920	Pericardial drainage procedure	Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
930	Pericardiectomy	Surgical removal of the pericardium.
940	Pericardial procedure, Other	Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
950	Fontan, Atrio-pulmonary connection	Fontan-type procedure with atrio-pulmonary connection.
960	Fontan, Atrio-ventricular connection	Fontan-type procedure with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
970	Fontan, TCPC, Lateral tunnel, Fenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
980	Fontan, TCPC, Lateral tunnel, Nonfenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
1000	Fontan, TCPC, External conduit, Fenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
1010	Fontan, TCPC, External conduit, Nonfenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
1025	Fontan revision or conversion (Re-do Fontan)	Revision of a previous Fontan procedure to a total cavopulmonary connection.
1030	Fontan, Other	Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
2340	Fontan + Atrioventricular valvuloplasty	
1035	Ventricular septation	Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
1050	Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
1060	Congenitally corrected TGA repair, Atrial switch and Rastelli	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
1070	Congenitally corrected TGA	Repair of congenitally corrected TGA by VSD closure

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	repair, VSD closure	only.
1080	Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
1090	Congenitally corrected TGA repair, Other	Any procedures for correction of CCTGA not otherwised specified in other listed procedure codes.
1110	Arterial switch operation (ASO)	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
1120	Arterial switch operation (ASO) and VSD repair	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
1123	Arterial switch procedure + Aortic arch repair	Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
1125	Arterial switch procedure and VSD repair + Aortic arch repair	Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
1130	Senning	Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
1140	Mustard	Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
1145	Atrial baffle procedure, Mustard or Senning revision	Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).
1150	Rastelli	Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.
1160	REV	The Lecompte (REV) intraventricular repair is designed

for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.

- 2190 Aortic root translocation over left ventricle (Including Nikaidoh procedure)
- 2210 TGA, Other procedures (Kawashima, LV-PA conduit, other)
- 1180 DORV, Intraventricular tunnel repair
- 1200 DOLV repair

Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima

Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes

1210 Coarctation repair, End to end

Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.

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1220	Coarctation repair, End to end, Extended	Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
1230	Coarctation repair, Subclavian flap	Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
1240	Coarctation repair, Patch aortoplasty	Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
1250	Coarctation repair, Interposition graft	Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
1260	Coarctation repair, Other	Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
1275	Coarctation repair + VSD repair	Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
1280	Aortic arch repair	Aortic arch repair, any technique.
1285	Aortic arch repair + VSD repair	Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
1290	Coronary artery fistula ligation	Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
1291	Anomalous origin of coronary artery from pulmonary artery repair	Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
1300	Coronary artery bypass	Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
1305	Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
1310	Coronary artery procedure, Other	Any coronary artery procedure not specifically listed.

1320 Interrupted aortic arch repair Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD.				
division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc). 1340 PDA closure, Device Closure of a PDA by device using transcatheter techniques. 1360 Vascular ring repair Repair of vascular ring (any type, except pulmonary artery sling) by any technique. 1365 Aortopexy Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea). 1370 Pulmonary artery sling repair Pulmonary artery sling repair by any technique. 1380 Aortic aneurysm repair Aortic dissection repair Aortic dissection repair by any technique. 1400 Lung biopsy Lung biopsy, any technique. 1410 Transplant, lung(s) Lung or lobe transplantation of any type. 1420 Lung procedure, Other Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe,) bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection. 1430 Pectus repair Repair of pectus excavatum or carinatum by any technique. 1440 Tracheal procedure Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, bromograft insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. 1450 Pacemaker implantation, Permanent Pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc). 1460 Pacemaker procedure Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well. 1470 ICD (AICD) implantation	13	320	Interrupted aortic arch repair	technique (direct anastomosis, prosthetic graft, etc).
techniques. Repair of vascular ring (any type, except pulmonary artery sling) by any technique. Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea). Pulmonary artery sling repair Pulmonary artery sling repair by any technique. Aortic aneurysm repair Aortic dissection repair Aortic dissection repair Pulmonary artery sling repair by any technique. Lung biopsy Aortic dissection repair Aortic dissection repair by any technique. Lung biopsy, any technique. Lung or lobe transplantation of any type. Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection. Repair of pectus excavatum or carinatum by any technique. Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. Pacemaker implantation, Permanent Permanent Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc). Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well. Implantation of an (automatic) implantable cardioverter	13	330	PDA closure, Surgical	division, clip) using any approach (i.e., thoracotomy,
artery sling) by any technique. Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea). Pulmonary artery sling repair Aortic aneurysm repair Pulmonary artery sling repair by any technique. Aortic dissection repair Aortic dissection repair by any technique. Lung biopsy Lung biopsy, any technique. Lung procedure, Other Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection. Repair of pectus excavatum or carinatum by any technique. Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc). Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.	13	340	PDA closure, Device	
(usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea). 1370 Pulmonary artery sling repair 1380 Aortic aneurysm repair 1390 Aortic dissection repair 1400 Lung biopsy 1410 Transplant, lung(s) 1420 Lung procedure, Other 1420 Lung procedure, Other 1430 Pectus repair 1440 Tracheal procedure 1440 Tracheal procedure 1450 Pectus repair 1450 Pacemaker implantation, Permanent 1450 Pacemaker procedure 1460 Pacemaker procedure 1460 Pacemaker procedure 1470 ICD (AICD) implantation 1470 ICD (AICD) implantation 1470 Implantation of an (uttomatic) implantatole cardioverter 1470 ICD (AICD) implantation Implantation of an (automatic) implantable cardioverter	13	360	Vascular ring repair	
1380 Aortic aneurysm repair 1390 Aortic dissection repair 1400 Lung biopsy 1410 Transplant, lung(s) 1420 Lung procedure, Other 1420 Lung procedure, Other 1430 Pectus repair 1440 Tracheal procedure 1450 Pacemaker implantation, 1450 Pacemaker procedure 1450 Pacemaker procedure 1450 Pacemaker procedure 1460 Pacemaker procedure 1460 Pacemaker procedure 1470 ICD (AICD) implantation 1570 Aortic dissection repair by any technique. 1470 Lung biopsy, any technique. 1470 Lung biopsy any technique. 1470 Lung biopsy, any technique. 1470 Lung biopsy any technique. 1470 Lung bio	13	365	Aortopexy	(usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g.,
1390 Aortic dissection repair 1400 Lung biopsy 1410 Transplant, lung(s) 1420 Lung procedure, Other 1420 Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection. 1430 Pectus repair 1440 Tracheal procedure 1440 Tracheal procedure Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. 1450 Pacemaker implantation, Permanent Permanent 1450 Pacemaker procedure Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. 1450 Pacemaker implantation, Permanent Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardial, with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc). Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well. Explantation of pacing system Implantation of an (automatic) implantable cardioverter	13	370	Pulmonary artery sling repair	Pulmonary artery sling repair by any technique.
Lung biopsy Lung biopsy, any technique. Lung or lobe transplantation of any type. Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection. Pectus repair Repair of pectus excavatum or carinatum by any technique. Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardial), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc). Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well. Explantation of pacing system Implantation of an (automatic) implantable cardioverter	13	380	Aortic aneurysm repair	Aortic aneurysm repair by any technique.
1410 Transplant, lung(s) Lung procedure, Other Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection. Pectus repair Repair of pectus excavatum or carinatum by any technique. Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. Pacemaker implantation, Permanent Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc). Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well. Explantation of pacing system ICD (AICD) implantation Implantation of an (automatic) implantable cardioverter	13	390	Aortic dissection repair	Aortic dissection repair by any technique.
1420 Lung procedure, Other Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection. 1430 Pectus repair Repair of pectus excavatum or carinatum by any technique. Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. 1450 Pacemaker implantation, Permanent Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc). 1460 Pacemaker procedure Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well. 1470 ICD (AICD) implantation Implantation of an (automatic) implantable cardioverter	14	400	Lung biopsy	Lung biopsy, any technique.
procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection. 1430 Pectus repair Repair of pectus excavatum or carinatum by any technique. 1440 Tracheal procedure Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. 1450 Pacemaker implantation, Permanent (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc). 1460 Pacemaker procedure Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well. 2350 Explantation of pacing system 1470 ICD (AICD) implantation Implantation of an (automatic) implantable cardioverter	14	410	Transplant, lung(s)	Lung or lobe transplantation of any type.
technique. Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. 1450 Pacemaker implantation, Permanent (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc). 1460 Pacemaker procedure Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well. 2350 Explantation of pacing system 1470 ICD (AICD) implantation Implantation of an (automatic) implantable cardioverter	14	420	Lung procedure, Other	procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung
relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately. 1450 Pacemaker implantation, Permanent Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc). 1460 Pacemaker procedure Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well. 2350 Explantation of pacing system 1470 ICD (AICD) implantation Implantation of an (automatic) implantable cardioverter	14	430	Pectus repair	
Permanent (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc). 1460 Pacemaker procedure Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well. 2350 Explantation of pacing system 1470 ICD (AICD) implantation Implantation of an (automatic) implantable cardioverter	14	440	Tracheal procedure	relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded
including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well. 2350 Explantation of pacing system 1470 ICD (AICD) implantation Implantation of an (automatic) implantable cardioverter	14	450		(e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy,
1470 ICD (AICD) implantation Implantation of an (automatic) implantable cardioverter	14	460	Pacemaker procedure	including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers
	23	350	Explantation of pacing system	
	14	470	ICD (AICD) implantation	

liac Data	abase	Version: 2.73
1480	ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
1490	Arrhythmia surgery - atrial, Surgical Ablation	Surgical ablation (any type) of any atrial arrhythmia.
1500	Arrhythmia surgery - ventricular, Surgical Ablation	Surgical ablation (any type) of any ventricular arrhythmia.
2500	Cardiovascular catheterization procedure, Diagnostic	
2520	Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	
2550	Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
2540	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	
2510	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	
2530	Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion	
2410	Cardiovascular catheterization procedure, Therapeutic	
2670	Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy	
1540	Cardiovascular catheterization procedure, Therapeutic, Balloon dilation	
2590	Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy	
1580	Cardiovascular	

catheterization procedure, Therapeutic, Coil implantation

1560 Cardiovascular

catheterization procedure, Therapeutic, Device implantation 2640 Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication) Cardiovascular 2580 catheterization procedure, Therapeutic, Septostomy 1550 Cardiovascular catheterization procedure, Therapeutic, Stent insertion 2630 Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation 2650 Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion 2660 Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve 2680 Cardiovascular electrophysiological catheterization procedure 2690 Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation 1590 Shunt, Systemic to Placement of a tube graft from a branch of the aortic pulmonary, Modified Blalockarch to the pulmonary artery with or without bypass, Taussig Shunt (MBTS) from any approach (thoracotomy, sternotomy). 1600 Shunt, Systemic to A direct anastomosis or placement of a tube graft from pulmonary, Central (from the aorta to the pulmonary artery with or without aorta or to main pulmonary bypass, from any approach (thoracotomy, sternotomy). artery) 1610 Shunt, Systemic to Placement of any other systemic-to-pulmonary artery pulmonary, Other shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt. 1630 Shunt, Ligation and takedown Takedown of any shunt. 2095 Shunt, Reoperation 1640 PA banding (PAB) Placement of a pulmonary artery band, any type.

ulac Data	abase	Version, 2.73
1650	PA debanding	Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
1660	Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
1670	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
1680	Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
1690	Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
1700	HemiFontan	A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
2330	Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
2130	Superior Cavopulmonary anastomosis(es) + PA reconstruction	
1710	Palliation, Other	Any other palliative procedure not specifically listed.
2360	ECMO cannulation	
2370	ECMO decannulation	
1910	ECMO procedure	Any ECMO procedure (cannulation, decannulation, etc.).
1900	Intraaortic balloon pump	Insertion of intraaortic balloon pump by any technique.

	(IADD) insertion	
1020	(IABP) insertion	
1920	Right/left heart assist device procedure	Any right, left, or biventricular assist device procedure (placement, removal etc.).
2390	VAD explantation	
2380	VAD implantation	
2420	Echocardiography procedure, Sedated transesophageal echocardiogram	
2430	Echocardiography procedure, Sedated transthoracic echocardiogram	
2435	Non-cardiovascular, Non- thoracic procedure on cardiac patient with cardiac anesthesia	
2440	Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
2450	Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
2460	Radiology procedure on cardiac patient, Diagnostic radiology	
2470	Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
2480	Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
2490	Interventional radiology procedure on cardiac patient	
1720	Aneurysm, Ventricular, Right, Repair	Repair of right ventricular aneurysm, any technique.
1730	Aneurysm, Ventricular, Left, Repair	Repair of left ventricular aneurysm, any technique.
1740	Aneurysm, Pulmonary artery, Repair	Repair of pulmonary artery aneurysm, any technique.
1760	Cardiac tumor resection	Resection of cardiac tumor, any type.
1780	Pulmonary AV fistula repair/occlusion	Repair or occlusion of a pulmonary arteriovenous fistula.
1790	Ligation, Pulmonary artery	Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.

Cardiac Da	atabase	Version: 2.73
1802	Pulmonary embolectomy, Acute pulmonary embolus	Acute pulmonary embolism (clot) removal, through catheter or surgery.
1804	Pulmonary embolectomy, Chronic pulmonary embolus	Chronic pulmonary embolism (clot) removal, through catheter or surgery.
1810	Pleural drainage procedure	Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
1820	Pleural procedure, Other	Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
1830	Ligation, Thoracic duct	Ligation of the thoracic duct; most commonly for persistent chylothorax.
1840	Decortication 1	Decortication of the lung by any technique.
1850	Esophageal procedure	Any procedure performed on the esophagus.
1860	Mediastinal procedure	Any non-cardiovascular mediastinal procedure not otherwise listed.
1870) Bronchoscopy	Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
1880	Diaphragm plication	Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
1890	Diaphragm procedure, Other	Any diaphragm procedure not specifically listed.
1930	VATS (video-assisted thoracoscopic surgery)	Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
1940	Minimally invasive procedure	Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
1950	Bypass for noncardiac lesion	Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
1960	Delayed sternal closure	Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
1970	Mediastinal exploration	Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
1980	Sternotomy wound drainage	Drainage of the sternotomy wound.

1990	Thoracotomy, Other	Any procedure performed through a thoracotomy incision not otherwise listed.
2000	Cardiotomy, Other	Any procedure involving an incision in the heart that is not otherwise listed.
2010	Cardiac procedure, Other	Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
2020	Thoracic and/or mediastinal procedure, Other	Any thoracic and/or mediastinal procedure not otherwise listed.
2030	Peripheral vascular procedure, Other	Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
2040	Miscellaneous procedure, Other	Any miscellaneous procedure not otherwise listed.
2050	Organ procurement	Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
7777	Other procedure	Any procedure on any organ system not otherwise listed.

Long Name:Other Card-Congenital Procedure 2SeqNo:5350Short Name:OCarCongProc2Core:YesSection Name:Other Cardiac ProceduresHarvest:Yes

DBTableName AdultData

Definition: Indicate the second of the three most significant congenital procedures.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Congenital Format: Text (categorical values

specified by STS)

ParentShortName: OCarCong DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

10 PFO, Primary closure Suture closure of patent foramen ovale (PFO).

20 ASD repair, Primary closure Suture closure of secundum (most frequently), coronary

sinus, sinus venosus or common atrium ASD.

30 ASD repair, Patch Patch closure (using any type of patch material) of

secundum, coronary sinus, or sinus venosus ASD.

40 ASD repair, Device Closure of any type ASD (including PFO) using a

device.

2110 ASD repair, Patch + PAPVC

repair

50 ASD, Common atrium (single Septation of common (single) atrium using any type

	atrium), Septation	patch material.
60	ASD creation/enlargement	Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
70	ASD partial closure	Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
80	Atrial septal fenestration	Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
85	Atrial fenestration closure	Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
100	VSD repair, Primary closure	Suture closure of any type VSD.
110	VSD repair, Patch	Patch closure (using any type of patch material) of any type VSD.
120	VSD repair, Device	Closure of any type VSD using a device.
130	VSD, Multiple, Repair	Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
140	VSD creation/enlargement	Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
150	Ventricular septal fenestration	Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.
170	AVC (AVSD) repair, Complete (CAVSD)	Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
180	AVC (AVSD) repair, Intermediate (Transitional)	Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
190	AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
2300	Valvuloplasty, Common atrioventricular valve	
2250	Valvuloplasty converted to valve replacement in the same	

nao Ban	abacc	Voloiciii 2.170
	operation, Common atrioventricular valve	
2230	Valve replacement, Common atrioventricular valve	
210	AP window repair	Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
220	Pulmonary artery origin from ascending aorta (hemitruncus) repair	Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
230	Truncus arteriosus repair	Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
240	Valvuloplasty, Truncal valve	Truncal valve repair, any type.
2290	Valvuloplasty converted to valve replacement in the same operation, Truncal valve	
250	Valve replacement, Truncal valve	Replacement of the truncal valve with a prosthetic valve.
2220	Truncus + Interrupted aortic arch repair (IAA) repair	
260	PAPVC repair	PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
270	PAPVC, Scimitar, Repair	In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
2120	PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right	

atrial appendage	atrial	ap	pend	lage)
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280	TAPVC repair

Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.

- 2200 TAPVC repair + Shunt systemic-to-pulmonary
- 290 Cor triatriatum repair

Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.

300 Pulmonary venous stenosis repair

Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.

310 Atrial baffle procedure (non-Mustard, non-Senning) The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.

330 Anomalous systemic venous connection repair

With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).

340 Systemic venous stenosis repair

Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.

350 TOF repair, No ventriculotomy

Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.

360 TOF repair, Ventriculotomy,

Tetralogy of Fallot repair (assumes VSD closure and

Nontransanular patch

relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.

370 TOF repair, Ventriculotomy, Transanular patch

Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.

380 TOF repair, RV-PA conduit

Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.

390 TOF - AVC (AVSD) repair

Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.

400 TOF - Absent pulmonary valve repair

Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.

420 Pulmonary atresia - VSD (including TOF, PA) repair

For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.

430 Pulmonary atresia - VSD -MAPCA (pseudotruncus) repair In the presence of MAPCAs, this code implies implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA

		conduit.
440	Unifocalization MAPCA(s)	Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.
450	Occlusion MAPCA(s)	Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
460	Valvuloplasty, Tricuspid	Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle transplocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
2280	Valvuloplasty converted to valve replacement in the same operation, Tricuspid	
465	Ebstein's repair	To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
470	Valve replacement, Tricuspid (TVR)	Replacement of the tricuspid valve with a prosthetic valve.
480	Valve closure, Tricuspid (exclusion, univentricular approach)	In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
490	Valve excision, Tricuspid (without replacement)	Excision of the tricuspid valve without placement of a valve prosthesis.
500	Valve surgery, Other, Tricuspid	Other tricuspid valve surgery not specified in procedure codes.
510	RVOT procedure	Included in this procedural code would be all RVOT

procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be

		localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
520	1 1/2 ventricular repair	Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
530	PA, reconstruction (plasty), Main (trunk)	Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
540	PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
550	PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
570	DCRV repair	Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
590	Valvuloplasty, Pulmonic	Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
2270	Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
600	Valve replacement, Pulmonic (PVR)	Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
630	Valve excision, Pulmonary	Excision of the pulmonary valve without placement of a

	(without replacement)	valve prosthesis.
640	Valve closure, Semilunar	Closure of a semilunar valve (pulmonic or aortic) by any technique.
650	Valve surgery, Other, Pulmonic	Other pulmonic valve surgery not specified in procedure codes.
610	Conduit placement, RV to PA	Placement of a conduit, any type, from RV to PA.
620	Conduit placement, LV to PA	Placement of a conduit, any type, from LV to PA.
1774	Conduit placement, Ventricle to aorta	Placement of a conduit from the right or left ventricle to the aorta.
1772	Conduit placement, Other	Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
580	Conduit reoperation	Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc).
660	Valvuloplasty, Aortic	Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
2240	Valvuloplasty converted to valve replacement in the same operation, Aortic	
2310	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	
2320	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross- Konno procedure	
670	Valve replacement, Aortic (AVR)	Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
680	Valve replacement, Aortic (AVR), Mechanical	Replacement of the aortic valve with a mechanical prosthetic valve.
690	Valve replacement, Aortic (AVR), Bioprosthetic	Replacement of the aortic valve with a bioprosthetic prosthetic valve.

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700	Valve replacement, Aortic (AVR), Homograft	Replacement of the aortic valve with a homograft prosthetic valve.
715	Aortic root replacement, Bioprosthetic	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
720	Aortic root replacement, Mechanical	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechnical prosthesis in a composite conduit.
730	Aortic root replacement, Homograft	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
735	Aortic root replacement, Valve sparing	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
740	Ross procedure	Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
750	Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
760	Ross-Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
770	Other annular enlargement procedure	Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manougian and Nicks aortic annular enlargement procedures.
780	Aortic stenosis, Subvalvar, Repair	Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation), Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty

techniques.

2100	Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	
790	Aortic stenosis, Supravalvar, Repair	Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
800	Valve surgery, Other, Aortic	Other aortic valve surgery not specified in other procedure codes.
810	Sinus of Valsalva, Aneurysm repair	Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
820	LV to aorta tunnel repair	LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
830	Valvuloplasty, Mitral	Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissuorotomy, leaflet repair, or papillary muscle repair.
2260	Valvuloplasty converted to valve replacement in the same operation, Mitral	
840	Mitral stenosis, Supravalvar mitral ring repair	Supravalvar mitral ring repair.
850	Valve replacement, Mitral (MVR)	Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
860	Valve surgery, Other, Mitral	Other mitral valve surgery not specified in procedure codes.
870	Norwood procedure	The Norwood operation is synonymous with the term

'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neoaortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection.

When coding the procedure "Norwood procedure", the primary procedure of the operation should be "Norwood procedure". The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:

- 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)
- 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)
- 3. Shunt, Systemic to pulmonary, Other
- 4. Conduit placement, RV to PA
- 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)
- 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)
- 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
- 8. HemiFontan

880 HLHS biventricular repair

Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.

2160 Hybrid Approach "Stage 1", Application of RPA & LPA bands A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

2170 Hybrid Approach "Stage 1", Stent placement in arterial A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional

duct (PDA)

2180 Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands

2140 Hybrid approach "Stage 2",
 Aortopulmonary
 amalgamation + Superior
 Cavopulmonary
 anastomosis(es) + PA
 Debanding + Aortic arch
 repair (Norwood [Stage 1] +
 Superior Cavopulmonary
 anastomosis(es) + PA
 Debanding)

2150 Hybrid approach "Stage 2",
 Aortopulmonary
 amalgamation + Superior
 Cavopulmonary
 anastomosis(es) + PA
 Debanding + Without aortic
 arch repair

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890	Transplant, Heart	Heart transplantation, any technique, allograft or xenograft.
900	Transplant, Heart and lung	Heart and lung (single or double) transplantation.
910	Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.
920	Pericardial drainage procedure	Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
930	Pericardiectomy	Surgical removal of the pericardium.
940	Pericardial procedure, Other	Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
950	Fontan, Atrio-pulmonary connection	Fontan-type procedure with atrio-pulmonary connection.
960	Fontan, Atrio-ventricular connection	Fontan-type procedure with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
970	Fontan, TCPC, Lateral tunnel, Fenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
980	Fontan, TCPC, Lateral tunnel, Nonfenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
1000	Fontan, TCPC, External conduit, Fenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
1010	Fontan, TCPC, External conduit, Nonfenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
1025	Fontan revision or conversion (Re-do Fontan)	Revision of a previous Fontan procedure to a total cavopulmonary connection.
1030	Fontan, Other	Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
2340	Fontan + Atrioventricular valvuloplasty	
1035	Ventricular septation	Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
1050	Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
1060	Congenitally corrected TGA	Repair of congenitally corrected TGA by concomitant

	repair, Atrial switch and Rastelli	atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
1070	Congenitally corrected TGA repair, VSD closure	Repair of congenitally corrected TGA by VSD closure only.
1080	Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
1090	Congenitally corrected TGA repair, Other	Any procedures for correction of CCTGA not otherwised specified in other listed procedure codes.
1110	Arterial switch operation (ASO)	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
1120	Arterial switch operation (ASO) and VSD repair	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
1123	Arterial switch procedure + Aortic arch repair	Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
1125	Arterial switch procedure and VSD repair + Aortic arch repair	Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
1130	Senning	Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
1140	Mustard	Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
1145	Atrial baffle procedure, Mustard or Senning revision	Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).
1150	Rastelli	Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an

1160 REV

LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.

The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.

- 2190 Aortic root translocation over left ventricle (Including Nikaidoh procedure)
- 2210 TGA, Other procedures (Kawashima, LV-PA conduit, other)
- 1180 DORV, Intraventricular tunnel repair
- 1200 DOLV repair

Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima

Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.

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1210	Coarctation repair, End to end	Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
1220	Coarctation repair, End to end, Extended	Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
1230	Coarctation repair, Subclavian flap	Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
1240	Coarctation repair, Patch aortoplasty	Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
1250	Coarctation repair, Interposition graft	Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
1260	Coarctation repair, Other	Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
1275	Coarctation repair + VSD repair	Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
1280	Aortic arch repair	Aortic arch repair, any technique.
1285	Aortic arch repair + VSD repair	Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
1290	Coronary artery fistula ligation	Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
1291	Anomalous origin of coronary artery from pulmonary artery repair	Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
1300	Coronary artery bypass	Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
1305	Anomalous aortic origin of coronary artery from aorta	

	(AAOCA) repair	
1310	Coronary artery procedure, Other	Any coronary artery procedure not specifically listed.
1320	Interrupted aortic arch repair	Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD.
1330	PDA closure, Surgical	Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc).
1340	PDA closure, Device	Closure of a PDA by device using transcatheter techniques.
1360	Vascular ring repair	Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
1365	Aortopexy	Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
1370	Pulmonary artery sling repair	Pulmonary artery sling repair by any technique.
1380	Aortic aneurysm repair	Aortic aneurysm repair by any technique.
1390	Aortic dissection repair	Aortic dissection repair by any technique.
1400	Lung biopsy	Lung biopsy, any technique.
1410	Transplant, lung(s)	Lung or lobe transplantation of any type.
1420	Lung procedure, Other	Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
1430	Pectus repair	Repair of pectus excavatum or carinatum by any technique.
1440	Tracheal procedure	Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
1450	Pacemaker implantation, Permanent	Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc).
1460	Pacemaker procedure	Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
2350	Explantation of pacing system	

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1470	ICD (AICD) implantation	Implantation of an (automatic) implantable cardioverter defibrillator system.
1480	ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
1490	Arrhythmia surgery - atrial, Surgical Ablation	Surgical ablation (any type) of any atrial arrhythmia.
1500	Arrhythmia surgery - ventricular, Surgical Ablation	Surgical ablation (any type) of any ventricular arrhythmia.
2500	Cardiovascular catheterization procedure, Diagnostic	
2520	Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	
2550	Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
2540	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	
2510	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	
2530	Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion	
2410	Cardiovascular catheterization procedure, Therapeutic	
2670	Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy	
1540	Cardiovascular catheterization procedure, Therapeutic, Balloon dilation	
2590	Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy	

1580 Cardiovascular

catheterization procedure, Therapeutic, Coil implantation

- 1560 Cardiovascular catheterization procedure, Therapeutic, Device implantation
- 2640 Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)
- 2580 Cardiovascular catheterization procedure, Therapeutic, Septostomy
- 1550 Cardiovascular catheterization procedure,
 Therapeutic, Stent insertion
- Cardiovascular catheterization procedure,
 Therapeutic, Stent re-dilation
- 2650 Cardiovascular catheterization procedure,
 Therapeutic, Transcatheter
 Fontan completion
- 2660 Cardiovascular catheterization procedure,
 Therapeutic, Transcatheter implantation of valve
- 2680 Cardiovascular electrophysiological catheterization procedure
- 2690 Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation
- 1590 Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)
- 1600 Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)
- 1610 Shunt, Systemic to pulmonary, Other

Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).

A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).

Placement of any other systemic-to-pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.

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1630	Shunt, Ligation and takedown	Takedown of any shunt.
2095	Shunt, Reoperation	
1640	PA banding (PAB)	Placement of a pulmonary artery band, any type.
1650	PA debanding	Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
1660	Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
1670	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
1680	Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
1690	Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
1700	HemiFontan	A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
2330	Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
2130	Superior Cavopulmonary anastomosis(es) + PA reconstruction	
1710	Palliation, Other	Any other palliative procedure not specifically listed.
2360	ECMO cannulation	

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2370	ECMO decannulation	
1910	ECMO procedure	Any ECMO procedure (cannulation, decannulation, etc.).
1900	Intraaortic balloon pump (IABP) insertion	Insertion of intraaortic balloon pump by any technique.
1920	Right/left heart assist device procedure	Any right, left, or biventricular assist device procedure (placement, removal etc.).
2390	VAD explantation	
2380	VAD implantation	
2420	Echocardiography procedure, Sedated transesophageal echocardiogram	
2430	Echocardiography procedure, Sedated transthoracic echocardiogram	
2435	Non-cardiovascular, Non- thoracic procedure on cardiac patient with cardiac anesthesia	
2440	Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
2450	Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
2460	Radiology procedure on cardiac patient, Diagnostic radiology	
2470	Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
2480	Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
2490	Interventional radiology procedure on cardiac patient	
1720	Aneurysm, Ventricular, Right, Repair	Repair of right ventricular aneurysm, any technique.
1730	Aneurysm, Ventricular, Left, Repair	Repair of left ventricular aneurysm, any technique.
1740	Aneurysm, Pulmonary artery, Repair	Repair of pulmonary artery aneurysm, any technique.
1760	Cardiac tumor resection	Resection of cardiac tumor, any type.

1780	Pulmonary AV fistula repair/occlusion	Repair or occlusion of a pulmonary arteriovenous fistula.
1790	Ligation, Pulmonary artery	Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
1802	Pulmonary embolectomy, Acute pulmonary embolus	Acute pulmonary embolism (clot) removal, through catheter or surgery.
1804	Pulmonary embolectomy, Chronic pulmonary embolus	Chronic pulmonary embolism (clot) removal, through catheter or surgery.
1810	Pleural drainage procedure	Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
1820	Pleural procedure, Other	Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
1830	Ligation, Thoracic duct	Ligation of the thoracic duct; most commonly for persistent chylothorax.
1840	Decortication	Decortication of the lung by any technique.
1850	Esophageal procedure	Any procedure performed on the esophagus.
1860	Mediastinal procedure	Any non-cardiovascular mediastinal procedure not otherwise listed.
1870	Bronchoscopy	Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
1880	Diaphragm plication	Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
1890	Diaphragm procedure, Other	Any diaphragm procedure not specifically listed.
1930	VATS (video-assisted thoracoscopic surgery)	Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
1940	Minimally invasive procedure	Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
1950	Bypass for noncardiac lesion	Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
1960	Delayed sternal closure	Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.

1970	Mediastinal exploration	Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
1980	Sternotomy wound drainage	Drainage of the sternotomy wound.
1990	Thoracotomy, Other	Any procedure performed through a thoracotomy incision not otherwise listed.
2000	Cardiotomy, Other	Any procedure involving an incision in the heart that is not otherwise listed.
2010	Cardiac procedure, Other	Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
2020	Thoracic and/or mediastinal procedure, Other	Any thoracic and/or mediastinal procedure not otherwise listed.
2030	Peripheral vascular procedure, Other	Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
2040	Miscellaneous procedure, Other	Any miscellaneous procedure not otherwise listed.
2050	Organ procurement	Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
7777	Other procedure	Any procedure on any organ system not otherwise listed.

Long Name:Other Card-Congenital Procedure 3SeqNo:5360Short Name:OCarCongProc3Core:YesSection Name:Other Cardiac ProceduresHarvest:Yes

DBTableName AdultData

Definition: Indicate the third of the three most significant congenital procedures.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Congenital Format: Text (categorical values

specified by STS)

ParentShortName: OCarCong DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

Code: Value: Definition:

10 PFO, Primary closure Suture closure of patent foramen ovale (PFO).

20 ASD repair, Primary closure Suture closure of secundum (most frequently), coronary

sinus, sinus venosus or common atrium ASD.

30 ASD repair, Patch Patch closure (using any type of patch material) of

secundum, coronary sinus, or sinus venosus ASD.

40 ASD repair, Device Closure of any type ASD (including PFO) using a

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device.

2110	ASD repair, Patch + PAPVC repair	
50	ASD, Common atrium (single atrium), Septation	Septation of common (single) atrium using any type patch material.
60	ASD creation/enlargement	Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
70	ASD partial closure	Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
80	Atrial septal fenestration	Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
85	Atrial fenestration closure	Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
100	VSD repair, Primary closure	Suture closure of any type VSD.
110	VSD repair, Patch	Patch closure (using any type of patch material) of any type VSD.
120	VSD repair, Device	Closure of any type VSD using a device.
130	VSD, Multiple, Repair	Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
140	VSD creation/enlargement	Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
150	Ventricular septal fenestration	Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.
170	AVC (AVSD) repair, Complete (CAVSD)	Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
180	AVC (AVSD) repair, Intermediate (Transitional)	Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
190	AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.

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2300	Valvuloplasty, Common atrioventricular valve	
2250	Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	
2230	Valve replacement, Common atrioventricular valve	
210	AP window repair	Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
220	Pulmonary artery origin from ascending aorta (hemitruncus) repair	Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
230	Truncus arteriosus repair	Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
240	Valvuloplasty, Truncal valve	Truncal valve repair, any type.
2290	Valvuloplasty converted to valve replacement in the same operation, Truncal valve	
250	Valve replacement, Truncal valve	Replacement of the truncal valve with a prosthetic valve.
2220	Truncus + Interrupted aortic arch repair (IAA) repair	
260	PAPVC repair	PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
270	PAPVC, Scimitar, Repair	In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.

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2120	PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)	
280	TAPVC repair	Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.
2200	TAPVC repair + Shunt - systemic-to-pulmonary	
290	Cor triatriatum repair	Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
300	Pulmonary venous stenosis repair	Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
310	Atrial baffle procedure (non-Mustard, non-Senning)	The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.
330	Anomalous systemic venous connection repair	With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
340	Systemic venous stenosis repair	Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
350	TOF repair, No ventriculotomy	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be

considered "transannular" and thus a ventricular

		incision, though the length of the incision onto the ventricle itself may be minimal.
360	TOF repair, Ventriculotomy, Nontransanular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
370	TOF repair, Ventriculotomy, Transanular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
380	TOF repair, RV-PA conduit	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
390	TOF - AVC (AVSD) repair	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
400	TOF - Absent pulmonary valve repair	Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
420	Pulmonary atresia - VSD (including TOF, PA) repair	For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch

 $transannular\ patch.$

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430	Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair	In the presence of MAPCAs, this code implies implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA conduit.
440	Unifocalization MAPCA(s)	Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.
450	Occlusion MAPCA(s)	Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
460	Valvuloplasty, Tricuspid	Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle transplocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
2280	Valvuloplasty converted to valve replacement in the same operation, Tricuspid	
465	Ebstein's repair	To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
470	Valve replacement, Tricuspid (TVR)	Replacement of the tricuspid valve with a prosthetic valve.
480	Valve closure, Tricuspid (exclusion, univentricular approach)	In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
490	Valve excision, Tricuspid (without replacement)	Excision of the tricuspid valve without placement of a valve prosthesis.
500	Valve surgery, Other, Tricuspid	Other tricuspid valve surgery not specified in procedure codes.
510	RVOT procedure	Included in this procedural code would be all RVOT

procedures not elsewhere specified in the nomenclature

		system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
520	1 1/2 ventricular repair	Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
530	PA, reconstruction (plasty), Main (trunk)	Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
540	PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
550	PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
570	DCRV repair	Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
590	Valvuloplasty, Pulmonic	Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
2270	Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
600	Valve replacement, Pulmonic (PVR)	Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between

		homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
630	Valve excision, Pulmonary (without replacement)	Excision of the pulmonary valve without placement of a valve prosthesis.
640	Valve closure, Semilunar	Closure of a semilunar valve (pulmonic or aortic) by any technique.
650	Valve surgery, Other, Pulmonic	Other pulmonic valve surgery not specified in procedure codes.
610	Conduit placement, RV to PA	Placement of a conduit, any type, from RV to PA.
620	Conduit placement, LV to PA	Placement of a conduit, any type, from LV to PA.
1774	Conduit placement, Ventricle to aorta	Placement of a conduit from the right or left ventricle to the aorta.
1772	Conduit placement, Other	Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
580	Conduit reoperation	Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc).
660	Valvuloplasty, Aortic	Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
2240	Valvuloplasty converted to valve replacement in the same operation, Aortic	
2310	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	
2320	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross- Konno procedure	
670	Valve replacement, Aortic (AVR)	Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
680	Valve replacement, Aortic (AVR), Mechanical	Replacement of the aortic valve with a mechanical prosthetic valve.

690	Valve replacement, Aortic (AVR), Bioprosthetic	Replacement of the aortic valve with a bioprosthetic prosthetic valve.
700	Valve replacement, Aortic (AVR), Homograft	Replacement of the aortic valve with a homograft prosthetic valve.
715	Aortic root replacement, Bioprosthetic	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
720	Aortic root replacement, Mechanical	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechnical prosthesis in a composite conduit.
730	Aortic root replacement, Homograft	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
735	Aortic root replacement, Valve sparing	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
740	Ross procedure	Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
750	Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
760	Ross-Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
770	Other annular enlargement procedure	Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manougian and Nicks aortic annular enlargement procedures.
780	Aortic stenosis, Subvalvar, Repair	Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation), Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal

muscle is resected, incisions are closed, and the aortic

		annulus is reconstituted), or other aortoventriculoplasty techniques.
2100	Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	
790	Aortic stenosis, Supravalvar, Repair	Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
800	Valve surgery, Other, Aortic	Other aortic valve surgery not specified in other procedure codes.
810	Sinus of Valsalva, Aneurysm repair	Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
820	LV to aorta tunnel repair	LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
830	Valvuloplasty, Mitral	Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissuorotomy, leaflet repair, or papillary muscle repair.
2260	Valvuloplasty converted to valve replacement in the same operation, Mitral	
840	Mitral stenosis, Supravalvar mitral ring repair	Supravalvar mitral ring repair.
850	Valve replacement, Mitral (MVR)	Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.

860 Valve surgery, Other, Mitral

Other mitral valve surgery not specified in procedure codes.

870 Norwood procedure

The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neoaortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection.

When coding the procedure "Norwood procedure", the primary procedure of the operation should be "Norwood procedure". The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:

- 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)
- 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)
- 3. Shunt, Systemic to pulmonary, Other
- 4. Conduit placement, RV to PA
- 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)
- 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)
- 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
- 8. HemiFontan

880 HLHS biventricular repair

Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.

2160 Hybrid Approach "Stage 1", Application of RPA & LPA bands A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly

2170 Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)

2180 Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands

2140 Hybrid approach "Stage 2",
 Aortopulmonary
 amalgamation + Superior
 Cavopulmonary
 anastomosis(es) + PA
 Debanding + Aortic arch
 repair (Norwood [Stage 1] +
 Superior Cavopulmonary
 anastomosis(es) + PA
 Debanding)

2150 Hybrid approach "Stage 2",
Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Without aortic
arch repair

"Hybrid Procedures".

A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".

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		actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
890	Transplant, Heart	Heart transplantation, any technique, allograft or xenograft.
900	Transplant, Heart and lung	Heart and lung (single or double) transplantation.
910	Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.
920	Pericardial drainage procedure	Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
930	Pericardiectomy	Surgical removal of the pericardium.
940	Pericardial procedure, Other	Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
950	Fontan, Atrio-pulmonary connection	Fontan-type procedure with atrio-pulmonary connection.
960	Fontan, Atrio-ventricular connection	Fontan-type procedure with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
970	Fontan, TCPC, Lateral tunnel, Fenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
980	Fontan, TCPC, Lateral tunnel, Nonfenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
1000	Fontan, TCPC, External conduit, Fenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
1010	Fontan, TCPC, External conduit, Nonfenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
1025	Fontan revision or conversion (Re-do Fontan)	Revision of a previous Fontan procedure to a total cavopulmonary connection.
1030	Fontan, Other	Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
2340	Fontan + Atrioventricular valvuloplasty	
1035	Ventricular septation	Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
1050	Congenitally corrected TGA	Repair of congenitally corrected TGA by concomitant

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	repair, Atrial switch and ASO (double switch)	atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
1060	Congenitally corrected TGA repair, Atrial switch and Rastelli	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
1070	Congenitally corrected TGA repair, VSD closure	Repair of congenitally corrected TGA by VSD closure only.
1080	Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
1090	Congenitally corrected TGA repair, Other	Any procedures for correction of CCTGA not otherwised specified in other listed procedure codes.
1110	Arterial switch operation (ASO)	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
1120	Arterial switch operation (ASO) and VSD repair	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
1123	Arterial switch procedure + Aortic arch repair	Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
1125	Arterial switch procedure and VSD repair + Aortic arch repair	Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
1130	Senning	Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
1140	Mustard	Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
1145	Atrial baffle procedure,	Revision of a previous atrial baffle procedure (either

Mustard or Senning revision	Mustard or Senning), for any reason (e.g., obstruction,
	baffle leak).

Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.

The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.

1160 REV

1150 Rastelli

- 2190 Aortic root translocation over left ventricle (Including Nikaidoh procedure)
- 2210 TGA, Other procedures (Kawashima, LV-PA conduit, other)
- 1180 DORV, Intraventricular tunnel repair
- 1200 DOLV repair

Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima

Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli

		procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
1210	Coarctation repair, End to end	Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
1220	Coarctation repair, End to end, Extended	Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
1230	Coarctation repair, Subclavian flap	Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
1240	Coarctation repair, Patch aortoplasty	Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
1250	Coarctation repair, Interposition graft	Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
1260	Coarctation repair, Other	Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
1275	Coarctation repair + VSD repair	Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
1280	Aortic arch repair	Aortic arch repair, any technique.
1285	Aortic arch repair + VSD repair	Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
1290	Coronary artery fistula ligation	Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
1291	Anomalous origin of coronary artery from pulmonary artery repair	Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
1300	Coronary artery bypass	Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging,

		atresia of left main, acquired coronary artery disease, etc.).
1305	Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
1310	Coronary artery procedure, Other	Any coronary artery procedure not specifically listed.
1320	Interrupted aortic arch repair	Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD.
1330	PDA closure, Surgical	Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc).
1340	PDA closure, Device	Closure of a PDA by device using transcatheter techniques.
1360	Vascular ring repair	Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
1365	Aortopexy	Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
1370	Pulmonary artery sling repair	Pulmonary artery sling repair by any technique.
1380	Aortic aneurysm repair	Aortic aneurysm repair by any technique.
1390	Aortic dissection repair	Aortic dissection repair by any technique.
1400	Lung biopsy	Lung biopsy, any technique.
1410	Transplant, lung(s)	Lung or lobe transplantation of any type.
1420	Lung procedure, Other	Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
1430	Pectus repair	Repair of pectus excavatum or carinatum by any technique.
1440	Tracheal procedure	Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
1450	Pacemaker implantation, Permanent	Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc).
1460	Pacemaker procedure	Any revision to a previously placed pacemaker system

		including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
2350	Explantation of pacing system	
1470	ICD (AICD) implantation	Implantation of an (automatic) implantable cardioverter defibrillator system.
1480	ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
1490	Arrhythmia surgery - atrial, Surgical Ablation	Surgical ablation (any type) of any atrial arrhythmia.
1500	Arrhythmia surgery - ventricular, Surgical Ablation	Surgical ablation (any type) of any ventricular arrhythmia.
2500	Cardiovascular catheterization procedure, Diagnostic	
2520	Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	
2550	Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
2540	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	
2510	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	
2530	Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion	
2410	Cardiovascular catheterization procedure, Therapeutic	
2670	Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy	
1540	Cardiovascular catheterization procedure, Therapeutic, Balloon dilation	
2590	Cardiovascular	

catheterization procedure, Therapeutic, Balloon valvotomy

1580 Cardiovascular catheterization procedure,
Therapeutic, Coil implantation

1560 Cardiovascular catheterization procedure, Therapeutic, Device implantation

2640 Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)

2580 Cardiovascular catheterization procedure, Therapeutic, Septostomy

1550 Cardiovascular catheterization procedure,
Therapeutic, Stent insertion

2630 Cardiovascular catheterization procedure,
Therapeutic, Stent re-dilation

2650 Cardiovascular catheterization procedure,
Therapeutic, Transcatheter
Fontan completion

2660 Cardiovascular catheterization procedure,
Therapeutic, Transcatheter implantation of valve

2680 Cardiovascular electrophysiological catheterization procedure

2690 Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation

1590 Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)

1600 Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)

1610 Shunt, Systemic to

Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).

A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).

Placement of any other systemic-to-pulmonary artery

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	pulmonary, Other	shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
1630	Shunt, Ligation and takedown	Takedown of any shunt.
2095	Shunt, Reoperation	
1640	PA banding (PAB)	Placement of a pulmonary artery band, any type.
1650	PA debanding	Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
1660	Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
1670	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
1680	Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
1690	Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
1700	HemiFontan	A HemiFontan is an operation that includes a bidirectional superior year cava (SVC)-to-pulmonary

bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVCpulmonary artery amalgamation" to the atrium, with a " dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-topulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.

- 2330 Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty
- 2130 Superior Cavopulmonary anastomosis(es) + PA

STS Adult Cardiac Database

	reconstruction	
1710	Palliation, Other	Any other palliative procedure not specifically listed.
2360	ECMO cannulation	
2370	ECMO decannulation	
1910	ECMO procedure	Any ECMO procedure (cannulation, decannulation, etc.).
1900	Intraaortic balloon pump (IABP) insertion	Insertion of intraaortic balloon pump by any technique.
1920	Right/left heart assist device procedure	Any right, left, or biventricular assist device procedure (placement, removal etc.).
2390	VAD explantation	
2380	VAD implantation	
2420	Echocardiography procedure, Sedated transesophageal echocardiogram	
2430	Echocardiography procedure, Sedated transthoracic echocardiogram	
2435	Non-cardiovascular, Non- thoracic procedure on cardiac patient with cardiac anesthesia	
2440	Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
2450	Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
2460	Radiology procedure on cardiac patient, Diagnostic radiology	
2470	Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
2480	Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
2490	Interventional radiology procedure on cardiac patient	
1720	Aneurysm, Ventricular, Right, Repair	Repair of right ventricular aneurysm, any technique.
1730	Aneurysm, Ventricular, Left, Repair	Repair of left ventricular aneurysm, any technique.

1740	Aneurysm, Pulmonary artery, Repair	Repair of pulmonary artery aneurysm, any technique.
1760	Cardiac tumor resection	Resection of cardiac tumor, any type.
1780	Pulmonary AV fistula repair/occlusion	Repair or occlusion of a pulmonary arteriovenous fistula.
1790	Ligation, Pulmonary artery	Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
1802	Pulmonary embolectomy, Acute pulmonary embolus	Acute pulmonary embolism (clot) removal, through catheter or surgery.
1804	Pulmonary embolectomy, Chronic pulmonary embolus	Chronic pulmonary embolism (clot) removal, through catheter or surgery.
1810	Pleural drainage procedure	Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
1820	Pleural procedure, Other	Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
1830	Ligation, Thoracic duct	Ligation of the thoracic duct; most commonly for persistent chylothorax.
1840	Decortication	Decortication of the lung by any technique.
1850	Esophageal procedure	Any procedure performed on the esophagus.
1860	Mediastinal procedure	Any non-cardiovascular mediastinal procedure not otherwise listed.
1870	Bronchoscopy	Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
1880	Diaphragm plication	Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
1890	Diaphragm procedure, Other	Any diaphragm procedure not specifically listed.
1930	VATS (video-assisted thoracoscopic surgery)	Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
1940	Minimally invasive procedure	Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
1950	Bypass for noncardiac lesion	Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
1960	Delayed sternal closure	Sternal closure effected after patient has left operating

		room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
1970	Mediastinal exploration	Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
1980	Sternotomy wound drainage	Drainage of the sternotomy wound.
1990	Thoracotomy, Other	Any procedure performed through a thoracotomy incision not otherwise listed.
2000	Cardiotomy, Other	Any procedure involving an incision in the heart that is not otherwise listed.
2010	Cardiac procedure, Other	Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
2020	Thoracic and/or mediastinal procedure, Other	Any thoracic and/or mediastinal procedure not otherwise listed.
2030	Peripheral vascular procedure, Other	Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
2040	Miscellaneous procedure, Other	Any miscellaneous procedure not otherwise listed.
2050	Organ procurement	Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
7777	Other procedure	Any procedure on any organ system not otherwise listed.

Long Name:Other Card-Transmyocardial Laser RevascularizationSeqNo:5370Short Name:OCarLasrCore:Yes

Section Name: Other Cardiac Procedures

Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient underwent the creation of multiple channels in left ventricular myocardium with a laser fiber either in conjunction with, or as the primary surgical procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Other Card-Cardiac Trauma SeqNo: 5380

Short Name: OCarTrma Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a surgical procedure for an injury due to Cardiac Trauma either in

conjunction with, or as the primary surgical procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Other Card-Card Tx SeqNo: 5390

Short Name: OCarCrTx Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Heterotopic or Orthotopic heart transplantation either in

conjunction with, or as the primary surgical procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Other Card-Arrhythmia Correction Surgery SeqNo: 5400

Short Name: OCarACD Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate which arrhythmia correction device was surgically placed either in conjunction with, or as

the primary surgical procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 None

2 Permanent Pacemaker An internal electronic generator that controls the heart

rate.

3 Permanent Pacemaker with An internal permanent pacemaker that uses biventricular

Cardiac Resynchronization electrical stimulation to synchronize ventricular

Technique (CRT) contraction.

4 Implantable Cardioverter Defibrillator (ICD)

5 ICD with CRT An internal AICD that uses biventricular electrical

stimulation to synchronize ventricular contraction.

An internal device that defibrillates the heart.

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Long Name: Other Card-Arrhythmia Correction Surgery-Lead Insertion or Replacement SeqNo: 5410

Short Name: OCarACDLI Core: Yes

Section Name: Other Cardiac Procedures

Harvest: Yes

DBTableName AdultData

Definition: Indicate whether procedure included lead insertion or replacement for a device intended to treat

cardiac arrhythmias.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Arrhythmia Format: Text (categorical values

Correction Surgery specified by STS)

ParentShortName: OCarACD DataLength:

ParentValue: <> "None" And Is Not Data Source: User

Missing

Harvest Codes:

Code: Value:

1 Yes

Other Card-Arrhythmia Correction Surgery-Lead Placement SeqNo: 5420 Long Name:

Short Name: **OCarACDL** Core: No Section Name: Other Cardiac Procedures Harvest: No

DBTableName AdultData

Definition: Indicate which lead placement was used for the permanent pacemaker with CRT or AICD with CRT:

Epicardial: the outer most layer of the heart. Endocardial: the inner most layer of the heart.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

> PQRIField: No ModelField: No

Parent Long Name: Other Card-Arrhythmia

Text (categorical values Format: Correction Surgery

specified by STS)

ParentShortName: OCarACD DataLength:

ParentValue: = "Permanent Pacemaker Data Source: User

> with Cardiac Resynchronization

Technique (CRT)" or "AICD

with CRT"

Harvest Codes:

Code: Value: **Epicardial** Endocardial

Long Name: Other Card-Arrhythmia Correction Surgery-Lead Extraction SeqNo: 5430

OCarACDLE Short Name: Core: Yes Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Indicate whether procedure included lead extraction for a device intended to treat cardiac Definition:

arrhythmias.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PORIField:

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

= "Yes" Data Source: User ParentValue:

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Other Card-Atrial Fibrillation Correction Surgery SeqNo: 5440

Short Name: OCarAFib Core: No
Section Name: Other Cardiac Procedures Harvest: No

DBTableName AdultData

Definition: Indicate if one of the following atrial fibrillation correction surgeries was performed either in

conjunction with, or as the primary surgical procedure. The intent of both surgeries is to preclude the atria from fibrillating by disrupting the abnormal reentry pathways of electronic signals that lead

to atrial fibrillation.

Standard Surgical Maze Procedure: Surgical procedure in which full thickness incisions are made in the atria of the heart. Sutures are then used to reapproximate the incised tissue. The resulting lesion disrupts the abnormal reentry pathways of electronic signals that lead to atrial fibrillation.

Other Surgical Ablative Procedure: Surgical procedure in which lesions are created in the atria of the heart by an energy source. The lesion disrupts the abnormal reentry pathways of electronic signals that lead to atrial fibrillation.

Combination of Standard Surgical Maze Procedure and Other Surgical Ablative Procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Standard Surgical Maze

Procedure

3 Other Surgical Ablative

Procedure

4 Combination of Standard and

Other Procedures

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Long Name: Other Card-Atrial Fibrillation Surgical Procedure SeqNo: 5450

Short Name: OCarAFibSur Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether atrial fibrillation correction surgery was performed as the primary procedure or in

conjunction with another procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Location SeqNo: 5451

Short Name: OCarAFibSurLoc Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate the location of the AFib ablation procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Atrial Format: Text (categorical values

Fibrillation Surgical specified by STS)

Procedure

ParentShortName: OCarAFibSur DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Biatrial

2 Left atrial only

3 Right atrial only

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Left Atrial Appendage SeqNo: 5452

Obliterated

Short Name: OCarAFibSurLAA Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether left atrial appendage was obliterated. Includes oversewing, ligation, stapling,

clipping, and/or plication.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Atrial Format: Text (categorical values

Fibrillation Surgical specified by STS)

Procedure

ParentShortName: OCarAFibSur DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion SegNo: 5455

Creation - Radio Frequency

Short Name: OCarAFibMethRad Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included radio

frequency.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Atrial Format: Text (categorical values

Fibrillation Surgical specified by STS)

Procedure

ParentShortName: OCarAFibSur DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion SeqNo: 5456

Creation - Ultrasound

Short Name: OCarAFibMethUltra Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included

ultrasound.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Atrial Format: Text (categorical values

Fibrillation Surgical

Procedure

Text (categorical value)

specified by STS)

ParentShortName: OCarAFibSur DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion SeqNo: 5457

Creation - Cryo

Short Name: OCarAFibMethCryo Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included cryo.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Atrial

Other Card-Atrial Format: Fibrillation Surgical

Text (categorical values specified by STS)

Procedure

ParentShortName: OCarAFibSur DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion SeqNo: 5458

Creation - Microwave

Short Name: OCarAFibMethMicro Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included

microwave.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Atrial Format: Text (categorical values

Fibrillation Surgical

Procedure

ormai. Text (categorical value

specified by STS)

ParentShortName: OCarAFibSur DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion SeqNo: 5459

Creation - Laser

Short Name:OCarAFibMethLasCore:YesSection Name:Other Cardiac ProceduresHarvest:Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included laser.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Atrial Format: Text (categorical values

Fibrillation Surgical specified by STS)

Procedure

ParentShortName: OCarAFibSur DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion SeqNo: 5460

Creation - Cut-And-Sew

Short Name: OCarAFibMethCAS Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included cut-

and-sew.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Atrial Format: Text (categorical values

Fibrillation Surgical

Procedure

ormal. Text (categorical values

specified by STS)

ParentShortName: OCarAFibSur DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Other Card-Atrial Fibrillation Ablation Procedure SeqNo: 5465

Short Name: OCarAFibAProc Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate what atrial fibrilation ablation procedure was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Atrial Format: Text (categorical values

Fibrillation Surgical specified by STS)

Procedure

ParentShortName: OCarAFibSur DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

1 Primarily epicardial procedure E.g., pulmonary vein isolation with or without

connection to left atrial appendage

2 Primarily intracardiac E.g., Maze procedures; lesions to mitral annulus; etc.

procedure

Long Name: Other Card-Ao Aneur SeqNo: 5470

Short Name: ONCAoAn Core: No

Section Name: Other Cardiac Procedures Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient underwent an aortic aneurysm repair either in conjunction with, or as

the primary surgical procedure. This includes dissections, non-dissections and ruptures of the aorta.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Other Card-Aortic Procedure Type SeqNo: 5471

Short Name: OCAoProcType Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate the type of aortic procedure performed in conjunction with another procedure or as the

primary procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PORIField:

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Aneurysm

3 Dissection (including

intramural hematoma)

- 4 Trauma
- 5 Coarctation
- 6 Other

Long Name: Other Card-Aortic Root SeqNo: 5473

Short Name: ONCAoRt Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient underwent repair of an aortic root aneurysm either in conjunction with, or as

the primary surgical procedure. Aneurysm refers to pathologic dilatation of the aorta.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Aortic Format: Text (categorical values

Procedure Type specified by STS)

ParentShortName: OCAoProcType DataLength:

ParentValue: = "Aneurysm" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Other Card-Aortic Root Graft SeqNo: 5474

Short Name: ONCAoGraft Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a Dacron graft was used to replace the ascending aorta (between the sinotubular

junction and the origin of the innominate artery) – this includes a "hemiarch" replacement as well as a Wheat procedure. Also includes valve-sparing root reimplantation and remodling operations. If the ascending aorta was replaced with a Dacron graft, record as "yes" and also go to AVR section

and record device model, size, etc. there.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Aortic Root Format: Text (categorical values

specified by STS)

ParentShortName: ONCAoRt DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Other Card-Asc SeqNo: 5480

Short Name: ONCAsc Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient underwent repair of ascending aortic aneurysm either in conjunction with, or

as the primary surgical procedure. Aneurysm refers to pathologic dilatation of the aorta. The ascending aorta begins at the aortic annulus and ends at the origin of the innominate artery where

the aorta continues as the transverse arch.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Other Card-Aortic Format: Text (categorical values

Procedure Type specified by STS)

ParentShortName: OCAoProcType DataLength:

ParentValue: = "Aneurysm" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Other Card-Arch SeqNo: 5490

Short Name: ONCArch Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient underwent repair of aneurysm in the arch of the aorta either in conjunction

with, or as the primary surgical procedure. The arch begins at the origin of the innominate artery and ends beneath the left subclavian artery. It is the portion of the aorta at the top of the heart that gives off three important blood vessels; the innominate artery, the left carotid artery and the left

subclavian artery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Other Card-Aortic Format: Text (categorical values

Procedure Type specified by STS)

ParentShortName: OCAoProcType DataLength:

ParentValue: = "Aneurysm" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Other Card-Arch Repair Extent SeqNo: 5491

Short Name: ONCArchRepExt Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate the extent of the arch repair.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Arch Format: Text (categorical values

specified by STS)

ParentShortName: ONCArch DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Hemi-Arch

2 Total Arch

Long Name: Other Card-Desc SeqNo: 5500

Short Name: ONCDesc Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient underwent repair of a descending aortic aneurysm either in conjunction with,

or as the primary surgical procedure. The descending aorta is the portion of the aorta between the

arch and the abdomen.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Other Card-Aortic Format: Text (categorical values

Procedure Type specified by STS)

ParentShortName: OCAoProcType DataLength:

ParentValue: = "Aneurysm" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Other Card-Thoracoabdominal Aneurysm SeqNo: 5510

Short Name: ONCThAbd Core: Yes

Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate if the patient underwent repair of a thoracoabdominal aneurysm either in conjunction with,

or as the primary surgical procedure. Thoracoabdominal aneurysms can involve the entire thoracoabdominal aorta from the origin of the left subclavian artery to the aortic bifurcation or can

involve only one or more segments of the abdominal aorta.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Other Card-Aortic Format: Text (categorical values

Procedure Type specified by STS)

specified by 51

ParentShortName: OCAoProcType DataLength:

ParentValue: = "Aneurysm" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Other Card-Thoracoabdominal Graft Replacement SegNo: 5511

Short Name: ONCThAbdGraft Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a graft replacement was used.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

specified by STS)

Parent Long Name: Other Card- Format: Text (categorical values

Thoracoabdominal

Aneurysm

ParentShortName: ONCThAbd DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Other Card-Thoracoabdominal-Intercostal Vessels SeqNo: 5512

Short Name: ONCThAbdInterVes Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether intercostal vessels were re-implanted.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-

Other Card- Format: Text (categorical values Thoracoabdominal Graft specified by STS)

Thoracoabdominal Graft specified by STS)
Replacement

ParentShortName: ONCThAbdGraft DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

Other Card-Thoracoabdominal-CSF Drainage Long Name: SeqNo: 5513

Short Name: **ONCThAbdLumCSF** Core: Yes Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether lumbar CSF drainage was utilized.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: PQRIField:

Parent Long Name: Other Card-Format: Text (categorical values

Thoracoabdominal Graft

Replacement

specified by STS)

ParentShortName: ONCThAbdGraft DataLength:

= "Yes" ParentValue: Data Source: User

Harvest Codes:

Code: Value: 1 Yes 2 No

Long Name: Other Card-Thoracoabdominal-Extent Replaced SegNo: 5514

Yes Short Name: **ONCThAbdExtent** Core: Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate extent of descending aorta replacement.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

> PQRIField: ModelField:

Parent Long Name: Other Card-Format: Text (categorical values

Thoracoabdominal Graft

specified by STS)

Replacement

ParentShortName: ONCThAbdGraft DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Proximal

2 Mid

3 Distal

Proximal - Mid

Proximal - Mid - Distal

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6 Mid - Distal

Other Card-Aortic Dissection-Acute 5516 Long Name: SegNo:

Core: Yes

AoDisAc Section Name: Other Cardiac Procedures

Harvest: Yes

DBTableName AdultData

Short Name:

Definition: Indicate whether a rtic dissection is acute (<14 days prior to procedure).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

> ModelField: PQRIField:

Parent Long Name: Other Card-Aortic Format: Text (categorical values

Procedure Type specified by STS)

ParentShortName: OCAoProcType DataLength:

ParentValue: = "Dissection (including Data Source: User

intramural hematoma)"

Harvest Codes:

Code: Value:

Yes

2 No

Long Name: Other Card-Aortic Dissection Type SegNo: 5517

Short Name: **AoDisTyp** Core: Yes

Section Name: Other Cardiac Procedures Yes Harvest:

DBTableName AdultData

Definition: Indicate aortic dissection type.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

> ModelField: PQRIField:

Parent Long Name: Other Card-Aortic Format: Text (categorical values

Procedure Type specified by STS)

ParentShortName: OCAoProcType DataLength:

Data Source: User ParentValue: = "Dissection (including

intramural hematoma)"

Harvest Codes and Value Definitions:

Code: Value: **Definition:**

1 Stanford Type A Dissection extends proximal to the left subclavian artery

2 Stanford Type B Dissection extends distal to the left subclavian artery

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Long Name: Other Card-Aortic Trauma type SeqNo: 5518

Short Name: AoTrTyp Core: Yes

Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate type of aortic trauma.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Aortic Format: Text (categorical values

Procedure Type specified by STS)

ParentShortName: OCAoProcType DataLength:

ParentValue: = "Trauma" Data Source: User

Harvest Codes:

Code: Value:

1 Blunt

2 Penetrating

Long Name: Other Card-Endovascular Procedure (TEVAR): SeqNo: 5520

Short Name: EndoProc Core: Yes

Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether an aortic endovascular stent graft was performed/deployed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Other Card-Endovascular Debranching SeqNo: 5521

Short Name: EndoProcDeb Core: Yes
Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether debranching was performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card-Endovascular

Procedure (TEVAR):

Format: Text (categorical values

specified by STS)

ParentShortName: EndoProc DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Other Card-Tumor SeqNo: 5530

Short Name: OCTumor Core: Yes

Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had resection of an intracardiac tumor.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Myxoma

3 Fibroelastoma

4 Hypernephroma

5 Sarcoma

6 Other

Long Name: Other Card-Pulmonary Thromboembolectomy SeqNo: 5540

OCPulThromDis Short Name: Core: Yes Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had surgery for pulmonary thromboembolic disease.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NOFField:

> ModelField: PQRIField:

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

ParentShortName: OpOCard DataLength:

= "Yes" ParentValue: Data Source: User

Harvest Codes:

Code: Value: 1 None

Yes, Acute

Yes, Chronic

Long Name: Other Card-Other SeqNo: 5550

OCarOthr Short Name: Core: Yes Section Name: Other Cardiac Procedures Harvest: Yes

DBTableName AdultData

Indicate whether the patient had an other cardiac procedure performed either in conjunction with, or Definition:

as the primary surgical procedure that is not included within this section. Includes, but is not limited

to those procedures listed on the STS Data Manager's section of the STS Web Site.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

> ModelField: No PQRIField: Yes

Parent Long Name: Other Card Format: Text (categorical values

specified by STS)

DataLength: ParentShortName: OpOCard

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value: Yes 1 2 No

Version: 2.73

Long Name: Other Non Card-Caro Endart SeqNo: 5560

Short Name: ONCCarEn Core: Yes
Section Name: Other Non-Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient underwent surgical removal of stenotic atheromatous plaque or

percutaneous/surgical placement of carotid stent in conjunction with the primary surgical procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Other Non Card Format: Text (categorical values

specified by STS)

ParentShortName: OpONCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Other Non Card-Other Vasc SeqNo: 5570

Short Name: ONCOVasc Core: Yes
Section Name: Other Non-Cardiac Procedures Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient had procedures treating peripheral vascular disease in conjunction with the

primary surgical procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Other Non Card Format: Text (categorical values

specified by STS)

ParentShortName: OpONCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Other Non Card-Other Thor SeqNo: 5580 Long Name:

Short Name: **ONCOThor** Core: Yes Section Name: Other Non-Cardiac Procedures Harvest: Yes

DBTableName AdultData

Indicate whether patient underwent procedures involving Thorax/Pleura in conjunction with the Definition:

primary surgical procedure. This includes but is not limited to open lung biopsy, lung resection,

mediastinal mass and/or lung dissection.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: NQFField: No ReportField: Yes

> ModelField: No PQRIField: No

Parent Long Name: Other Non Card Format: Text (categorical values

specified by STS)

ParentShortName: OpONCard DataLength:

= "Yes" ParentValue: Data Source: User

Harvest Codes:

Code: Value: 1 Yes 2 No

Other Non Card-Other 5590 Long Name: SegNo:

ONCOther Short Name: Core: Yes Harvest: Yes

Section Name: Other Non-Cardiac Procedures

DBTableName AdultData

Definition: Indicate whether the patient had any other non-cardiac procedure performed in conjunction with the

primary surgical procedure that is not included within this section.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

> ModelField: No PQRIField: No

Parent Long Name: Other Non Card Format: Text (categorical values

specified by STS)

ParentShortName: OpONCard DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value: 1 Yes

Version: 2.73

Long Name: Postoperative Creatinine Level SeqNo: 5610

Short Name: PostCreat Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the postoperative Creatinine level. If more than one level is obtained, code the highest

level.

LowValue: 0.1 UsualRangeLow: 0.1 ACCField: Not mapped

HighValue: 30.0 UsualRangeHigh: 9.0 ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name:Blood ProdSeqNo:5620Short Name:BldProdCore:YesSection Name:PostoperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate whether blood products were transfused any time postoperatively. Postoperatively is

defined as any blood started after the initial surgery. Include blood transfused after the initial

surgery, including any blood transfused during a reoperative surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Long Name: Blood Prod - RBC Units SeqNo: 5630

Short Name: BdRBCU Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of units of packed red blood cells that were transfused any time postoperatively.

Do not include autologous, cell-saver or chest tube recirculated blood.

LowValue: 0 UsualRangeLow: 0 ACCField: Not mapped

HighValue: 99 UsualRangeHigh: 10 ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Blood Prod Format: Integer

ParentShortName: BldProd DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Blood Prod - FFP Units SeqNo: 5640

Short Name: BdFFPU Core: Yes
Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of units of fresh frozen plasma that were transfused any time postoperatively.

LowValue: 0 UsualRangeLow: 0 ACCField: Not mapped

HighValue: 99 UsualRangeHigh: 10 ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Blood Prod Format: Integer

ParentShortName: BldProd DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: Blood Prod - Cryo Units SeqNo: 5650

Short Name: BdCryoU Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of units of cryoprecipitate that were transfused intraoperatively.

One bag of cryo = one unit.

The number of units is not volume dependent.

LowValue: 0 UsualRangeLow: 0 ACCField: Not mapped

HighValue: 99 UsualRangeHigh: 10 ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Blood Prod Format: Integer

ParentShortName: BldProd DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Blood Prod - Platelet Units SeqNo: 5660

Short Name: BdPlatU Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of units of platelets that were transfused intraoperatively.

Count the dose pack as one unit. A dose pack may consist of 4, 6, 8, 10, or any number of donor

platelets obtained. The number of units coded is not volume dependent.

LowValue: 0 UsualRangeLow: ACCField: Not mapped

HighValue: 99 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Blood Prod Format: Integer

ParentShortName: BldProd DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: Extubated In OR SeqNo: 5670

Short Name: ExtubOR Core: Yes
Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient was extubated prior to leaving the operating room during the initial

surgery.

If patient expires in the operating room during the initial surgery, answer "Yes".

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Re-intubated During Hospital Stay SeqNo: 5680

Short Name: ReIntub Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient was reintubated during the hospital stay after the initial extubation.

This may include patients who have been extubated in the OR and require intubation in the

postoperative period.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes

Long Name: Additional Hours Ventilated SeqNo: 5690

Short Name: VentHrsA Core: Yes
Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate how many additional hours the patient was on ventilator after initial extubation.

LowValue: 0.1 UsualRangeLow: 1.0 ACCField: Not mapped

HighValue: 5000.0 UsualRangeHigh: 168.0 ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Re-intubated During Format: Real

Hospital Stay

ParentShortName: ReIntub DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: ICU Visit SeqNo: 5700

Short Name: ICUVisit Core: Yes
Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient received ICU level of care immediately following the initial surgery.

Include ICU unit, post-anesthesia recovery, and other similar critical care environments.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Initial ICU hours SeqNo: 5710

Short Name: ICUInHrs Core: Yes
Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of hours the patient received ICU level of care immediately following the initial

surgery until the time of transfer out of ICU. Include ICU unit, post-anesthesia recovery, and other

similar critical care environments.

For those sites who provide postop ICU level of care in one single stay unit (admission to ICU to hospital discharge), document the number of hours immediately following the initial surgery until a physician order is written to change the level of care provided.

physician order is written to change the level of care provided.

Do not count hours when the patient is kept in ICU because of staffing or bed availability.

LowValue: 0.1 UsualRangeLow: 1.0 ACCField: Not mapped

HighValue: 5000.0 UsualRangeHigh: 100.0 ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: ICU Visit Format: Real

ParentShortName: ICUVisit DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Readmission to ICU SeqNo: 5720

Short Name: ICUReadm Core: Yes
Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient spent time in an ICU after having been transferred to a step-down unit

(lower level care). Specific situations are described below:

 $OR \rightarrow ICU \rightarrow OR \rightarrow ICU = No$

OR -> ICU -> STEP DOWN -> ICU = Yes

OR -> STEP DOWN -> ICU = Yes

Single care unit:

Code ICU readmission when the level of care increases and is noted in the physician order.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Additional ICU Hours SeqNo: 5730

Short Name: ICUAdHrs Core: Yes
Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the number of additional hours spent in the ICU, or at the equivalent higher level of care in

single stay units.

LowValue: 0.1 UsualRangeLow: 1.0 ACCField: Not mapped

HighValue: 5000.0 UsualRangeHigh: 100.0 ReportField: Yes NOFField: No

ModelField: No PQRIField: No

Parent Long Name: Readmission to ICU Format: Real

ParentShortName: ICUReadm DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: Total Hrs ICU SeqNo: 5740

Short Name: TotHrICU Core: No Section Name: Postoperative Harvest: No

DBTableName AdultData

Definition: Indicate the total number of hours post operation for which the patient was in the ICU. Leave blank

if the patient expired in the OR during the initial surgery. Enter zero (0) if patient was never in post-

anesthesia recovery or other similar critical care environment.

LowValue: 0.0 UsualRangeLow: 1.0 ACCField: Not mapped

HighValue: 10000.0 UsualRangeHigh: 100.0 ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User or Calculated

Long Name: Postop Echo SeqNo: 5744

Short Name: POpTTEch Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether an echo was performed postoperatively prior to discharge.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Postop Echo Aortic Insufficiency SeqNo: 5745

Short Name: POpTTAR Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest level of aortic regurgitation found on post op echo prior to discharge. Mild-to-

moderate should be coded as moderate; moderate to severe should be coded as severe.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Postop Echo Format: Text (categorical values

specified by STS)

ParentShortName: POpTTEch DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Trace/trivial

3 Mild

4 Moderate

5 Severe

Long Name: Postop Echo Mitral Insufficiency SeqNo: 5746

Short Name: POpTTMR Core: Yes
Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest level of mitral regurgitation found on post op echo prior to discharge. Mild-to-

moderate should be coded as moderate; moderate to severe should be coded as severe.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Postop Echo Format: Text (categorical values

specified by STS)

ParentShortName: POpTTEch DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Trace/trivial

- 3 Mild
- 4 Moderate
- 5 Severe

Long Name: Postop Echo Tricuspid Insufficiency SeqNo: 5747

Short Name: POpTTTR Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the highest level of tricuspid regurgitation found on post op echo prior to discharge. Mild-

to-moderate should be coded as moderate; moderate to severe should be coded as severe.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Postop Echo Format: Text (categorical values

specified by STS)

ParentShortName: POpTTEch DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Trace/trivial

3 Mild

4 Moderate

5 Severe

Version: 2.73

Long Name: Postop EF Done SeqNo: 5748

Short Name: POpEFD Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the Ejection Fraction was measured postoperatively.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Postop EF SeqNo: 5749

Short Name: POpEF Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the percentage of the blood emptied from the left ventricle at the end of the contraction

measured postoperatively.

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:

Normal = 60%

Good function = 50% Mildly reduced = 45%

Fair function = 40%

Moderately reduced = 30%

Poor function = 25% Severely reduced = 20%

LowValue: 1.0 UsualRangeLow: 5.0 ACCField: Not mapped

HighValue: 99.0 UsualRangeHigh: 99.0 ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Postop EF Done Format: Real

ParentShortName: POpEFD DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Postop Cardiac Enzymes Drawn SeqNo: 5750

Short Name: POpEnzDrawn Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate whether Cardiac Enzymes (biomarkers) were drawn post procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name:Postop Peak CKMBSeqNo:5751Short Name:POpPkCKMBCore:YesSection Name:PostoperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate the peak CKMB (highest level post procedure).

LowValue: 0.0 UsualRangeLow: ACCField: Not mapped

HighValue: 5000.0 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Postop Cardiac Enzymes Format: Real

Drawn

ParentShortName: POpEnzDrawn DataLength:

ParentValue: = "Yes" Data Source: User

Long Name:Postop Peak Troponin ISeqNo:5752Short Name:POpPkTrICore:Yes

Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the peak Troponin I (highest level post procedure).

LowValue: 0.0 UsualRangeLow: ACCField: Not mapped

HighValue: 5000.0 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Postop Cardiac Enzymes Format: Real

Drawn

ParentShortName: POpEnzDrawn DataLength:

ParentValue: = "Yes" Data Source: User

Version: 2.73

Long Name: Postop Peak Troponin T SeqNo: 5753

Short Name: POpPkTrT Core: Yes Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the peak Troponin T (highest level post procedure).

LowValue: 0.0 UsualRangeLow: ACCField: Not mapped

HighValue: 5000.0 UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Postop Cardiac Enzymes Format: Real

Drawn

ParentShortName: POpEnzDrawn DataLength:

ParentValue: = "Yes" Data Source: User

Long Name:Postop 12 Lead EKGSeqNo:5754Short Name:POpEKGCore:YesSection Name:PostoperativeHarvest:Yes

DBTableName AdultData

Definition: Indicate the post procedure 12 lead EKG findings, if performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Not Performed

2 No Significant Changes

3 New Pathological Q-Wave or

LBBB

Version: 2.73

Long Name: Postop Imaging Study SeqNo: 5755

Short Name: POpImagStdy Core: Yes
Section Name: Postoperative Harvest: Yes

DBTableName AdultData

Definition: Indicate the post procedure imaging study findings, if performed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Not performed

2 Angiographic evidence of new thrombosis or occlusion of graft or native coronary

3 Imaging evidence of new loss of viable myocardium

No evidence of new myocardial injury

Long Name: Post-Op Events SeqNo: 5759

Short Name: Complics Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a postoperative event occurred during the hospitalization for surgery. This includes

the entire postoperative period up to discharge, even if over 30 days.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-ReOp Bleed SeqNo: 5760

Short Name: COpReBld Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient was reexplored for mediastinal bleeding with or without tamponade

either in the ICU or returned to the operating room.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: Yes

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-ReOp Bleed Timing SeqNo: 5770

Short Name: COpReBldTim Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate when reoperation for bleeding took place.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-ReOp Bleed Format: Text (categorical values

specified by STS)

ParentShortName: COpReBld DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes and Value Definitions:

<u>Code: Value: Definition:</u>

Acute Within 24 hours of the end of the case
 Late more than 24 hours after case ends

Version: 2.73

Long Name: Post-Op-ReOp Vlv Dys SeqNo: 5780

Short Name: COpReVlv Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient returned to the operating room for prosthetic or native valve

dysfunction.

Dysfunction may be structural and/or non-structural failure. Dysfunction may be of a prosthesis, a progressive native disease process, or an acute event process that disrupts valve function and creates either clinical compromising insufficiency/regurgitation or valve orifice narrowing.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Post-Op-Reintervention-Graft Occlusion

SeqNo: 5790

Short Name: COpReGft Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: 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.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: Yes

ModelField: No PQRIField: Yes

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Post-Op-ReOp Other Card

SeqNo:

5800 Core:

Short Name: COpReOth

Yes Yes

Section Name: Postoperative Events

Harvest:

DBTableName AdultData

Definition: Indicate whether the patient returned to the operating room for other cardiac reasons.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: Yes

> PQRIField: No ModelField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

= "Yes" Data Source: User ParentValue:

Harvest Codes:

Code: Value: 1 Yes 2 No

Post-Op-ReOp Other Non Card Long Name:

SeqNo:

5810 Yes

COpReNon Short Name:

Core:

Section Name: Postoperative Events

Yes Harvest:

DBTableName AdultData

Indicate whether the patient returned to the operating room for other non-cardiac reasons. Definition:

> This includes procedures requiring a return to the operating room such as tracheostomy, hematoma evacuation, planned delayed sternal closure, general surgery procedures.

This does not include procedures performed outside the operating room such as GI Lab for peg tube, shunts for dialysis, etc.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: NQFField: No UsualRangeHigh: ReportField: Yes

> ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

= "Yes" Data Source: User ParentValue:

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Open Chest With Planned Delayed Sternal Closure SeqNo: 5811

Short Name: COpPlndDelay Core: Yes Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the chest was left open with planned delayed sternal closure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complies DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Comps-Op-Perioperative MI SeqNo: 5820

Short Name: COpPerMI Core: No
Section Name: Postoperative Events Harvest: No

DBTableName AdultData

Definition: (0-24 hours post-op)

Indicate the presence of a peri-operative MI (0-24 hours post-op) as documented

by the following criteria:

The CK-MB (or CK if MB not available) must be greater than or equal to 5 times the upper limit of normal, with or without new Q waves present in two or more contiguous ECG leads. No symptoms required.

(> 24 hours post-op)

Indicate the presence of a peri-operative MI (> 24 hours post-op) as documented by at least one of the following criteria:

- 1. Evolutionary ST- segment elevations
- 2. Development of new Q- waves in two or more contiguous ECG leads
- 3. New or presumably new LBBB pattern on the ECG
- 4. The CK-MB (or CK if MB not available) must be greater than or equal to 3 times the upper limit of normal

Because normal limits of certain blood tests may vary, please check with your lab for normal limits for CK-MB and total CK.

Defining Reference Control Values (Upper Limit of Normal): Reference values must be determined in each laboratory by studies using specific assays with appropriate quality control, as reported in peer-reviewed journals. Acceptable imprecision (coefficient of variation) at the 99th percentile for each assay should be defined as < or = to 10%. Each individual laboratory should confirm the range of reference values in their specific setting.

This element should not be coded as an adverse event for evolving MI's unless their enzymes peak, fall, then have a second peak.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Post-Op-Sternotomy Issue SegNo: 5830

Short Name: CSternal Core: Yes

Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate presence of a post operative sternotomy issue within 30 days of procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Post-Op Sternal instability/dehiscence (sterile) SeqNo: 5840

Short Name: CSternalDehis Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: The code indicates sterile dehiscence of the sternal edges without evidence of infection but which

requires surgical intervention. Skin and subcutaneous tissue may remain intact.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Sternotomy Issue Format: Text (categorical values

specified by STS)

ParentShortName: CSternal DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Post-Op-Surgical Site Infection SeqNo: 5841

Short Name: SurSInf Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether surgical site infection was diagnosed within 30 days of the procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complies DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Sternal-Superficial Wound Infection SeqNo: 5850

Short Name: CSternalSupInf Core: Yes

Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a superficial sternal wound infection occurred within 30 days of procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Surgical Site Format: Text (categorical values

Infection specified by STS)

ParentShortName: SurSInf DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Post-Op-Infect-Deep Sternal Infection SeqNo: 5860

Short Name: CIStDeep Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient, within 30 days postoperatively, had a deep sternal infection involving

muscle, bone, and/or mediastinum REQUIRING OPERATIVE INTERVENTION.

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Post-Op-Surgical Site

Infection

Format: Text (categorical values

specified by STS)

ParentShortName: SurSInf DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name:Post-Op-Sternal-MediastinitisSeqNo:5870Short Name:CSternalMediaCore:YesSection Name:Postoperative EventsHarvest:Yes

DBTableName AdultData

Definition: Indicate whether the patient developed mediastinitis within 30 days of the surgical procedure.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Surgical Site Format: Text (categorical values

Infection specified by STS)

ParentShortName: SurSInf DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Version: 2.73

Long Name: Post-Op-Sternal-Mediastinitis - Date of Diagnosis SeqNo: 5880

Short Name: CSternalMediaDtDiag Core: Yes Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate the date one which the mediastinitis was diagnosed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Sternal- Format: Date mm/dd/yyyy

Mediastinitis

ParentShortName: CSternalMedia DataLength:

ParentValue: = "Yes" Data Source: User

Long Name: Post-Op-Sternal-Mediastinitis - Secondary Procedure - Open With SeqNo: 5890

Packing/Irrigation

Short Name:CSternalMediaSPOpenCore:YesSection Name:Postoperative EventsHarvest:Yes

DBTableName AdultData

Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included leaving the

incision open with packing/irrigation.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Sternal- Format: Text (categorical values

Mediastinitis specified by STS)

ParentShortName: CSternalMedia DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Long Name: Post-Op-Sternal-Mediastinitis - Secondary Procedure - Wound Vac SeqNo: 5900

Short Name: CSternalMediaSPWVa Core: Yes

С

Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included wound vac.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Sternal- Format: Text (categorical values

Mediastinitis specified by STS)

ParentShortName: CSternalMedia DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Sternal-Mediastinitis - Secondary Procedure - Muscle Flap SeqNo: 5910

Short Name: CSternalMediaSPMusc Core: Yes

le

Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included muscle flap.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Sternal- Format: Text (categorical values

Mediastinitis specified by STS)

ParentShortName: CSternalMedia DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Post-Op-Sternal-Mediastinitis - Secondary Procedure - Omental Flap 5920 Long Name: SeqNo:

Short Name: **CSternalMediaSPOme** Core: Yes

ntal

Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included omental flap.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

> ModelField: *PQRIField*:

Parent Long Name: Post-Op-Sternal-Format: Text (categorical values

Mediastinitis specified by STS)

ParentShortName: CSternalMedia DataLength:

= "Yes" ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Infect-Thoracotomy SegNo: 5930

Core: Yes Short Name: **CIThor** Harvest: Yes

Section Name: Postoperative Events

DBTableName AdultData

Definition: Indicate whether the patient had an infection involving a thoracotomy or parasternal site.

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

LowValue: UsualRangeLow: ACCField: Not mapped

ReportField: No HighValue: UsualRangeHigh: NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Post-Op-Surgical Site Format: Text (categorical values Infection

specified by STS)

ParentShortName: SurSInf DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

DBTableName AdultData

Long Name: Post-Op-Infect-Conduit Harvest or Cannulation Site SeqNo: 5940

Short Name: Core: Yes **CILeg** Harvest: Yes

Section Name: Postoperative Events

Definition: Indicate whether the patient had an infection involving a conduit harvest or cannulation site

Must have ALL of the following conditions:

1. Wound opened with excision of tissue (I&D)

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

3. Treatment with antibiotics beyond perioperative prophylaxis

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

> ModelField: No PQRIField: No

Parent Long Name: Post-Op-Surgical Site

Infection

Format: Text (categorical values

specified by STS)

ParentShortName: SurSInf DataLength:

= "Yes" ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Comps-Infect-Arm SeqNo: 5950

Short Name: CIArm Core: No Section Name: Postoperative Events Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient had an infection involving an arm harvest site.

Must have one of the following conditions:

1. Wound opened with excision of tissue (I&D)

2. Positive culture

3. Treatment with antibiotics

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Post-Op-Wound Intervention - Open With Packing/Irrigation SeqNo: 5960

Short Name: WndIntOpen Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether wound intervention required within 30 days following procedure for wounds other

than sternotomy included leaving the incision open with packing/irrigation.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Surgical Site Format: Text (categorical values

Infection specified by STS)

ParentShortName: SurSInf DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

Long Name:Post-Op-Wound Intervention - Wound VacSeqNo:5970Short Name:WndIntWVacCore:YesSection Name:Postoperative EventsHarvest:Yes

DBTableName AdultData

Definition: Indicate whether wound intervention required within 30 days following procedure for wounds other

than sternotomy included wound vac.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Surgical Site Format: Text (categorical values

Infection specified by STS)

ParentShortName: SurSInf DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Comps-Infect-Septicemia SeqNo: 6000

Short Name: CISeptic Core: No

Section Name: Postoperative Events

Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient had septicemia (requires positive blood cultures) postoperatively.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name:Post-Op-SepsisSeqNo:6010Short Name:CSepsisCore:Yes

Section Name: Postoperative Events

Harvest: Yes

DBTableName AdultData

Definition: Sepsis is defined as evidence of serious infection accompanied by a deleterious systemic response.

In the time period of the first 48 postoperative or postprocedural hours, the diagnosis of sepsis requires the presence of a Systemic Inflammatory Response Syndrome (SIRS) resulting from a proven infection (such as bacteremia, fungemia or urinary tract infection). In the time period after the first 48 postoperative or postprocedural hours, sepsis may be diagnosed by the presence of a SIRS resulting from suspected or proven infection. During the first 48 hours, a SIRS may result from the stress associated with surgery and/or cardiopulmonary bypass. Thus, the clinical criteria for sepsis during this time period should be more stringent. A systemic inflammatory response syndrome (SIRS) is present when at least two of the following criteria are present: hypo- or hyperthermia (>38.5 or <36.0), tachycardia or bradycardia, tachypnea, leukocytosis or leukopenia,

and thrombocytopenia.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Post-Op-Sepsis-Positive Blood Cultures SeqNo: 6020

Short Name: CSepsisPBC Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a recognized pathogen is cultured from 1 or more blood cultures and is not related

to an infection at another site.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Sepsis Format: Text (categorical values

specified by STS)

ParentShortName: CSepsis DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Post-Op-Neuro-Stroke Perm SeqNo: 6030

Short Name: CNStrokP Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: 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.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

STS Adult Cardiac Database Version: 2.73

Long Name:Post-Op-Neuro-Transient Ischemic Attack - TIASeqNo:6040Short Name:CNStrokTTIACore:Yes

Short Name: CNStrokTTIA Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a postoperative Transient Ischemic Attack (TIA): Loss of

neurological function that was abrupt in onset but with complete return of function within 24 hours.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Comps-Neuro-Stroke Trans - RIND SeqNo: 6050

Short Name: CNStrokTRIND Core: No Section Name: Postoperative Events Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient had a postoperative Reversible Ischemic Neurologic Deficit (RIND):

Loss of neurological function with symptoms at least 24 hours after onset but with complete return

of function within 72 hours.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Long Name: Comps-Neuro-Cont Coma >= 24Hrs SeqNo: 6060

Short Name: CNComa Core: No
Section Name: Postoperative Events Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient had a new postoperative coma that persists for at least 24 hours

secondary to anoxic/ischemic and/or metabolic encephalopathy, thromboembolic event or cerebral

bleed.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Post-Op-Neuro-Coma/Encephalopathy SeqNo: 6070

Short Name: CNComaEnceph Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient developed a postoperative coma and/or encephalopathy.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 None

2 Anoxic

3 Embolic

4 Drug

5 Metabolic

6 Intracranial Bleeding

7 Other

Long Name: Post-Op-Neuro-Paralysis SeqNo: 6110

Short Name: CNParal Core: Yes

Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a new postoperative paralysis, paraparesis, or paraplegia related to

spinal cord ischemia and not related to a stroke.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Neuro-Paralysis Type SeqNo: 6120

Short Name: CNParalTy Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the new postoperative paralysis, paraparesis, or paraplegia was transient or

permanent.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op-Neuro-Paralysis Format: Text (categorical values

specified by STS)

ParentShortName: CNParal DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Transient

2 Permanent

Long Name: Post-Op-Pulm-Vent Prolonged SeqNo: 6130

Short Name: CPVntLng Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had prolonged pulmonary ventilator > 24 hours.

Include (but not limited to) causes such as ARDS, pulmonary edema, and/or any patient requiring

mechanical ventilation > 24 hours postoperatively.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Comps-Pulm-Pulm Embolism SeqNo: 6140

Short Name: CPPulEmb Core: No
Section Name: Postoperative Events Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient had a pulmonary embolism diagnosed by study such as V/Q scan,

angiogram, or spiral CT.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

Long Name: Post-Op-Pulm-Pneumonia SeqNo: 6150

Short Name: CPPneum Core: Yes

Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had Pneumonia diagnosed by any of the following: positive cultures of

sputum, transtracheal fluid, bronchial washings, and/or clinical findings consistent with the diagnosis of pneumonia (which may include chest x-ray diagnostic of pulmonary infiltrates).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Venous Thromboembolism-VTE SeqNo: 6160

Short Name: CVTE Core: Yes

Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient developed postoperative venous thrombosis or thromboembolic event.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PORIField:

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Post-Op-Pulmonary Thromboembolism SeqNo: 6170

Short Name: PulmEmb Core: Yes Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a pulmonary thromboembolism diagnosed by radiologic study such

as V/Q scan, angiogram, or spiral CT.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Venous Format: Text (categorical values

Thromboembolism-VTE specified by STS)

ParentShortName: CVTE DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Post-Op-Deep Venous Thrombosis SegNo: 6180

Short Name: DVT Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient had thrombosis (clot formation) in a deep vein.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Venous Format: Text (categorical values

Thromboembolism-VTE specified by STS)

ParentShortName: CVTE DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Version: 2.73

Long Name: Post-Op-Pleural Effusion Requiring Drainage SeqNo: 6190

Short Name: CPlEff Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether a postoperative pleural effusion required drainage via thoracentesis or chest tube

insertion.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Post-Op-Renal-Renal Failure SeqNo: 6200

Short Name: CRenFail Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had acute renal failure or worsening renal function resulting in ONE

OR BOTH of the following:

1. Increase of serum creatinine to > 2.0 AND 2x most recent preoperative creatinine level.

2. A new requirement for dialysis postoperatively.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complies DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

Version: 2.73

Long Name: Post-Op-Renal-Dialysis Req SeqNo: 6210

Short Name:CRenDialCore:YesSection Name:Postoperative EventsHarvest:Yes

DBTableName AdultData

Definition: Indicate whether the patient had a new requirement for dialysis postoperatively, which may include

hemodialysis, peritoneal dialysis.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op-Renal-Renal Failure Format: Text (categorical values

specified by STS)

ParentShortName: CRenFail DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Dialysis Duration SeqNo: 6220

Short Name: DialDur Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether dialysis was required after hospital discharge.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op-Renal-Dialysis Req Format: Text (categorical values

specified by STS)

ParentShortName: CRenDial DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

Yes

Version: 2.73

Long Name: Post-Op-Ultra Filtration SeqNo: 6230

Short Name: CUltraFil Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient required Ultra filtration.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Vasc-Iliac/Fem Dissect SeqNo: 6240

Short Name: CVallFem Core: Yes

Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a dissection occurring in the iliac or femoral arteries.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Post-Op-Vasc-Acute Limb Isch SeqNo: 6250

Short Name: CVaLbIsc Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had any complication producing limb ischemia. This may include

upper or lower limb ischemia.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complies DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Comps-Other-Heart Block SeqNo: 6260

Short Name: COtHtBlk Core: No Section Name: Postoperative Events Harvest: No

DBTableName AdultData

Definition: Indicate whether the patient had a new heart block requiring the implantation of a permanent

pacemaker of any type prior to discharge.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Long Name: Post-Op-Rhythm Disturbance Requiring Perm Device SeqNo: 6270

Short Name: CRhythmDis Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient developed a new dysrhythmia requiring insertion of a permanent device.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Pacemaker

2 ICD

3 Pacemaker/ICD

4 None

Long Name: Post-Op-Other-Card Arrest SeqNo: 6280

Short Name: COtArrst

Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had an acute cardiac arrest documented by one of the following:

a. Ventricular fibrillation

b. Rapid ventricular tachycardia with hemodynamic instability

c. Asystole

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Core:

Yes

Long Name: Post-Op-Other-Anticoag Event SeqNo: 6290

Short Name: COtCoag Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had bleeding, hemorrhage, and/or embolic events related to

anticoagulant therapy postoperatively.

This may include patients who experience Disseminated Intravascular Coagulopathy (DIC) or

Heparin Induced Thrombocytopenia (HIT).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complies DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Long Name: Post-Op-Other-Tamponade Non-Surgical Intervention SeqNo: 6300

Short Name: COtTamp Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had fluid in the pericardial space compromising cardiac filling, and

requiring intervention other than returning to the operating room, such as pericardiocentesis.

This should be documented by either:

1. Echo showing pericardial fluid and signs of tamponade such as right heart compromise, or

2. Systemic hypotension due to pericardial fluid compromising cardiac function

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

Yes

2 No

Version: 2.73

Version: 2.73

Long Name: Post-Op-Other-GI Event SeqNo: 6310

Short Name: COtGI Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a postoperative occurrence of any GI event, including but not

limited to:

a. GI bleeding requiring transfusion

b. Pancreatitis with abnormal amylase/lipase requiring nasogastric (NG) suction therapy

c. Cholecystitis requiring cholecystectomy or drainage

d. Mesenteric ischemia requiring exploration

e. Hepatic failuref. Prolonged ileusg. Clostridium difficile

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complies DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Post-Op-Other-Multi Sys Fail SeqNo: 6320

Short Name: COtMSF Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had two or more major organ systems suffer compromised functions.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complies DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Other-A Fib SeqNo: 6330

Short Name: COtAFib Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: 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.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Ao Dissect SeqNo: 6340

Short Name: CVaAoDis Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had a dissection occurring in any part of the aorta.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Post-Op-Recurrent Laryngeal Nerve Injury SeqNo: 6341

Short Name: RecLarynNrvInj Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient has symptoms of recurrent laryngeal nerve injury, (e.g., horseness,

difficulty speaking, etc.).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complics DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Phrenic Nerve Injury SeqNo: 6342

Short Name: PhrenNrvInj Core: Yes
Section Name: Postoperative Events Harvest: Yes

DBTableName AdultData

Definition: Indicate whether patient has symptoms of recurrent phrenic nerve injury, (e.g., immobility or

elevation of the diaphragm, etc.).

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complies DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Post-Op-Other-Other SeqNo: 6350

Short Name:COtOtherCore:YesSection Name:Postoperative EventsHarvest:Yes

DBTableName AdultData

Definition: Indicate whether a postoperative event occurred that is not identified in the categories above yet

impacts hospital length of stay and/or outcome.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Post-Op Events Format: Text (categorical values

specified by STS)

ParentShortName: Complies DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Mort-Mortality SeqNo: 6360

Short Name: Mortalty Core: Yes
Section Name: Mortality Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient has been declared dead within this hospital or any time after discharge

from this hospitalization. This includes all causes of death, including those causes clearly unrelated

to the operation.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Version: 2.73

Long Name: Mort-DC Status SeqNo: 6370

Short Name: MtDCStat Core: Yes Section Name: Mortality Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient was alive or dead AT discharge from the hospitalization in which

surgery occurred.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Alive
2 Dead

Long Name: Mort-30d Status SeqNo: 6380

Short Name: Mt30Stat Core: Yes
Section Name: Mortality Harvest: Yes

DBTableName AdultData

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

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Alive

2 Dead

3 Unknown

Version: 2.73

Long Name: Mort-Op Death-Method Of Verification SeqNo: 6381

Short Name: Mt30StatMeth Core: Yes Section Name: Mortality Harvest: Yes

DBTableName AdultData

Definition: Indicate the primary method used to verify the patient's 30-day mortality status.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Format: Text (categorical values

specified by STS)

ParentShortName: DataLength:

ParentValue: Data Source: User

Harvest Codes:

Code: Value:

1 Phone call to patient or family

2 Letter from medical provider

3 Evidence of life in medical record (lab tests, cardiac rehab visits, etc.)

4 Office visit to surgeon more than 30 days after procedure

5 Social Security Death Master File

6 Other

Long Name: Mort-Op Death SeqNo: 6390

Short Name: MtOpD Core: Yes Section Name: Mortality Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient had an operative mortality: Includes both (1) all deaths occurring

during the acute episode of care in which the operation was performed (this includes patients transferred to other acute care facilities), even if after 30 days; and (2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure unless the cause of death is clearly

unrelated to the operation.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Mort-Mortality Format: Text (categorical values

specified by STS)

ParentShortName: Mortalty DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Mort-Date SeqNo: 6400

Short Name: MtDate Core: Yes
Section Name: Mortality Harvest: Yes

DBTableName AdultData

Definition: Indicate the date the patient was declared dead.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Mort-Mortality Format: Date mm/dd/yyyy

ParentShortName: Mortalty DataLength:

ParentValue: = "Yes" Data Source: User

Long Name:Mort-LocationSeqNo:6410Short Name:MtLocatnCore:Yes

Section Name: Mortality

Harvest: Yes

DBTableName AdultData

Definition: Indicate the patient's location at time of death.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Mort-Mortality Format: Text (categorical values

specified by STS)

ParentShortName: Mortalty DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Operating Room (OR) During Initial Surgery

- 2 Hospital (Other Than Operating Room)
- 3 Home
- 7 Extended Care Facility
- 8 Hospice
- 9 Acute Rehabilitation
- 5 Operating Room (OR) During Reoperation
- 6 Unknown
- 10 Other

Long Name: Mort-Prim Cause SeqNo: 6420

Short Name: MtCause Core: Yes Section Name: Mortality Harvest: Yes

DBTableName AdultData

Definition: Indicate the PRIMARY cause of death, i.e., the first significant abnormal event which ultimately led

to death.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Mort-Mortality Format: Text (categorical values

specified by STS)

ParentShortName: Mortalty DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Cardiac

2 Neurologic

3 Renal

4 Vascular

5 Infection

5 Pulmonary

7 Valvular

700 Unknown

777 Other

Version: 2.73

Long Name: ADP Inhibitors - Discharge SeqNo: 6430

Short Name: DCADP Core: Yes
Section Name: Discharge Harvest: Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on ADP Inhibitors.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

ParentValue: = "Alive" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Antiarrhythmics - Discharge SeqNo: 6440

Short Name: DCAArhy Core: Yes
Section Name: Discharge Harvest: Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on antiarrhythmics.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

ParentValue: = "Alive" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

Version: 2.73

Long Name: Antiarrhythmics - Discharge - Medication Name SeqNo: 6450

Short Name: DCAArMN Core: No Section Name: Discharge Harvest: No

DBTableName AdultData

Definition: Indicate the name of the antiarrhythmic medication the patient was on when discharged from the

facility.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Antiarrhythmics - Discharge Format: Text (categorical values

specified by STS)

ParentShortName: DCAArhy DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Amiodarone

2 Other

Long Name: Aspirin - Discharge SeqNo: 6460

Short Name: DCASA Core: Yes
Section Name: Discharge Harvest: Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on Aspirin, or if it was

contraindicated. The contraindication must be documented in the medical record by a physician,

nurse practitioner, or physician assistant.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

ParentValue: = "Alive" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

3 Contraindicated

Long Name: ACE or ARB Inhibitors - Discharge SeqNo: 6470

Short Name: DCACE Core: Yes
Section Name: Discharge Harvest: Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on ACE or ARB Inhibitors, or if it

was contraindicated or not indicated. The contraindication must be documented in the medical

record by a physician, nurse practitioner, or physician assistant.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

ParentValue: = "Alive" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

4 No, contraindicated

5 No. not indicated

Long Name: Beta Blockers - Discharge SeqNo: 6480

Short Name: DCBeta Core: Yes
Section Name: Discharge Harvest: Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged on beta blockers, or if beta blocker was

contraindicated or not indicated. The contraindication must be documented in the medical record by

a physician, nurse practitioner, or physician assistant.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

ParentValue: = "Alive" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

3 Contraindicated

Long Name: Lipid Lowering - Discharge SeqNo: 6490

Short Name: DCLipid Core: Yes
Section Name: Discharge Harvest: Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged on a statin or lipid lowering medication, or if it

was contraindicated or not indicated. The contraindication must be documented in the medical

record by a physician, nurse practitioner, or physician assistant.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: Yes

ModelField: No PQRIField: No

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

ParentValue: = "Alive" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

3 Contraindicated

Long Name: Lipid Lowering - Discharge - Medication Type SeqNo: 6500

Short Name: DCLipMT Core: Yes
Section Name: Discharge Harvest: Yes

DBTableName AdultData

Definition: Indicate the type of Lipid Lowering medication the patient was on when discharged from the facility.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Lipid Lowering - Discharge Format: Text (categorical values

specified by STS)

ParentShortName: DCLipid DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

1 Statin

2 Non statin

3 Both

4 Other

Long Name:Coumadin - DischargeSeqNo:6510Short Name:DCCoumCore:YesSection Name:DischargeHarvest:Yes

Section Name: Discharge

DBTableName AdultData

Definition: Indicate whether the patient was discharged from the facility on Coumadin.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

ParentValue: = "Alive" Data Source: User

Harvest Codes:

Code: Value:

1 Yes
2 No

Long Name: Direct Thrombin Inhibitors - Discharge SeqNo: 6511

Short Name: DCDirThromIn Core: Yes
Section Name: Discharge Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient was discharged from the facility on a direct thrombin inhibitor.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: NQFField:

ModelField: PQRIField:

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

ParentValue: = "Alive" Data Source: User

Harvest Codes:

Code: Value:
1 Yes
2 No

Long Name: Discharge Location SeqNo: 6520

Short Name: DisLoctn Core: Yes Section Name: Discharge Harvest: Yes

DBTableName AdultData

Definition: Indicate the location to where the patient was discharged.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

ParentValue: = "Alive" Data Source: User

Harvest Codes:

Code: Value:

1 Home

2 Extended Care/Transitional

Care Unit/Rehab

3 Other Hospital

4 Nursing Home

5 Hospice

777 Other

Version: 2.73

Long Name: Cardiac Rehabilitation Referral SeqNo: 6530

Short Name: CardRef Core: Yes
Section Name: Discharge Harvest: Yes

DBTableName AdultData

Definition: Indicate whether advice was given or discussion conducted with the patient (by physician, nurse, or

other personnel) regarding the importance of joining a cardiac rehabilitation program, or an

appointment made.

LowValue: UsualRangeLow: ACCField: Mapped - Definition and coding

HighValue: UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

ParentValue: = "Alive" Data Source: User

Harvest Codes:

Code: Value:
1 Yes

2 No

3 Not Applicable

Long Name: Smoking Cessation Counseling SeqNo: 6540

Short Name:SmokCounCore:YesSection Name:DischargeHarvest:Yes

DBTableName AdultData

Definition: Indicate whether, prior to discharge from the acute care facility, the patient received smoking

cessation counseling. Please select "Not Applicable" for those patients with no prior history of

smoking or remote (more than 1 year) history.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: Yes NOFField: No

ModelField: No PQRIField: No

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

ParentValue: = "Alive" Data Source: User

Harvest Codes:

Code: Value:

1 Yes

3 Not Applicable

Long Name: Readmit <= 30 Days from DOP SegNo: 6550

Short Name: Readm30 Core: Yes Section Name: Readmission Harvest: Yes

DBTableName AdultData

Definition: Indicate whether the patient was readmitted to an acute care facility as an in-patient within 30 days

> from the date of initial surgery for ANY reason. This includes readmissions to acute care, primary care institutions only. Do not include readmissions to rehabilitation hospital, or nursing home.

LowValue: ACCField: UsualRangeLow: Not mapped

UsualRangeHigh: NOFField: No HighValue: ReportField: Yes

> ModelField: No PQRIField: No

Parent Long Name: Mort-DC Status Format: Text (categorical values

specified by STS)

ParentShortName: MtDCStat DataLength:

= "Alive" ParentValue: Data Source: User

Harvest Codes:

Code: Value: 1 Yes 2 No

Readmit Reason SeqNo: 6560 Long Name:

Short Name: ReadmRsn Core: Yes Section Name: Readmission Harvest: Yes

DBTableName AdultData

Indicate the primary reason that the patient was readmitted as an in-patient within 30 days from the Definition:

date of initial surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NOFField: No

> ModelField: No PQRIField: No

Parent Long Name: Readmit <= 30 Days from Format: Text (categorical values

specified by STS)

ParentShortName: Readm30 DataLength:

= "Yes" ParentValue: Data Source: User

Harvest Codes:

Code: Value:

Anticoagulation

Complication - Valvular

- 21 Anticoagulation Complication -Pharmacological
- 2 Arrhythmia/Heart Block
- 3 Congestive Heart Failure
- 5 Myocardial Infarction and/or Recurrent Angina
- 6 Pericardial Effusion and/or Tamponade
- 7 Pneumonia or other Respiratory Complication
- 22 Coronary Artery Dysfunction
- 8 Valve Dysfunction
- 9 Infection Deep Sternum / Mediastinitis
- 23 Infection Conduit Harvest Site
- 14 Renal Failure
- 15 TIA
- 18 Permanent CVA
- 19 Acute Vascular Complication
- 24 Subacute Endocarditis
- 25 VAD Complication
- 26 Transplant Rejection
- 28 PE
- 27 DVT
- 998 Other Related Readmission
- 999 Other Nonrelated Readmission

Version: 2.73

Long Name: Readmit Reason - Primary Procedure SeqNo: 6570

Short Name: ReadmPro Core: Yes Section Name: Readmission Harvest: Yes

DBTableName AdultData

Definition: Indicate the primary procedure that the patient received after being readmitted as an in-patient

within 30 days from the date of initial surgery.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Readmit <= 30 Days from Format: Text (categorical values

DOP specified by STS)

ParentShortName: Readm30 DataLength:

ParentValue: = "Yes" Data Source: User

Harvest Codes:

Code: Value:

10 OR for Bleeding

20 Pacemaker insertion/AICD

30 PCI

40 Pericardiotomy/Pericardiocent

esis

50 OR for Coronary Arteries

60 OR for Valve

70 OR for Sternal

Debridement/Muscle Flap

80 Dialysis

90 OR for Vascular

700 No Procedure Performed

710 Other Procedure

720 Unknown

Long Name: Risk Model Coefficients Version Number SeqNo: 6580

Short Name: PredCoefVrsn Core: No Section Name: Risk Scores Harvest: No

DBTableName AdultData

Definition: The version number of the set of coefficients used in the risk models to calculate the risk scores for

this record. The value is inserted into the record at the time the risk calculations are performed. The

version numbers will be specified by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text

ParentShortName: DataLength:

ParentValue: Data Source: Automatic

Long Name: Predicted Risk of Mortality SeqNo: 6590

Short Name: PredMort Core: Yes
Section Name: Risk Scores Harvest: Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Mortality.

LowValue: 0.000 UsualRangeLow: ACCField: Not mapped

HighValue: 100.000 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real number, at least 0.3 digits

(3 decimal places

ParentShortName: DataLength:

ParentValue: Data Source: Calculated

Version: 2.73

Version: 2.73

Long Name: Predicted Deep Sternal Wound Infx SeqNo: 6600

Short Name: PredDeep Core: Yes
Section Name: Risk Scores Harvest: Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Deep Sternal Wound Infection.

LowValue: 0.000 UsualRangeLow: ACCField: Not mapped

HighValue: 100.000 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real number, at least 0.3 digits

(3 decimal places

ParentShortName: DataLength:

ParentValue: Data Source: Calculated

Long Name: Predicted Reoperation SeqNo: 6610

Short Name: PredReop Core: Yes
Section Name: Risk Scores Harvest: Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Reoperation.

LowValue: 0.000 UsualRangeLow: ACCField: Not mapped

HighValue: 100.000 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real number, at least 0.3 digits

(3 decimal places

ParentShortName: DataLength:

Version: 2.73

Long Name: Predicted Permanent Stroke SeqNo: 6620

Short Name: PredStro Core: Yes
Section Name: Risk Scores Harvest: Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Permanent Stroke.

LowValue: 0.000 UsualRangeLow: ACCField: Not mapped

HighValue: 100.000 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real number, at least 0.3 digits

(3 decimal places

ParentShortName: DataLength:

ParentValue: Data Source: Calculated

Long Name:Predicted Prolonged VentilationSeqNo:6630Short Name:PredVentCore:YesSection Name:Risk ScoresHarvest:Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Prolonged Ventilation.

LowValue: 0.000 UsualRangeLow: ACCField: Not mapped

HighValue: 100.000 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real number, at least 0.3 digits

(3 decimal places

ParentShortName: DataLength:

Version: 2.73

Long Name: Predicted Renal Failure SeqNo: 6640

Short Name: PredRenF Core: Yes
Section Name: Risk Scores Harvest: Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Renal Failure.

LowValue: 0.000 UsualRangeLow: ACCField: Not mapped

HighValue: 100.000 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real number, at least 0.3 digits

(3 decimal places

ParentShortName: DataLength:

ParentValue: Data Source: Calculated

Long Name: Predicted Morbidity or Mortality SeqNo: 6650

Short Name: PredMM Core: Yes
Section Name: Risk Scores Harvest: Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Morbidity or Mortality.

LowValue: 0.000 UsualRangeLow: ACCField: Not mapped

HighValue: 100.000 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real number, at least 0.3 digits

(3 decimal places

ParentShortName: DataLength:

Version: 2.73

Long Name: Predicted Short Length of Stay SeqNo: 6660

Short Name: Pred6D Core: Yes
Section Name: Risk Scores Harvest: Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Short Length of Stay.

LowValue: 0.000 UsualRangeLow: ACCField: Not mapped

HighValue: 100.000 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real number, at least 0.3 digits

(3 decimal places

ParentShortName: DataLength:

ParentValue: Data Source: Calculated

Long Name: Predicted Long Length of Stay SeqNo: 6670

Short Name: Pred14D Core: Yes
Section Name: Risk Scores Harvest: Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Long Length of Stay.

LowValue: 0.000 UsualRangeLow: ACCField: Not mapped

HighValue: 100.000 UsualRangeHigh: ReportField: Yes NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real number, at least 0.3 digits

(3 decimal places

ParentShortName: DataLength:

Version: 2.73

Long Name: STS Custom Numeric Field 1 SeqNo: 6680

Short Name: STSCustNum1 Core: Yes
Section Name: STS Custom Fields Harvest: Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to

be collected before a data specification upgrade can be completed. Users should not store any data

in this field except as explicitly stated by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: STS Custom Numeric Field 2 SeqNo: 6690

Short Name: STSCustNum2 Core: Yes Section Name: STS Custom Fields Harvest: Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to

be collected before a data specification upgrade can be completed. Users should not store any data

in this field except as explicitly stated by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Version: 2.73

Long Name: STS Custom Numeric Field 3 SeqNo: 6700

Short Name: STSCustNum3 Core: Yes
Section Name: STS Custom Fields Harvest: Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to

be collected before a data specification upgrade can be completed. Users should not store any data

in this field except as explicitly stated by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: STS Custom Numeric Field 4 SeqNo: 6710

Short Name: STSCustNum4 Core: Yes Section Name: STS Custom Fields Harvest: Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to

be collected before a data specification upgrade can be completed. Users should not store any data

in this field except as explicitly stated by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: STS Custom Numeric Field 5 SeqNo: 6720

Short Name: STSCustNum5 Core: Yes
Section Name: STS Custom Fields Harvest: Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to

be collected before a data specification upgrade can be completed. Users should not store any data

in this field except as explicitly stated by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Real

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: STS Custom Text Field 1 SeqNo: 6730

Short Name: STSCustTxt1 Core: Yes
Section Name: STS Custom Fields Harvest: Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to

be collected before a data specification upgrade can be completed. Users should not store any data

in this field except as explicitly stated by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NOFField: No

ModelField: No PQRIField: Yes

Parent Long Name: Format: Text length 100

ParentShortName: DataLength:

ParentValue: Data Source: User

Version: 2.73

Version: 2.73

Long Name: STS Custom Text Field 2 SeqNo: 6740

Short Name: STSCustTxt2 Core: Yes
Section Name: STS Custom Fields Harvest: Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to

be collected before a data specification upgrade can be completed. Users should not store any data

in this field except as explicitly stated by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text length 100

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: STS Custom Text Field 3 SeqNo: 6750

Short Name: STSCustTxt3 Core: Yes Section Name: STS Custom Fields Harvest: Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to

be collected before a data specification upgrade can be completed. Users should not store any data

in this field except as explicitly stated by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NOFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text length 100

ParentShortName: DataLength:

ParentValue: Data Source: User

Version: 2.73

Long Name: STS Custom Text Field 4 SeqNo: 6760

Short Name: STSCustTxt4 Core: Yes
Section Name: STS Custom Fields Harvest: Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to

be collected before a data specification upgrade can be completed. Users should not store any data

in this field except as explicitly stated by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text length 100

ParentShortName: DataLength:

ParentValue: Data Source: User

Long Name: STS Custom Text Field 5 SeqNo: 6770

Short Name: STSCustTxt5 Core: Yes Section Name: STS Custom Fields Harvest: Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to

be collected before a data specification upgrade can be completed. Users should not store any data

in this field except as explicitly stated by the STS.

LowValue: UsualRangeLow: ACCField: Not mapped

HighValue: UsualRangeHigh: ReportField: No NQFField: No

ModelField: No PQRIField: No

Parent Long Name: Format: Text length 100

ParentShortName: DataLength:

ParentValue: Data Source: User