NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF QUALITY AND PATIENT SAFETY
CARDIAC SERVICES PROGRAM

Instructions and Data Element Definitions
January 2013

Cardiac Surgery Report, Pediatric
(Under age 18)
Form DOH-2254p

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Revision Highlights and Coding Clarification

There are no changes for 2013 data collection. The following are included here as reminders of recent changes.

Recently Added Data Elements

Interventional Cardiologist - A field has been added to collect the NYS Physician License number of interventional cardiologist if the surgical procedure included both surgical and interventional components.

Recently Revised Data Elements

Start time is now collected as time of first skin incision.

Diagnosis #1 is now the Fundamental Diagnosis.
Diagnosis #2 is now the Primary Diagnosis.
Diagnosis #3 - #5 are now Additional Diagnosis #1 - #3.

Procedure #1 is now the Primary Procedure
Procedures #2 - #4 are now Additional Procedures #1 - #3.

The Procedure Code List (Attachment D) and Diagnosis Code List (Attachment E) have been updated. These code sets are compatible with those reported to the STS Congenital Heart Surgery Database v3.0 and are used with permission.

Pulmonary Hypertension has been renamed “Near Systemic PVR.” The definition is unchanged.

Recent Data Element Clarifications

Please see “When to Complete A PedCSRS” form for revised clarifications on what procedures should be reported to PedCSRS.
When to Complete a Pediatric CSRS Form

Complete a Pediatric Cardiac Surgery Reporting System (Pediatric CSRS) form for every patient under the age of 18 at the time of admission undergoing one or more surgical operations on the heart or great vessels, with or without extracorporeal circulation.

Complete a Pediatric CSRS form only for procedures that include a surgical intervention on the heart or great vessels. Procedure codes for other types of interventions may be used (as space permits) to indicate non-surgical and/or non-cardiac components of a cardiac surgery. However, non-surgical and non-cardiac procedures are not “form generating”. This means that performing one of these procedures by itself, with no cardiac surgical procedure at the same time, is not reportable.

If more than one cardiac surgery occurred during a single hospital stay, complete a separate form for each operation.

Unless otherwise specified, forms should be created for reportable cardiac surgery even if it occurs in a location other than the operating room.

A surgical procedure begins at the time of the FIRST skin incision, unless otherwise stated.

Examples of procedures that are not “form generating” include but are not limited to the following codes found in Attachment D:

- **Thoracic and Mediastinal Disease**
  - Lung biopsy (1400)
  - Lung procedure, Other (1420)
  - Pectus repair (1430)
  - Tracheal procedure (1440)
- **Interventional Cardiology Procedures – All Listed**
- **Anesthetic Procedures - All Listed**
- **Pericardial Disease**
  - Pericardial drainage procedure (920)
- **Thoracic Arteries and Veins**
  - PDA closure, Device using transcatheter technique (1340)
- **Electrophysiological Procedures**
  - Pacemaker implant, Permanent (1450)
  - Pacemaker procedure (1460)
  - Explantation of pacing system (2350)
  - ICD [AICD] implantation (1470)
  - ICD [AICD] procedure (1480)
When to Complete a Pediatric CSRS Form (cont.)

Examples of procedures that are not form generating (continued)

- **Mechanical Support**
  - ECMO decannulation (2370)
  - IABP insertion (1900)
  - VAD explantation (2390)

- **Miscellaneous Procedures**
  - Pleural drainage procedure (1810)
  - Pleural procedure, Other (1820)
  - Ligation, Thoracic duct (1830)
  - Decortication (1840)
  - Esophageal procedure (1850)
  - Mediastinal procedure (1860)
  - Bronchoscopy (1870)
  - Diaphragm plication (1880)
  - Diaphragm procedure, Other (1890)
  - VATS – video assisted thoracoscopic surgery (1930)
  - Minimally invasive procedure (1940)
  - Bypass for non-cardiac lesion (1950)
  - Delayed sternal closure (1960)
  - Mediastinal exploration (1970)
  - Sternotomy wound drainage (1980)
  - Thoracotomy, Other (1990)
  - Cardiotomy, Other (2000)
  - Thoracic and/or mediastinal procedure, Other (2020)
  - Peripheral vascular procedure, Other (2030)
  - Miscellaneous procedure, Other (2040)
  - Organ procurement (2050)
  - Other procedure (7777)

**PDA closure, Surgical (1330)** is form generating only when performed in the operating room on a baby weighing at least 1500 grams. If done at the same time as another cardiac surgical procedure, it should always be reported. This is consistent with the prior PedCSRS instruction to not report an isolated PDA on patients less than 1500g or if performed anywhere other than the operating room.

**ECMO cannulation (2360):** Is form generating only when there is also another PedCSRS reportable procedure during the admission. For these cases, ECMO should be reported regardless of physical location or clinical staff responsible.

**Cardiac procedure, Other (2010):** Should not be reported for procedures that are not cardiac or that are not surgical. Operative notes will be requested as part of the validation process for cases reported with this procedure code.
Pediatric CSRS Data Reporting Policies

Hospice Policy

Beginning with patients discharged on or after January 1, 2003, any patient that is discharged from the hospital after cardiac surgery or PCI to hospice care (inpatient or home with hospice care) and is still alive 30 days after the discharge from the hospital will be analyzed as a live discharge.

All patients discharged to a hospice or home with hospice care should continue to be reported with Discharge Status – 12: Hospice. If a patient is still alive 30 days after discharge to hospice, whether in hospice or not, appropriate supporting documentation should be sent to Cardiac Services Program. Examples of appropriate documentation include: a dated progress note from the hospice service, evidence of a follow-up doctor’s visit 30 days after discharge, evidence of subsequent hospital admission 30 days after initial discharge. It will be the responsibility of the hospital (physician) to send documentation to the Department of Health to support this change. Upon receipt, review, and verification of the documentation, Cardiac Services Program staff will change the discharge status from dead to alive for purposes of analysis. All documentation must be received before the final volume and mortality for a given year of data is confirmed by the hospital.

Reporting Schedule

Pediatric CSRS data is reported quarterly by discharge date. It is due to the Cardiac Services Program two months after the end of the quarter. The 2012 reporting schedule is as follows.

Quarter 1 (1/1/13 – 3/31/13 Discharges) due on or before May 31, 2013
Quarter 2 (4/1/13 – 6/30/13 Discharges) due on or before August 31, 2013
Quarter 3 (7/1/13 – 9/30/13 Discharges) due on or before November 30, 2013
Quarter 4 (10/1/13 – 12/31/13 Discharges) due on or before February 28, 2014

Limited extensions to the above deadlines will be granted on a case by case basis when warranted by extenuating circumstances. They must be requested in writing prior to the required submission date.
Item-by-Item Instructions

PFI Number
Variable Name:  PFI

The PFI Number is a Permanent Facility Identifier assigned by the Department of
Health. Enter your facility’s PFI Number as shown in Attachment A.

Sequence Number
Variable Name:  SEQUENCE

If your facility assigns a sequence number to each case on a chronological flow
sheet or similar log, enter the sequence number here. The sequence number is
not required for the Pediatric Cardiac Surgery Reporting System, but has been
included on the form in case your facility finds it useful in identifying and tracking
cases.

I. Patient Information

Child’s Name
Variable Names:  LASTNAME, FIRSTNAME

Enter the child’s last name followed by his/her first name.

Medical Record Number
Variable Name:  MEDRECNO

Enter the child’s medical record number.

Child’s Social Security Number
Variable Name:  SSNO

Enter the child’s social security number.
Patient Information (continued)

Age in Years

Variable Name: AGE

Enter the child’s age at admission to the hospital. If the child is less than one year old, enter “0”. If the child is admitted on or after his/her 18th birthday, please complete an Adult CSRS form NOT a Pediatric CSRS form.

Date of Birth

Variable Name: DOB

Enter the child’s exact date of birth.

Sex

Variable Name: SEX

Check the appropriate box.

Ethnicity

Variable Name: ETHNIC

Check the appropriate box.

Race

Variable Names: RACE, RACESPEC

Select one of the following.

1 - White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

2 - Black or African American. 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."

3 - Native American / American Indian or Alaska Native. 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.
Patient Information (continued)

Race (cont.)

4 - Asian. 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.

5 - Native Hawaiian or Other Pacific Islander. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

8 - Other. Report for those responses that are not covered by an above category. Please provide the specific race for any case marked “Other.”

Note: Please note that race should be based on the patient’s racial/ethnic origins, which is not necessarily the same as their country or place of origin.

Multi-racial can be indicated by checking “8-Other” and providing details in the “specify” field.

For White Hispanics, check "White"; for Black Hispanics, check "Black."

Residence Code

Variable Names: RESIDENC, STATE

Enter the county code of the patient’s principal residence, as shown in Attachment B. If the patient lives outside of New York State, use code 99 and print the name of the state or country where the patient resides in the space provided. If you enter a valid NYS County Code then the ‘State or Country” field should be left blank.

If the patient is from a foreign country, but is staying in the US during the pre-operative and post-operative time period, you must enter 99 and print the name of the country that the patient is from. Do not enter the residence code of where the patient is staying while in the United States.

Hospital Admission Date

Variable Name: ADMIDATE

Enter the date that the current hospital stay began.
Patient Information (continued)

**Primary Payer**

*Variable Name: PAYER*

Enter the primary source of payment for this hospital stay as shown in Appendix C.

**Interpretation: Primary Payer and Medicaid**

For “Medicaid Pending” code Primary Payer as “11 - Self-Pay” and check the box for Medicaid.

Please note the difference between “07 - Other Private Insurance Company” and “19 - Other”. Code 07 refers to a Private Insurance Company (also referred to as “Commercial” insurance) that is not listed elsewhere. Use Code 19 for any other type of insurance that is not given a code of its own (e.g. Corrections).

Code a PPO (Preferred Provider Organization) as Code 06 – HMO/Managed Care.

If you know a patient has Medicare or Medicaid, but do not know if it is Fee for Service or Managed Care, code Fee for Service.

**Medicaid**

*Variable Name: MEDICAID*

Check this box if the patient has Medicaid that will provide payment for any portion of this hospital stay. If the patient’s primary payer is Medicaid, check this box in addition to entering “03” or “04” under Primary Payer.

**PFI of Transferring Hospital**

*Variable Name: TRANS_PFI*

If the patient was transferred from another acute care facility, enter the PFI of the transferring hospital.

This element only needs to be completed for transfer patients.

A listing of PFIs for cardiac diagnostic centers in New York State (NYS) is provided in Attachment A. If transferred from a Veterans Administration hospital in NYS, enter "8888"; if transferred from outside NYS, enter "9999". For patients transferred from another hospital in NYS, please see http://hospitals.nyhealth.gov for a complete listing of NYS hospitals, including their PFI.
II. Procedural Information

**REMEMINDER:** Complete a separate pediatric cardiac surgery form for each surgery involving the heart or great vessels during the current hospital admission.

**Date of Surgery**
*Variable Name: SURGDATE*

Enter the date on which the cardiac surgical procedure was performed.

Remember to fill out a separate pediatric cardiac surgery form for each cardiac surgery that occurred during the admission.

**Time of First Skin Incision**
*Variable Names: SURGHHOUR, SURGMIN*

Enter the time of the first skin incision for this procedure, using military time (e.g. 1:00 am is 01:00, and 1:00 pm is 13:00).

**Primary Surgeon Performing Surgery**
*Variable Name: PHYSNUM*

Enter the name and NYS physician license number of the primary or principal surgeon who performed the cardiac surgical procedure(s).

**Note:** Primary Surgeon name is included on the paper form for abstractor convenience. It is not part of the PedCSRS file structure.

**Interventional Cardiologist**
*Variable Name: CARDNUM*

Enter the name and NYS physician license number of the interventional cardiologist participating in the case if this surgical procedure also included an interventional component.

**Note:** Interventional Cardiologist name is included on the paper form for abstractor convenience. It is not part of the PedCSRS file structure.
II. Procedural Information (continued)

**Surgical Priority**

*Variable Name: PRIORITY*

Check the appropriate box.

**Elective:** All cases not classified as urgent or emergency as defined below.

**Urgent:** The patient is too ill or unstable to be discharged from the hospital, but is not classified as an emergency as defined below.

This includes patients with ductal-dependent systemic or pulmonary circulation.

**Emergency:** Patients with cardiac compromise or circulatory compromise of the cardiac organ.

Typical emergency patients include those with obstructed anomalous pulmonary venous return and those with ductal-dependent systemic or pulmonary circulation in whom ductal patency cannot be maintained.

**Prior Surgery this Admission**

*Variable Names: PRIOSURG, PRIODATE*

Check the appropriate box to indicate whether the patient underwent any cardiac surgery prior to this one during the current hospital admission.

If “Yes” then the date of the most recent previous cardiac operation **MUST** be entered.
II. Procedural Information (continued)

**Fundamental Diagnosis**

*Variable Names: DIAG1*

The fundamental diagnosis is a diagnosis that is carried with a patient throughout life, through all operations and hospitalizations. The fundamental diagnosis is the most complex cardiac anomaly or condition (congenital or acquired) of the patient.

No “Status - post diagnoses” can be a primary diagnosis or fundamental diagnosis.

Most frequently, the primary diagnosis will also be the fundamental diagnosis. For some operations, however, the fundamental diagnosis and primary diagnosis will be different.

For example, a patient who has a complete AV canal defect and undergoes either palliation or repair of the defect has a primary and fundamental diagnosis of “AVC (AVSD), Complete CAVSD”. Subsequently, the child develops mitral insufficiency and is re-hospitalized for mitral valve replacement. The primary diagnosis for the mitral valve replacement operation is “Mitral regurgitation”, but the fundamental diagnosis is “AVC (AVSD), Complete CAVSD.”

**Coding Note:** The definition of Fundamental Diagnosis (*DIAG1*) and the Congenital Diagnosis Codes in Attachment E are aligned with STS Congenital Heart Surgery Database v3.0 data element 430.

*Society of Thoracic Surgeons, Congenital Heart Surgery Database, Version 3.0, used with permission.*

**Primary Diagnosis**

*Variable Names: DIAG2*

Indicate the diagnosis of primary importance at the time of this surgical procedure.

No “Status - post diagnoses” can be a primary diagnosis or fundamental diagnosis.

Example: fundamental diagnosis of Tetralogy of Fallot. The current Diagnoses are both pulmonary insufficiency and residual ventricular septal defect. In this case, pulmonary insufficiency will be flagged as the primary diagnosis.

**Coding Note:** The definition of Primary Diagnosis (*DIAG2*) and the Congenital Diagnosis Codes in Attachment E are aligned with STS Congenital Heart Surgery Database v3.0 data element 870.

*Society of Thoracic Surgeons, Congenital Heart Surgery Database, Version 3.0, used with permission.*
II. Procedural Information (continued)

Additional Cardiac Diagnosis Codes (#1 - #3)
Variable Names: DIAG3, DIAG4, DIAG5

Report up to three additional diagnoses. Indicate up to three diagnoses noted at the time of the surgical procedure or documented by preoperative studies.

Coding Note: The Congenital Diagnosis Codes in Attachment E are aligned with those used in STS Congenital Heart Surgery Database v3.0 data element 870.
*Society of Thoracic Surgeons, Congenital Heart Surgery Database, Version 3.0, used with permission.

Primary Procedure Code
Variable Names: PROC1

Use the codes in Attachment D to report the PRIMARY procedure performed during this surgical procedure.

Coding Note: The definition of Primary Procedure (PROC1) and the Procedure Codes in Attachment D are aligned with STS Congenital Heart Surgery Database v3.0 data element 910.
*Society of Thoracic Surgeons, Congenital Heart Surgery Database, Version 3.0, used with permission.

Additional Cardiac Procedure Codes (#1 - #3)
Variable Names: PROC2, PROC3, PROC4

Use the procedure codes listed in Attachment D to indicate additional procedure(s) performed during this operation.

Do not repeat the procedure reported as Primary Procedure in these fields.

If there are more than 3 additional procedures, select procedure codes that are both cardiac and surgical in order of significance first. You may use additional spaces for non-surgical interventions that take place during the procedure or portions of the procedure that are not primarily directed at the heart or great vessels only as space permits.

Coding Note: The Procedure Codes in Attachment D are aligned with those used in the STS Congenital Heart Surgery Database v3.0 data element 900.
*Society of Thoracic Surgeons, Congenital Heart Surgery Database, Version 3.0, used with permission.
II. Procedural Information (continued)

**Mode of Cardiopulmonary (CP) Bypass**

*Variable Name: LOWFLOW, DEEPHYPO, CIRCARES*

Check all that apply. If none apply, leave blank.

**Minimally Invasive**

*Variable Name: MINI_INV*

If the cardiac surgical procedure began through an incision other than a complete sternotomy or thoracotomy check “Yes”, regardless of whether the case was converted to a standard incision or CP Bypass was used. Otherwise check “No”.

**Entire Procedure Off Pump**

*Variable Name: ALL_OFF*

Check this box if the cardiac operation was performed entirely without the use of cardiopulmonary bypass.

**CABG Information**

*Variable Names: TOT_COND, ART_COND, DISTAL*

If Procedure Code 670 is coded then the following information must be completed.

**Total Conduits:** List the total number of conduits or grafts performed up to 9. For more than 9, write 9.

**Arterial Conduits:** List the number of arterial conduits or grafts used up to 9. For more than 9, write 9. The number of arterial conduits CANNOT be larger than the total number of conduits.

**Distal Anastomoses:** List the total number of distal anastomoses up to 9. For more than 9, write 9. A distal anastomosis is defined as a hole between a conduit or graft and a coronary touchdown site for the conduit or graft. The number of distal anastomoses could be larger than the total number of conduits, especially in the case of sequential grafts.
### III. Pre-Operative Status

#### Weight at Time of Operation

*Variable Names: WGT_UNIT, WEIGHT*

Enter the patient’s weight at the time of the operation. If less than 10 kilograms, report in grams, if 10 kilograms or more report in kilograms. Check the appropriate box for grams or kilograms.

#### Gestational Age at Birth in Weeks

*Variable Name: GEST_AGE*

If the patient is under one year of age at admission, enter the gestational age at birth (in weeks).

If the patient's age at admission was one year or more, this item should be left blank.

#### Weight at Birth in Grams

*Variable Names: BIRTHWGT*

If the patient is under one year of age at admission, check the box with the appropriate weight range in grams. If the patient’s age at admission was one year or more, this item should be left blank.

#### Pre-operative Conditions

*Check all of the following conditions that existed prior to the start of the procedure, but within the time frame specified.*

<table>
<thead>
<tr>
<th>0. None</th>
</tr>
</thead>
</table>

*Variable Name: NORISK*

None of the pre-operative conditions listed below were present prior to surgery.
III. Pre-Operative Status (continued)

1-3. Previous Open Heart Operations
Variable Names: PREVOP_1, PREVOP_2, PREVOP_3

If the patient had an open-heart surgery prior to the current cardiac operation, check the appropriate box to indicate the number of such operations.

**Interpretation:** For the purposes of this reporting system, minimally invasive procedures are considered open-heart surgery.

“Previous Open Heart Operations” refers to surgeries using CP Bypass and “Previous Closed Heart Operations” refers to those without CP Bypass.

Include any previous surgeries, either from this admission or a previous admission.

**If there was a previous surgery this admission, please be sure that the date of the most recent surgery is indicated in the field “Prior Surgery This Admission” on the front of the form.**

4-6. Previous Closed Heart Operations
Variable Names: PRECLO_1, PRECLO_2, PRECLO_3

If the patient had a closed heart surgery prior to the current cardiac operation, check the appropriate box to indicate the number of such operations.

**Interpretation:** “Previous Open Heart Operations” refers to surgeries using CP Bypass and “Previous Closed Heart Operations” refers to those without CP Bypass.

Include any previous surgeries, either from this admission or a previous admission.

**If there was a previous surgery this admission, please be sure that the date of the most recent surgery is indicated in the field “Prior Surgery This Admission” on the front of the form.**
III. Pre-Operative Status (continued)

7. Pre-op Interventional Cath Procedure

Variable Names:  PRE_CATH, INT_DATE

Indicate if the patient has had a pre-operative interventional cardiac catheterization procedure.

If during this admission, enter the date of the most recent procedure in the space provided.

Interpretation: Examples of these procedures include but are not limited to coil embolization of collaterals, balloon valvuloplasty, balloon dilation of coarctation of the aorta, defect closure, pulmonary artery, systemic vein or pulmonary vein. Balloon atrial septostomy would be excluded.

Report this risk factor if the patient underwent a cardiac intervention in-utero (e.g. aortic valve dilation).

11. Severe Cyanosis or Severe Hypoxia

Variable Name:  SEV_CYAN

Code if any of the following are present and sustained within 12 hours prior to surgery:

- Pulse oximetry saturation <70%
- Resting PO2 < 35mmHg
- Arterial saturation <75%

Interpretation: The following scenario would be coded: Medical record states: “the patient’s baseline oxygen saturation is 68% on room air. Central Aorto-Pulmonary Shunt placed for full repair due to cyanosis.”

12. Dialysis within 14 Days Prior to Surgery

Variable Name:  DIAL_PRE

Code if the patient received either continuous or intermittent hemodialysis or peritoneal dialysis within 14 days prior to surgery. The dialysis does not have to occur in the same hospital stay, it only has to be within 14 days of the procedure.

Note: You may also code this element if the patient had Continuous Renal Replacement Therapy (CRRT), for example PRISMA, within 14 days prior to surgery.

Do not report this risk factor if the patient requires CRRT, for example PRISMA, for fluid management while on ECMO.
III. Pre-Operative Status (continued)

13. Any Ventilator Dependence During the Same Admission or within 14 Days Prior to Surgery

Variable Name:  VENT_PRE

Code if the patient was ventilator dependent during the same admission or within 14 days prior to surgery.

**Interpretation:** The following scenario **would** be coded because surgery occurred in the same admission as ventilator dependence even though there was 16 days between ventilator dependence and surgery:

- Admitted on 5/15
- Ventilator dependent on 6/1
- Extubated on 6/10
- Surgery on 6/26
- Discharged on 6/30

Admitted on 5/15
Ventilator dependent on 6/1
Extubated on 6/10
Discharged on 6/30

The following scenario **would NOT** be coded because more than 14 days passed between ventilator dependence and surgery:

Admitted on 5/15
Ventilator dependent on 6/1
Extubated on 6/10
Surgery on 6/26
Discharged on 6/30

Nasal CPAP is not considered pre-operative ventilator dependence.

14. Inotropic Support Immediately Pre-op within 24 hrs

Variable Name:  INOT_PRE

Code if either of the following is present in the patient’s medical record:

Dopamine in dosage >5 mcg/kg/minute
Any other agent/dose for inotropic support

15. Positive Blood Cultures within 2 Weeks of Surgery

Variable Name:  POS_BLOO

Code if the patient has had positive blood cultures that are documented in the medical record, occurring within 2 weeks prior to surgery.

**Interpretation:** This can be coded even if the patient had the positive blood cultures within 2 weeks of surgery, was discharged, and was then re-admitted for surgery.
III. Pre-Operative Status (continued)

16. Arterial pH < 7.25, Immediately Pre-op within Hospital Stay

*Variable Name: ARTER_PH*

Arterial pH is < 7.25 within 12 hours prior to surgery but before the first blood gas taken in the OR.

17. Significant Renal Dysfunction

*Variable Name: RENA_DYS*

Code if Creatinine levels reach the indicated range for the patient’s age:

- Preemies and Newborn Creatinine >1.5 mg/dl
- >1 month of age Creatinine >2.0 mg/dl

18. Trisomy 21

*Variable Name: DOWN_SYN*

Code for any patients with Trisomy 21 (Down’s Syndrome).
III. Pre-Operative Status (continued)

19. Major Extracardiac Anomalies

Variable Name: CARDANOM and ANOM_SPEC

Check this box for any extracardiac anomaly not already captured on the PedCSRS form that is felt to be clinically relevant. Specify the anomaly in the space provided.

Examples include but are not limited to:

- Non-Down’s Syndrome
- chromosomal abnormalities
- DiGeorge’s Syndrome
- Cystic Fibrosis
- Marfan’s Syndrome
- Sickle Cell Anemia
- Blood Dyscrasia
- Omphalocele
- Hypoplastic lung

- Tracheo-esophageal (TE) fistula
- Choanal Atresia
- Diaphragmatic hernia
- Biliary Atresia
- Any -ostomy
- Beecher Muscular Dystrophy
- Tethered Spinal Cord
- Vater Syndrome
- Pierre Robin Syndrome

The following would not be accepted as Major Extracardiac Anomalies:

- Failure to Thrive
- Developmentally Delayed
- Hepatomegaly
- Preemie
- Jaundiced

Normothermic
Cleft lip/palate
Hirschsprung Disease
Legally blind

Note: As part of the data validation process, you may be asked to provide additional information on the nature, extent, or severity of the “Major Extracardiac Anomaly.” Please keep notes on cases with this risk factor to facilitate this validation.

21. Near Systemic Pulmonary Vascular Resistance (PVR)

Variable Name: PULM_HYP

In the case of an unrestrictive ventricular or great vessel communication (e.g. ductus or AP window), the following would constitute evidence of increased PVR (and hence presence of the risk factor):

- bidirectional shunting (meaning at least some R to L shunting) across the defect
- absence of CHF symptoms in patients at least 2 months of age
- evidence of systemic or suprasystemic RV pressure by tricuspid regurgitant jet velocity in the absence of a moderate or large left to right shunt
III. Pre-Operative Status (continued)

22. Ventricular Assist

Variable Name: PREOPVAD

Code if any of the following were used prior to the procedure to maintain vital signs:

- Extracorporeal Membrane Oxygenation (ECMO)
- Intra-Aortic Balloon Pump (IABP)
- Left Ventricular Assist Device (LVAD)
- Right Ventricular Assist Device (RVAD)
- Bi-Ventricular Assist Device (BIVAD)

24. Pre-existing Neurologic Abnormality

Variable Name: NEUROABN and NEURO_SPEC

Check this box for any pre-existing neurologic abnormality. Specify the abnormality in the space provided.

Pre-existing neurological abnormality includes but is not limited to:

- Documented intracranial bleed
- Hydrocephalus
- Chiari Malformation
- Arterial venous malformation
- Cerebral vascular accident (CVA)
- Seizure disorders

Note: As part of the data validation process, you may be asked to provide additional information on the nature, extent, or severity of the “Pre-existing Neurologic Abnormality.” Please keep notes on cases with this risk factor to facilitate this validation.

25. Pneumonia at Time of Surgery

Variable Name: PNEUMONI

As evidenced by:

Chest X-ray with infiltrate and at least ONE of the following:
- temperature greater than 101°F (38.5°C)
- white blood count greater than 12,000
- positive blood culture/viral titer.
III. Pre-Operative Status (continued)

26. Prostaglandin Dependence at Time of Surgery

Variable Name: PROSTAGL

At the time of surgery, the child requires prostaglandin to maintain normal respiration.

27. Balloon Atrial Septostomy

Variable Name: BALLSEPT

Prior to surgery, but within the same hospital admission, the patient had a balloon atrial septostomy.

28. Any Previous Organ Transplant

Variable Name: ORGN_TRA

The patient has had any organ transplant prior to the current cardiac surgery. This includes, but is not limited to, heart, lung, kidney, and liver transplants. If a heart and/or lung transplant was performed during the operating room visit that generated this form DO NOT code this risk factor.

Interpretation: Also code for bone marrow transplant. Do not code for skin transplant (grafting).
IV. Post-Procedural Events Requiring Intervention

Check all of the listed post-procedural events that occurred following the surgery.

**Please Note:** A documented pre-operative condition that persists post-operatively with NO increase in severity is NOT a post-procedural event.

0. None

<table>
<thead>
<tr>
<th>Variable Name: NOEVENTS</th>
</tr>
</thead>
</table>

Check if none of the post-procedural events listed below occurred following the operation.

1. Cardiac Tamponade

<table>
<thead>
<tr>
<th>Variable Name: CARDTAMP</th>
</tr>
</thead>
</table>

Code if cardiac tamponade is present post procedure.

**Interpretation:** Cardiac Tamponade should be coded if there is post-op chest drainage. Code regardless of where the drainage was performed (operating room, bedside, etc.).

2. Ventricular Fibrillation or CPR

<table>
<thead>
<tr>
<th>Variable Name: VENT_FIB</th>
</tr>
</thead>
</table>

Code if the patient experiences V-Fib or requires CPR at any time post-procedure, but before hospital discharge.

3. Bleeding Requiring Reoperation

<table>
<thead>
<tr>
<th>Variable Name: BLEDREOP</th>
</tr>
</thead>
</table>

Unplanned reoperation to control bleeding or to evacuate large hematomas in the thorax or pericardium.

**Interpretation:** This should be coded no matter where the bleeding was controlled (i.e., ICU, OR, bedside).
IV. Post-Procedural Events Requiring Intervention (continued)

4. Deep Sternal Wound Infection

Variable Name: DSW_INF

Drainage of purulent material from the sternotomy or thoracotomy wound.

Report this event only when associated with instability of the sternum.

A sternal wound infection should be reported as a post-procedural event even if it does not become apparent until after the patient is discharged from the hospital.

NOTE: This event is reportable up to one-year post-procedure, regardless of when the patient was discharged.

6. Ventilator Dependency > 10 Days

Variable Name: VENDEP10

The patient is unable to be extubated within 10 days post procedure.

Do not report if the patient had been ventilator dependent within 14 days prior to surgery.

7. Clinical Sepsis with Positive Blood Cultures

Variable Name: SEPSIS

Report if either of the following is present post procedure:

Temperature over 101°F (38.5°C) and Increased WBC and Positive blood culture

OR

Temperature below 98.6°F (37°C) and Decreased WBC and Positive blood culture

11. Renal Failure Requiring Dialysis

Variable Name: DIALYSIS

Code if the patient requires either continuous or intermittent hemodialysis or peritoneal dialysis post-procedure. Also code if the patient requires Continuous Renal Replacement Therapy (CRRT), for example PRISMA, post-procedure.

DO NOT code if the patient required dialysis (or CRRT) within 14 days before the procedure. Do not report this major event if the patient requires CRRT, for example PRISMA, for fluid management while on ECMO.
IV. Post-Procedural Events Requiring Intervention (continued)

12. Complete Heart Block at Discharge

*Variable Name: COMP_HB*

Code if the heart block lasts until the time of discharge with or without permanent pacemaker insertion before discharge.

13. Unplanned Cardiac Reoperation or Interventional Catheterization

*Variable Name: UP_REOP*

Includes any unplanned cardiac reoperation or interventional catheterization.

The procedure can be done in the operating room, cath lab, or at the bedside.

This would exclude a reoperation to control bleeding.

15. New Neurologic Deficit

*Variable Name: NEURODEF*

New neurologic deficit present at discharge.

16. Ventricular Assist

*Variable Name: POST_VAD*

Code if any of the following were required after the procedure to maintain vital signs:

- Extracorporeal Membrane Oxygenation (ECMO)
- Intra-Aortic Balloon Pump (IABP)
- Left Ventricular Assist Device (LVAD)
- Right Ventricular Assist Device (RVAD)
- Bi-Ventricular Assist Device (BIVAD)

Do not code if Pre-Operative Status #22 is reported or if VAD/ECMO support was initiated during this procedure (and reported as a procedure code).
V. Discharge Information

**Hospital Discharge Date**
*Variable Name: DISDATE*

Enter the date the patient was discharged from the hospital.
If the patient died in the hospital, the hospital discharge date is the date of death.

**Discharged Alive To**
*Variable Name: STATUS, DISWHERE*

Check the appropriate box.
If a patient is discharged to Hospice (including Home with Hospice), code the status a “12”. NOTE that for purposes of analysis a hospice discharge (“12”) is considered an in-hospital mortality, unless the hospital can provide documentation that 30 days after discharge the patient was still alive (even if still in Hospice).

**Please see the full Hospice policy and reporting requirements under “Pediatric CSRS Data Reporting Policies.”**

“19 – Other (specify)” should only be checked for a live discharge status not otherwise specified in this section (e.g. AMA).

Any status “19” that is reported without a specific discharge location will be sent back during data validation.

**Died in**
*Variable Name: STATUS, DISWHERE*

Check the appropriate box.
If “8 – Elsewhere in Hospital (specify)” is checked, specify where the patient died.

Any status “8” that is reported without an indication of where the patient expired will be sent back during data validation.

**30 Day Status**
*Variable Name: THIRTYDAY*

Report the patient’s status at 30 days post-procedure using the appropriate code.
# Attachment A

**PFI Numbers for Cardiac Diagnostic and Surgical Centers**

<table>
<thead>
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<th>PFI</th>
<th>Facility</th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
<tr>
<td>0001</td>
<td>Albany Medical Center Hospital</td>
</tr>
<tr>
<td>0135</td>
<td>Champlain Valley Physicians Hospital Medical Center</td>
</tr>
<tr>
<td>0829</td>
<td>Ellis Hospital</td>
</tr>
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<td>1005</td>
<td>Glens Falls Hospital</td>
</tr>
<tr>
<td>0746</td>
<td>Mary Imogene Bassett Hospital</td>
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<tr>
<td>0756</td>
<td>Samaritan Hospital</td>
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<tr>
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<td>Saratoga Hospital</td>
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<td>St. Peter's Hospital</td>
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<td>0630</td>
<td>St. Joseph's Hospital Health Center</td>
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<td>0058</td>
<td>United Health Services Hospital, Inc.-Wilson Medical Center</td>
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**NY City Area**

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<td>University Hospital of Brooklyn</td>
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<tr>
<td>1318</td>
<td>Wyckoff Heights Medical Center</td>
</tr>
</tbody>
</table>

8888  Catheterization Laboratory at a Veterans Administration Hospital in New York. (for use in this reporting system; not an official Permanent Facility Identifier)

9999  Catheterization Laboratory Outside New York State (for use in this reporting system; not an official Permanent Facility Identifier)

A complete listing of NYS hospitals, including their PFI can be found at: [http://hospitals.nyhealth.gov/](http://hospitals.nyhealth.gov/)
### Attachment B
### Residence Codes

The county codes shown below are also used in the SPARCS Discharge Data Abstract:

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Attachment C
Payer Codes

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<td>02</td>
<td>Medicare—Managed Care</td>
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<td>03</td>
<td>Medicaid—Fee For Service</td>
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<td>Medicaid—Managed Care</td>
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<td>HMO/Managed Care</td>
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<td>Other Private Insurance Company</td>
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<td>Self Pay</td>
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<tr>
<td>19</td>
<td>Other</td>
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</tbody>
</table>
### Septal Defects

**ASD**
- 10 PFO, Primary closure
- 20 ASD repair, Primary closure
- 30 ASD repair, Patch
- 40 ASD repair, Device
- 2110 ASD repair, Patch + PAPVC repair
- 50 ASD, Common atrium (single atrium), Septation
- 60 ASD creation/enlargement
- 70 ASD partial closure
- 80 Atrial septal fenestration
- 85 Atrial fenestration closure

**VSD**
- 100 VSD repair, Primary closure
- 110 VSD repair, Patch
- 120 VSD repair, Device
- 130 VSD, Multiple, Repair
- 140 VSD creation/enlargement
- 150 Ventricular septal fenestration

**AV Canal**
- 170 AVC (AVSD) repair, Complete (CAVSD)
- 180 AVC (AVSD) repair, Intermediate (Transitional)
- 190 AVC (AVSD) repair, Partial (Incomplete) (PAVSD)
- 2300 Valvuloplasty, Common atrioventricular valve
- 2250 Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve
- 2230 Valve replacement, Common atrioventricular valve

**AP Window**
- 210 AP window repair
- 220 Pulmonary artery origin from ascending aorta (hemitruncus) repair
- 230 Truncus arteriosus repair
- 240 Valvuloplasty, Truncal valve
- 2290 Valvuloplasty converted to valve replacement in the same operation, Truncal valve
- 250 Valve replacement, Truncal valve
- 2220 Truncus + Interrupted aortic arch repair (IAA) repair

### Pulmonary Venous Anomalies

**Partial Anomalous Pulmonary Venous Connection**
- 260 PAPVC repair
- 270 PAPVC, Scimitar, Repair
- 2120 PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)

**Total Anomalous Pulmonary Venous Connection**
- 280 TAPVC repair
- 2200 TAPVC repair + Shunt - systemic-to-pulmonary

---

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### Attachment D
Pediatric CSRS Cardiac Procedure Codes

#### COR TRIATRIATUM

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tr>
<td>290</td>
<td>Cor triatriatum repair</td>
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#### PULMONARY VENOUS STENOSIS

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<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>300</td>
<td>Pulmonary venous stenosis repair</td>
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#### SYSTEMIC VENOUS ANOMALIES

#### Anomalous Systemic Venous Connection / Obstruction

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>310</td>
<td>Atrial baffle procedure (non-Mustard, non-Senning)</td>
</tr>
<tr>
<td>330</td>
<td>Anomalous systemic venous connection repair</td>
</tr>
<tr>
<td>340</td>
<td>Systemic venous stenosis repair</td>
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</tbody>
</table>

#### RIGHT HEART LESIONS

#### Tetralogy of Fallot

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>350</td>
<td>TOF repair, No ventriculotomy</td>
</tr>
<tr>
<td>360</td>
<td>TOF repair, Ventriculotomy, Nontransanular patch</td>
</tr>
<tr>
<td>370</td>
<td>TOF repair, Ventriculotomy, Transanular patch</td>
</tr>
<tr>
<td>380</td>
<td>TOF repair, RV-PA conduit</td>
</tr>
<tr>
<td>390</td>
<td>TOF - AVC (AVSD) repair</td>
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<tr>
<td>400</td>
<td>TOF - Absent pulmonary valve repair</td>
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#### Pulmonary Atresia

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<tr>
<th>Code</th>
<th>Description</th>
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<tr>
<td>420</td>
<td>Pulmonary atresia - VSD (including TOF, PA) repair</td>
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<tr>
<td>430</td>
<td>Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair</td>
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<tr>
<td>440</td>
<td>Unifocalization MAPCA(s)</td>
</tr>
<tr>
<td>450</td>
<td>Occlusion MAPCA(s)</td>
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#### Tricuspid Valve Disease and Ebstein's Anomaly

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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>460</td>
<td>Valvuloplasty, Tricuspid</td>
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<tr>
<td>2280</td>
<td>Valvuloplasty converted to valve replacement in the same operation, Tricuspid</td>
</tr>
<tr>
<td>465</td>
<td>Ebstein's repair</td>
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<tr>
<td>470</td>
<td>Valve replacement, Tricuspid (TVR)</td>
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<tr>
<td>480</td>
<td>Valve closure, Tricuspid (exclusion, univentricular approach)</td>
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<tr>
<td>490</td>
<td>Valve excision, Tricuspid (without replacement)</td>
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<tr>
<td>500</td>
<td>Valve surgery, Other, Tricuspid</td>
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#### RVOT Obstruction, IVS Pulmonary Stenosis

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<tr>
<td>510</td>
<td>RVOT procedure</td>
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<tr>
<td>520</td>
<td>1 1/2 ventricular repair</td>
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<tr>
<td>530</td>
<td>PA, reconstruction (plasty), Main (trunk)</td>
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<tr>
<td>540</td>
<td>PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)</td>
</tr>
<tr>
<td>550</td>
<td>PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)</td>
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<tr>
<td>570</td>
<td>DCRV repair</td>
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#### Pulmonary Valve Disease

<table>
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<th>Description</th>
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</thead>
<tbody>
<tr>
<td>590</td>
<td>Valvuloplasty, Pulmonic</td>
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<tr>
<td>2270</td>
<td>Valvuloplasty converted to valve replacement in the same operation, Pulmonic</td>
</tr>
<tr>
<td>600</td>
<td>Valve replacement, Pulmonic (PVR)</td>
</tr>
</tbody>
</table>

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## RIGHT HEART LESIONS (CONTINUED)

### Pulmonary Valve Disease (continued)
- 630 Valve excision, Pulmonary (without replacement)
- 640 Valve closure, Semilunar
- 650 Valve surgery, Other, Pulmonic

### CONDUIT OPERATIONS

#### Conduit Operations
- 610 Conduit placement, RV to PA
- 620 Conduit placement, LV to PA
- 1774 Conduit placement, Ventricle to aorta
- 1172 Conduit placement, Other

#### Conduit Stenosis / Insufficiency
- 580 Conduit reoperation

## LEFT HEART LESIONS

### Aortic Valve Disease
- 660 Valvuloplasty, Aortic
- 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)
- 680 Valve replacement, Aortic (AVR), Mechanical
- 690 Valve replacement, Aortic (AVR), Bioprosthetic
- 700 Valve replacement, Aortic (AVR), Homograft
- 715 Aortic root replacement, Bioprosthetic
- 720 Aortic root replacement, Mechanical
- 730 Aortic root replacement, Homograft
- 735 Aortic root replacement, Valve sparing
- 740 Ross procedure
- 750 Konno procedure
- 760 Ross-Konno procedure
- 770 Other annular enlargement procedure
- 780 Aortic stenosis, Subvalvar, Repair
- 2100 Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS
- 790 Aortic stenosis, Supravalvar, Repair
- 800 Valve surgery, Other, Aortic

### Sinus of Valsalva Aneurysm
- 810 Sinus of Valsalva, Aneurysm repair

### LV to Aorta Tunnel
- 820 LV to aorta tunnel repair

### Mitral Valve Disease
- 830 Valvuloplasty, Mitral
- 2260 Valvuloplasty converted to valve replacement in the same operation, Mitral

---

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# Attachment D
Pediatric CSRS Cardiac Procedure Codes

## LEFT HEART LESIONS (CONTINUED)

### Mitral Valve Disease (continued)

<table>
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<tr>
<td>840</td>
<td>Mitral stenosis, Supravalvar mitral ring repair</td>
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<td>Valve replacement, Mitral (MVR)</td>
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<td>Valve surgery, Other, Mitral</td>
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<td>870</td>
<td>Norwood procedure</td>
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<tr>
<td>880</td>
<td>HLHS biventricular repair</td>
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<tr>
<td>2160</td>
<td>Hybrid Approach &quot;Stage 1&quot;, Application of RPA &amp; LPA bands</td>
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<tr>
<td>2170</td>
<td>Hybrid Approach &quot;Stage 1&quot;, Stent placement in arterial duct (PDA)</td>
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<tr>
<td>2180</td>
<td>Hybrid Approach &quot;Stage 1&quot;, Stent placement in arterial duct (PDA) + application of RPA &amp; LPA bands</td>
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<tr>
<td>2140</td>
<td>Hybrid approach &quot;Stage 2&quot;, Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)</td>
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<tr>
<td>2150</td>
<td>Hybrid approach &quot;Stage 2&quot;, Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair</td>
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### CARDIOMYOPATHY

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<tr>
<td>900</td>
<td>Transplant, Heart and lung</td>
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<td>Partial left ventriculectomy (LV volume reduction surgery) (Batista)</td>
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### PERICARDIAL DISEASE

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<td>Pericardial drainage procedure</td>
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<td>Pericardial procedure, Other</td>
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### SINGLE VENTRICLE

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<tr>
<td>950</td>
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<td>Fontan, Atro-ventricular connection</td>
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<td>970</td>
<td>Fontan, TCPC, Lateral tunnel, Fenestrated</td>
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<td>Fontan, TCPC, Lateral tunnel, Nonfenestrated</td>
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<td>Fontan, TCPC, External conduit, Fenestrated</td>
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<td>Fontan, TCPC, External conduit, Nonfenestrated</td>
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<td>Fontan, Other</td>
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<tr>
<td>2340</td>
<td>Fontan + Atrioventricular valvuloplasty</td>
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<td>1035</td>
<td>Ventricular septation</td>
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### TRANSPOSITION OF THE GREAT ARTERIES

#### Congenitally Corrected TGA

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<td>1050</td>
<td>Congenitally corrected TGA repair, Atrial switch and ASO (double switch)</td>
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<tr>
<td>1060</td>
<td>Congenitally corrected TGA repair, Atrial switch and Rastelli</td>
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<tr>
<td>1070</td>
<td>Congenitally corrected TGA repair, VSD closure</td>
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<tr>
<td>1080</td>
<td>Congenitally corrected TGA repair, VSD closure and LV to PA conduit</td>
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<tr>
<td>1090</td>
<td>Congenitally corrected TGA repair, Other</td>
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## Attachment D
Pediatric CSRS Cardiac Procedure Codes

### Transposition of the Great Arteries (continued)

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<td>1110</td>
<td>Arterial switch operation (ASO)</td>
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<td>1120</td>
<td>Arterial switch operation (ASO) and VSD repair</td>
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<td>1123</td>
<td>Arterial switch procedure + Aortic arch repair</td>
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<tr>
<td>1125</td>
<td>Arterial switch procedure and VSD repair + Aortic arch repair</td>
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<tr>
<td>1130</td>
<td>Senning</td>
</tr>
<tr>
<td>1140</td>
<td>Mustard</td>
</tr>
<tr>
<td>1145</td>
<td>Atrial baffle procedure, Mustard or Senning revision</td>
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<tr>
<td>1150</td>
<td>Rastelli</td>
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<td>REV</td>
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<td>2190</td>
<td>Aortic root translocation over left ventricle (Including Nikaidoh procedure)</td>
</tr>
<tr>
<td>2210</td>
<td>TGA, Other procedures (Kawashima, LV-PA conduit, other)</td>
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### DORV

<table>
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<th>Procedure Description</th>
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<td>DORV, Intraventricular tunnel repair</td>
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### DOLV

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<td>DOLV repair</td>
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### Thoracic Arteries and Veins

#### Coarctation of Aorta and Aortic Arch Hypoplasia

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<th>Procedure Description</th>
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<tr>
<td>1210</td>
<td>Coarctation repair, End to end</td>
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<tr>
<td>1220</td>
<td>Coarctation repair, End to end, Extended</td>
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<td>1230</td>
<td>Coarctation repair, Subclavian flap</td>
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<td>1240</td>
<td>Coarctation repair, Patch aortoplasty</td>
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<tr>
<td>1250</td>
<td>Coarctation repair, Interposition graft</td>
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<td>1260</td>
<td>Coarctation repair, Other</td>
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<tr>
<td>1275</td>
<td>Coarctation repair + VSD repair</td>
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<tr>
<td>1280</td>
<td>Aortic arch repair</td>
</tr>
<tr>
<td>1285</td>
<td>Aortic arch repair + VSD repair</td>
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</tbody>
</table>

#### Coronary Artery Anomalies

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<tr>
<th>Code</th>
<th>Procedure Description</th>
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</thead>
<tbody>
<tr>
<td>1290</td>
<td>Coronary artery fistula ligation</td>
</tr>
<tr>
<td>1291</td>
<td>Anomalous origin of coronary artery from pulmonary artery repair</td>
</tr>
<tr>
<td>1300</td>
<td>Coronary artery bypass</td>
</tr>
<tr>
<td>1305</td>
<td>Anomalous aortic origin of coronary artery from aorta (AAOCA) repair</td>
</tr>
<tr>
<td>1310</td>
<td>Coronary artery procedure, Other</td>
</tr>
</tbody>
</table>

#### Interrupted Arch

<table>
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<tr>
<th>Code</th>
<th>Procedure Description</th>
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<tbody>
<tr>
<td>1320</td>
<td>Interrupted aortic arch repair</td>
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#### Patent Ductus Arteriosus

<table>
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<tr>
<th>Code</th>
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<tr>
<td>1330</td>
<td>PDA closure, Surgical</td>
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<tr>
<td>1340</td>
<td>PDA closure, Device</td>
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#### Vascular Rings and Slings

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<th>Procedure Description</th>
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<tbody>
<tr>
<td>1360</td>
<td>Vascular ring repair</td>
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</tbody>
</table>

---

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### Attachment D

**Pediatric CSRS Cardiac Procedure Codes**

#### THORACIC ARTERIES AND VEINS (CONTINUED)

**Vascular Rings and Slings (continued)**
- 1365 Aortopexy
- 1370 Pulmonary artery sling repair

**Aortic Aneurysm**
- 1380 Aortic aneurysm repair

**Aortic Dissection**
- 1390 Aortic dissection repair

#### THORACIC AND MEDIASTINAL DISEASE

**Lung Disease**
- 1400 Lung biopsy
- 1410 Transplant, lung(s)
- 1420 Lung procedure, Other

**Pectus Excavatum, Carinatum**
- 1430 Pectus repair

**Tracheal Stenosis**
- 1440 Tracheal procedure

#### ELECTROPHYSIOLOGICAL

- 1450 Pacemaker implantation, Permanent
- 1460 Pacemaker procedure
- 2350 Explantation of pacing system
- 1470 ICD (AICD) implantation
- 1480 ICD (AICD) (automatic) implantable cardioverter defibrillator) procedure
- 1490 Arrhythmia surgery - atrial, Surgical Ablation
- 1500 Arrhythmia surgery - ventricular, Surgical Ablation

#### INTERVENTIONAL CARDIOLOGY PROCEDURES

- 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

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## Interventional Cardiology Procedures (Continued)

<table>
<thead>
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<th>Description</th>
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<tr>
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<td>2630</td>
<td>Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation</td>
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<td>Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion</td>
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<tr>
<td>2660</td>
<td>Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve</td>
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<tr>
<td>2680</td>
<td>Cardiovascular electrophysiological catheterization procedure</td>
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<td>Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation</td>
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## Palliative Procedures

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<tr>
<td>1590</td>
<td>Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)</td>
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<tr>
<td>1600</td>
<td>Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)</td>
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<tr>
<td>1610</td>
<td>Shunt, Systemic to pulmonary, Other</td>
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<tr>
<td>1630</td>
<td>Shunt, Ligation and takedown</td>
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<tr>
<td>2095</td>
<td>Shunt, Reoperation</td>
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<tr>
<td>1640</td>
<td>PA banding (PAB)</td>
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<tr>
<td>1650</td>
<td>PA debanding</td>
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<tr>
<td>1660</td>
<td>Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)</td>
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<tr>
<td>1670</td>
<td>Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)</td>
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<tr>
<td>1680</td>
<td>Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)</td>
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<tr>
<td>1690</td>
<td>Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)</td>
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<tr>
<td>1700</td>
<td>HemiFontan</td>
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<tr>
<td>2330</td>
<td>Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty</td>
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<tr>
<td>2130</td>
<td>Superior Cavopulmonary anastomosis(es) + PA reconstruction</td>
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<tr>
<td>1710</td>
<td>Palliation, Other</td>
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## Mechanical Support

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<tr>
<td>2360</td>
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<td>2370</td>
<td>ECMO decannulation</td>
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<td>1910</td>
<td>ECMO procedure</td>
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<tr>
<td>1900</td>
<td>Intraaortic balloon pump (IABP) insertion</td>
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<td>1920</td>
<td>Right/left heart assist device procedure</td>
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<tr>
<td>2390</td>
<td>VAD explantation</td>
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<td>2380</td>
<td>VAD implantation</td>
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## Anesthetic Procedures

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<td>Echocardiography procedure, Sedated transthoracic echocardiogram</td>
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<tr>
<td>2435</td>
<td>Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia</td>
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<tr>
<td>2440</td>
<td>Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)</td>
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<tr>
<td>2450</td>
<td>Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)</td>
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<tr>
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<td>Radiology procedure on cardiac patient, Diagnostic radiology</td>
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<tr>
<td>2470</td>
<td>Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient</td>
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<tr>
<td>2480</td>
<td>Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient</td>
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<tr>
<td>2490</td>
<td>Interventional radiology procedure on cardiac patient</td>
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1 Society of Thoracic Surgeon, Congenital Heart Surgery Database v3.0, used with permission
### MISCELLANEOUS PROCEDURES

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<td>Aneurysm, Ventricular, Left, Repair</td>
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<tr>
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<td>Aneurysm, Pulmonary artery, Repair</td>
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<tr>
<td>1760</td>
<td>Cardiac tumor resection</td>
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<td>1780</td>
<td>Pulmonary AV fistula repair/occlusion</td>
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<td>1790</td>
<td>Ligation, Pulmonary artery</td>
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<td>1802</td>
<td>Pulmonary embolectomy, Acute pulmonary embolus</td>
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<tr>
<td>1804</td>
<td>Pulmonary embolectomy, Chronic pulmonary embolus</td>
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<td>Pleural drainage procedure</td>
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<td>1820</td>
<td>Pleural procedure, Other</td>
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<td>1830</td>
<td>Ligation, Thoracic duct</td>
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<td>1840</td>
<td>Decortication</td>
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<td>Esophageal procedure</td>
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<td>Mediastinal procedure</td>
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<td>1870</td>
<td>Bronchoscopy</td>
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<td>Diaphragm procedure, Other</td>
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<td>VATS (video-assisted thoracoscopic surgery)</td>
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<td>1940</td>
<td>Minimally invasive procedure</td>
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<td>1950</td>
<td>Bypass for noncardiac lesion</td>
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<td>1960</td>
<td>Delayed sternal closure</td>
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<td>1970</td>
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<td>Thoracotomy, Other</td>
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<td>2010</td>
<td>Cardiac procedure, Other</td>
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<td>2020</td>
<td>Thoracic and/or mediastinal procedure, Other</td>
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<td>Peripheral vascular procedure, Other</td>
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<td>Miscellaneous procedure, Other</td>
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<td>Organ procurement</td>
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<td>7777</td>
<td>Other procedure</td>
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</table>
## SEPTAL DEFECTS

### ASD
- 10 PFO
- 20 ASD, Secundum
- 30 ASD, Sinus venosus
- 40 ASD, Coronary sinus
- 50 ASD, Common atrium (single atrium)

### VSD
- 71 VSD, Type 1 (Subarterial) (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

### AV Canal
- 100 AVC (AVSD), Complete (CAVSD)
- 110 AVC (AVSD), Intermediate (transitional)
- 120 AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum)

### AV Window
- 140 AP window (aortopulmonary window)
- 150 Pulmonary artery origin from ascending aorta (hemitruncus)

### Truncus Arteriosus
- 160 Truncus arteriosus
- 170 Truncal valve insufficiency
- 2010 Truncus arteriosus + Interrupted aortic arch

## PULMONARY VENOUS ANOMALIES

### Partial Anomalous Pulmonary Venous Connection
- 180 Partial anomalous pulmonary venous connection (PAPVC)
- 190 Partial anomalous pulmonary venous connection (PAPVC), scimitar

### Total Anomalous Pulmonary Venous Connection
- 200 Total anomalous pulmonary venous connection (TAPVC), Type 1 (supracardiac)
- 210 Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac)
- 220 Total anomalous pulmonary venous connection (TAPVC), Type 3 (infracardiac)
- 230 Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed)

## COR TRIATRIATUM
- 250 Cor triatriatum

## PULMONARY VENOUS STENOSIS
- 260 Pulmonary venous stenosis

---

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Attachment E: Congenital Cardiac Diagnosis Codes

Page 1 of 15  
2013 Discharges
# Attachment E
## Congenital Cardiac Diagnosis Codes

### Systemic Venous Anomalies

<table>
<thead>
<tr>
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<tr>
<td>270</td>
<td>Systemic venous anomaly</td>
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<tr>
<td>280</td>
<td>Systemic venous obstruction</td>
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### Right Heart Lesions

#### Tetralogy of Fallot

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<tr>
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<tr>
<td>290</td>
<td>TOF</td>
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<tr>
<td>2140</td>
<td>TOF, Pulmonary stenosis</td>
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<tr>
<td>300</td>
<td>TOF, AVC (AVSD)</td>
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<tr>
<td>310</td>
<td>TOF, Absent pulmonary valve</td>
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#### Pulmonary Atresia

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<tr>
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<tbody>
<tr>
<td>320</td>
<td>Pulmonary atresia</td>
</tr>
<tr>
<td>330</td>
<td>Pulmonary atresia, IVS</td>
</tr>
<tr>
<td>340</td>
<td>Pulmonary atresia, VSD (Including TOF, PA)</td>
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<tr>
<td>350</td>
<td>Pulmonary atresia, VSD-MAPCA (pseudotruncus)</td>
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<tr>
<td>360</td>
<td>MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD)</td>
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#### Tricuspid Valve Disease and Ebstein’s Anomaly

<table>
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<tr>
<td>370</td>
<td>Ebstein's anomaly</td>
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<tr>
<td>380</td>
<td>Tricuspid regurgitation, non-Ebstein's related</td>
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<tr>
<td>390</td>
<td>Tricuspid stenosis</td>
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<tr>
<td>400</td>
<td>Tricuspid regurgitation and tricuspid stenosis</td>
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<tr>
<td>410</td>
<td>Tricuspid valve, Other</td>
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#### RVOT Obstruction and/or Pulmonary Stenosis

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<tr>
<td>420</td>
<td>Pulmonary stenosis, Valvar</td>
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<tr>
<td>430</td>
<td>Pulmonary artery stenosis (hypoplasia), Main (trunk)</td>
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<td>440</td>
<td>Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)</td>
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<tr>
<td>470</td>
<td>Pulmonary artery, Discontinuous</td>
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<tr>
<td>490</td>
<td>Pulmonary stenosis, Subvalvar</td>
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<tr>
<td>500</td>
<td>DCRV</td>
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#### Pulmonary Valve Disease

<table>
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<tr>
<td>530</td>
<td>Pulmonary insufficiency</td>
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<tr>
<td>540</td>
<td>Pulmonary insufficiency and pulmonary stenosis</td>
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### Shunt Failure

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### Conduit Failure

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<td>520</td>
<td>Conduit failure</td>
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</tbody>
</table>

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**LEFT HEART LESIONS**

### Aortic Valve Disease
- 550 Aortic stenosis, Subvalvar
- 560 Aortic stenosis, Valvar
- 570 Aortic stenosis, Supravalvar
- 590 Aortic valve atresia
- 600 Aortic insufficiency
- 610 Aortic insufficiency and aortic stenosis
- 620 Aortic valve, Other

### Sinus of Valsalva Fistula/Aneurysm
- 630 Sinus of Valsalva aneurysm

### LV to Aorta Tunnel
- 640 LV to aorta tunnel

### Mitral Valve Disease
- 650 Mitral stenosis, Supravalvar mitral ring
- 660 Mitral stenosis, Valvar
- 670 Mitral stenosis, Subvalvar
- 680 Mitral stenosis, Subvalvar, Parachute
- 695 Mitral stenosis
- 700 Mitral regurgitation and mitral stenosis
- 710 Mitral regurgitation
- 720 Mitral valve, Other

### Hypoplastic Left Heart Syndrome
- 730 Hypoplastic left heart syndrome (HLHS)

### Shone’s Syndrome
- 2080 Shone’s syndrome

### CARDIOMYOPATHY
- 740 Cardiomyopathy (including dilated, restrictive, and hypertrophic)
- 750 Cardiomyopathy, End-stage congenital heart disease

### PERICARDIAL DISEASE
- 760 Pericardial effusion
- 770 Pericarditis
- 780 Pericardial disease, Other

### SINGLE VENTRICLE
- 790 Single ventricle, DILV
- 800 Single ventricle, DIRV
- 810 Single ventricle, Mitral atresia
- 820 Single ventricle, Tricuspid atresia
- 830 Single ventricle, Unbalanced AV canal
- 840 Single ventricle, Heterotaxia syndrome

---

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*Attachment E: Congenital Cardiac Diagnosis Codes*
Attachment E
Congenital Cardiac Diagnosis Codes

**SINGLE VENTRICLE (CONTINUED)**

850  Single ventricle, Other
851  Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)

**TRANSPOSITION OF THE GREAT ARTERIES**

**Congenitally Corrected TGA**

870  Congenitally corrected TGA
872  Congenitally corrected TGA, IVS
874  Congenitally corrected TGA, IVS-LVOTO
876  Congenitally corrected TGA, VSD
878  Congenitally corrected TGA, VSD-LVOTO

**Transposition of the Great Arteries**

880  TGA, IVS
890  TGA, IVS-LVOTO
900  TGA, VSD
910  TGA, VSD-LVOTO

**DORV**

930  DORV, VSD type
940  DORV, TOF type
950  DORV, TGA type
960  DORV, Remote VSD (uncommitted VSD)
2030  DORV + AVSD (AV Canal)
975  DORV, IVS

**DOLV**

980  DOLV

**THORACIC ARTERIES AND VEINS**

**Coarctation of Aorta and Aortic Arch Hypoplasia**

990  Coarctation of aorta
1000  Aortic arch hypoplasia
92  VSD + Aortic arch hypoplasia
94  VSD + Coarctation of aorta

**Coronary Artery Anomalies**

1010  Coronary artery anomaly, Anomalous aortic origin of coronary artery from aorta (AAOCA)
1020  Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA)
1030  Coronary artery anomaly, Fistula
1040  Coronary artery anomaly, Aneurysm
1050  Coronary artery anomaly, Other

**Interrupted Arch**

1070  Interrupted aortic arch
2020  Interrupted aortic arch + VSD

---

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### THORACIC ARTERIES AND VEINS (CONTINUED)

#### Interrupted Arch (continued)
- 2000 Interrupted aortic arch + AP window (aortopulmonary window)

#### Patent Ductus Arteriosus
- 1080 Patent ductus arteriosus

#### Vascular Rings and Slings
- 1090 Vascular ring
- 1100 Pulmonary artery sling

#### Aortic Aneurysm
- 1110 Aortic aneurysm (including pseudoaneurysm)

#### Aortic Dissection
- 1120 Aortic dissection

### THORACIC AND MEDIASTINAL DISEASE

#### Lung Disease
- 1130 Lung disease, Benign
- 1140 Lung disease, Malignant

#### Pectus Excavatum, Carinatum
- 1150 Pectus

#### Tracheal Stenosis
- 1160 Tracheal stenosis
- 1170 Airway disease

#### Pleural Disease
- 1430 Pleural disease, Benign
- 1440 Pleural disease, Malignant
- 1450 Pneumothorax
- 1460 Pleural effusion
- 1470 Chylothorax
- 1480 Empyema

#### Esophageal Disease
- 1490 Esophageal disease, Benign
- 1500 Esophageal disease, Malignant

#### Mediastinal Disease
- 1505 Mediastinal disease
- 1510 Mediastinal disease, Benign
- 1520 Mediastinal disease, Malignant

#### Diaphragmatic Disease
- 1540 Diaphragm paralysis
- 1550 Diaphragm disease, Other
### Electrophysiological

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<td>Arrhythmia, Atrial</td>
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<td>Arrhythmia, Junctional</td>
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<td>Arrhythmia, Ventricular</td>
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<td>1185</td>
<td>Arrhythmia, Heart block</td>
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<td>Arrhythmia, Heart block, Acquired</td>
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<td>Arrhythmia, Heart block, Congenital</td>
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<td>Arrhythmia, Pacemaker, Indication for replacement</td>
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### Miscellaneous, Other

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<td>2090</td>
<td>Dextrocardia</td>
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<td>2100</td>
<td>Levocardia</td>
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<td>Mesocardia</td>
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<td>2120</td>
<td>Situs inversus</td>
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<td>Prosthetic valve failure</td>
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<td>Myocardial infarction</td>
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<td>Cardiac tumor</td>
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<td>Pulmonary AV fistula</td>
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<td>Pulmonary embolism</td>
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<tr>
<td>1385</td>
<td>Pulmonary vascular obstructive disease</td>
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<td>Pulmonary vascular obstructive disease (Eisenmenger's)</td>
</tr>
<tr>
<td>1400</td>
<td>Primary pulmonary hypertension</td>
</tr>
<tr>
<td>1410</td>
<td>Persistent fetal circulation</td>
</tr>
<tr>
<td>1420</td>
<td>Meconium aspiration</td>
</tr>
<tr>
<td>1560</td>
<td>Cardiac, Other</td>
</tr>
<tr>
<td>1570</td>
<td>Thoracic and/or mediastinal, Other</td>
</tr>
<tr>
<td>1580</td>
<td>Peripheral vascular, Other</td>
</tr>
<tr>
<td>7000</td>
<td>Normal heart</td>
</tr>
<tr>
<td>7777</td>
<td>Miscellaneous, Other</td>
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### Status Post

#### Septal Defects

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4010</td>
<td>Status post - PFO, Primary closure</td>
</tr>
<tr>
<td>4020</td>
<td>Status post - ASD repair, Primary closure</td>
</tr>
<tr>
<td>4030</td>
<td>Status post - ASD repair, Patch</td>
</tr>
</tbody>
</table>

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1 Society of Thoracic Surgeons, Adult Cardiac Surgery Database, Version 2.73, used with permission.
## Attachment E
### Congenital Cardiac Diagnosis Codes

**Status Post**

### Septal Defects (continued)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>4040</td>
<td>Status post - ASD repair, Device</td>
</tr>
<tr>
<td>6110</td>
<td>Status post - ASD repair, Patch + PAPVC repair</td>
</tr>
<tr>
<td>4050</td>
<td>Status post - ASD, Common atrium (single atrium), Septation</td>
</tr>
<tr>
<td>4060</td>
<td>Status post - ASD creation/enlargement</td>
</tr>
<tr>
<td>4070</td>
<td>Status post - ASD partial closure</td>
</tr>
<tr>
<td>4080</td>
<td>Status post - Atrial septal fenestration</td>
</tr>
<tr>
<td>4085</td>
<td>Status post - Atrial fenestration closure</td>
</tr>
</tbody>
</table>

### VSD

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4100</td>
<td>Status post - VSD repair, Primary closure</td>
</tr>
<tr>
<td>4110</td>
<td>Status post - VSD repair, Patch</td>
</tr>
<tr>
<td>4120</td>
<td>Status post - VSD repair, Device</td>
</tr>
<tr>
<td>4130</td>
<td>Status post - VSD, Multiple, Repair</td>
</tr>
<tr>
<td>4140</td>
<td>Status post - VSD creation/enlargement</td>
</tr>
<tr>
<td>4150</td>
<td>Status post - Ventricular septal fenestration</td>
</tr>
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### AV Canal

<table>
<thead>
<tr>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4170</td>
<td>Status post - AVC (AVSD) repair, Complete (CAVSD)</td>
</tr>
<tr>
<td>4180</td>
<td>Status post - AVC (AVSD) repair, Intermediate (Transitional)</td>
</tr>
<tr>
<td>4190</td>
<td>Status post - AVC (AVSD) repair, Partial (Incomplete) (PAVSD)</td>
</tr>
<tr>
<td>6300</td>
<td>Status post - Valvuloplasty, Common atrioventricular valve</td>
</tr>
<tr>
<td>6250</td>
<td>Status post - Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve</td>
</tr>
<tr>
<td>6230</td>
<td>Status post - Valve replacement, Common atrioventricular valve</td>
</tr>
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</table>

### AP Window

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4210</td>
<td>Status post - AP window repair</td>
</tr>
<tr>
<td>4220</td>
<td>Status post - Pulmonary artery origin from ascending aorta (hemitruncus) repair</td>
</tr>
</tbody>
</table>

### Truncus Arteriosus

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>4230</td>
<td>Status post - Truncus arteriosus repair</td>
</tr>
<tr>
<td>4240</td>
<td>Status post - Valvuloplasty, Truncal valve</td>
</tr>
<tr>
<td>6250</td>
<td>Status post - Valvuloplasty converted to valve replacement in the same operation, Truncal valve</td>
</tr>
<tr>
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<td>Status post - Valve replacement, Truncal valve</td>
</tr>
<tr>
<td>6220</td>
<td>Status post - Truncus + Interrupted aortic arch repair (IAA) repair</td>
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</tbody>
</table>

**Status Post**

### Pulmonary Venous Anomalies

#### Partial Anomalous Pulmonary Venous Connection

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>4260</td>
<td>Status post - PAPVC repair</td>
</tr>
<tr>
<td>4270</td>
<td>Status post - PAPVC, Scimitar, Repair</td>
</tr>
<tr>
<td>6120</td>
<td>Status post - PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)</td>
</tr>
</tbody>
</table>

#### Total Anomalous Pulmonary Venous Connection

<table>
<thead>
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<tbody>
<tr>
<td>4280</td>
<td>Status post - TAPVC repair</td>
</tr>
<tr>
<td>6200</td>
<td>Status post - TAPVC repair + Shunt - systemic-to-pulmonary</td>
</tr>
</tbody>
</table>

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*Society of Thoracic Surgeons, Adult Cardiac Surgery Database, Version 2.73, used with permission.*
## Status Post

### Cor Triatriatum

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>4290</td>
<td>Status post - Cor triatriatum repair</td>
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</table>

### Pulmonary Venous Stenosis

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>4300</td>
<td>Status post - Pulmonary venous stenosis repair</td>
</tr>
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</table>

### Systemic Venous Anomalies

#### Anomalous Systemic Venous Connection

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>4310</td>
<td>Status post - Atrial baffie procedure (non-Mustard, non-Senning)</td>
</tr>
<tr>
<td>4330</td>
<td>Status post - Anomalous systemic venous connection repair</td>
</tr>
</tbody>
</table>

#### Systemic Venous Obstruction

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>4340</td>
<td>Status post - Systemic venous stenosis repair</td>
</tr>
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### Right Heart Lesions

#### Tetralogy of Fallot

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>4350</td>
<td>Status post - TOF repair, No ventriculotomy</td>
</tr>
<tr>
<td>4360</td>
<td>Status post - TOF repair, Ventriculotomy, Nontransanular patch</td>
</tr>
<tr>
<td>4370</td>
<td>Status post - TOF repair, Ventriculotomy, Transanular patch</td>
</tr>
<tr>
<td>4380</td>
<td>Status post - TOF repair, RV-PA conduit</td>
</tr>
<tr>
<td>4390</td>
<td>Status post - TOF - AVC (AVSD) repair</td>
</tr>
<tr>
<td>4400</td>
<td>Status post - TOF - Absent pulmonary valve repair</td>
</tr>
</tbody>
</table>

#### Pulmonary Atresia

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>4420</td>
<td>Status post - Pulmonary atresia - VSD (including TOF, PA) repair</td>
</tr>
<tr>
<td>4430</td>
<td>Status post - Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair</td>
</tr>
<tr>
<td>4440</td>
<td>Status post - Unifocalization MAPCA(s)</td>
</tr>
<tr>
<td>4450</td>
<td>Status post - Occlusion MAPCA(s)</td>
</tr>
</tbody>
</table>

#### Tricuspid Valve Disease and Ebstein’s Anomaly

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4460</td>
<td>Status post - Valvuloplasty, Tricuspid</td>
</tr>
<tr>
<td>6280</td>
<td>Status post - Valvuloplasty converted to valve replacement in the same operation, Tricuspid</td>
</tr>
<tr>
<td>4465</td>
<td>Status post - Ebstein’s repair</td>
</tr>
<tr>
<td>4470</td>
<td>Status post - Valve replacement, Tricuspid (TVR)</td>
</tr>
<tr>
<td>4480</td>
<td>Status post - Valve closure, Tricuspid (exclusion, univentricular approach)</td>
</tr>
<tr>
<td>4490</td>
<td>Status post - Valve excision, Tricuspid (without replacement)</td>
</tr>
<tr>
<td>4500</td>
<td>Status post - Valve surgery, Other, Tricuspid</td>
</tr>
</tbody>
</table>

#### RVOT Obstruction, IVS Pulmonary Stenosis

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>4510</td>
<td>Status post - RVOT procedure</td>
</tr>
<tr>
<td>4520</td>
<td>Status post - 1 1/2 ventricular repair</td>
</tr>
<tr>
<td>4530</td>
<td>Status post - PA, reconstruction (plasty), Main (trunk)</td>
</tr>
<tr>
<td>4540</td>
<td>Status post - PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)</td>
</tr>
<tr>
<td>4550</td>
<td>Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)</td>
</tr>
<tr>
<td>4570</td>
<td>Status post - DCRV repair</td>
</tr>
</tbody>
</table>

---

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### Pulmonary Valve Disease

- **4590** Status post - Valvuloplasty, Pulmonic
- **6270** Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic
- **4600** Status post - Valve replacement, Pulmonic (PVR)
- **4630** Status post - Valve excision, Pulmonary (without replacement)
- **4640** Status post - Valve closure, Semilunar
- **4650** Status post - Valve surgery, Other, Pulmonic

### STATUS POST

##### CONDUIT OPERATIONS

- **4610** Status post - Conduit placement, RV to PA
- **4620** Status post - Conduit placement, LV to PA
- **5774** Status post - Conduit placement, Ventricle to aorta
- **5772** Status post - Conduit placement, Other

### Conduit Stenosis/ Insufficiency

- **4580** Status post - Conduit reoperation

### LEFT HEART LESIONS

#### Aortic Valve Disease

- **4660** Status post - Valvuloplasty, Aortic
- **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)
- **4680** Status post - Valve replacement, Aortic (AVR), Mechanical
- **4690** Status post - Valve replacement, Aortic (AVR), Bioprosthetic
- **4700** Status post - Valve replacement, Aortic (AVR), Homograft
- **4715** Status post - Aortic root replacement, Bioprosthetic
- **4720** Status post - Aortic root replacement, Mechanical
- **4730** Status post - Aortic root replacement, Homograft
- **4735** Status post - Aortic root replacement, Valve sparing
- **4740** Status post - Ross procedure
- **4750** Status post - Konno procedure
- **4760** Status post - Ross-Konno procedure
- **4770** Status post - Other annular enlargement procedure
- **4780** Status post - Aortic stenosis, Subvalvar, Repair
- **6100** Status post - Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS
- **4790** Status post - Aortic stenosis, Supravalvar, Repair
- **4800** Status post - Valve surgery, Other, Aortic

#### Sinus of Valsalva Aneurysm

- **4810** Status post - Sinus of Valsalva, Aneurysm repair

---

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## Attachment E
### Congenital Cardiac Diagnosis Codes

### Status Post

#### Left Heart Lesions (continued)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4820</td>
<td>Status post - LV to aorta tunnel repair</td>
</tr>
</tbody>
</table>

#### Mitral Valve Disease

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4830</td>
<td>Status post - Valvuloplasty, Mitral</td>
</tr>
<tr>
<td>6280</td>
<td>Status post - Valvuloplasty converted to valve replacement in the same operation, Mitral</td>
</tr>
<tr>
<td>4840</td>
<td>Status post - Mitral stenosis, Supravalvar mitral ring repair</td>
</tr>
<tr>
<td>4850</td>
<td>Status post - Valve replacement, Mitral (MVR)</td>
</tr>
<tr>
<td>4860</td>
<td>Status post - Valve surgery, Other, Mitral</td>
</tr>
</tbody>
</table>

#### Hypoplastic Left Heart

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4870</td>
<td>Status post - Norwood procedure</td>
</tr>
<tr>
<td>4880</td>
<td>Status post - HLHS biventricular repair</td>
</tr>
<tr>
<td>6160</td>
<td>Status post - Hybrid Approach &quot;Stage 1&quot;, Application of RPA &amp; LPA bands</td>
</tr>
<tr>
<td>6170</td>
<td>Status post - Hybrid Approach &quot;Stage 1&quot;, Stent placement in arterial duct (PDA)</td>
</tr>
<tr>
<td>6180</td>
<td>Status post - Hybrid Approach &quot;Stage 1&quot;, Stent placement in arterial duct (PDA) + application of RPA &amp; LPA bands</td>
</tr>
<tr>
<td>6140</td>
<td>Status post - Hybrid approach &quot;Stage 2&quot;, Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)</td>
</tr>
<tr>
<td>6150</td>
<td>Status post - Hybrid approach &quot;Stage 2&quot;, Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair</td>
</tr>
</tbody>
</table>

#### Cardiomyopathy

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1590</td>
<td>Status post - Transplant, Heart</td>
</tr>
<tr>
<td>1610</td>
<td>Status post - Transplant, Heart and lung</td>
</tr>
<tr>
<td>4910</td>
<td>Status post - Partial left ventriculectomy (LV volume reduction surgery) (Batista)</td>
</tr>
</tbody>
</table>

#### Pericardial Disease

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4920</td>
<td>Status post - Pericardial drainage procedure</td>
</tr>
<tr>
<td>4930</td>
<td>Status post – Pericardectomy</td>
</tr>
<tr>
<td>4940</td>
<td>Status post - Pericardial procedure, Other</td>
</tr>
</tbody>
</table>

#### Single Ventricle

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4950</td>
<td>Status post - Fontan, Atrio-pulmonary connection</td>
</tr>
<tr>
<td>4960</td>
<td>Status post - Fontan, Atrio-ventricular connection</td>
</tr>
<tr>
<td>4970</td>
<td>Status post - Fontan, TCPC, Lateral tunnel, Fenestrated</td>
</tr>
<tr>
<td>4980</td>
<td>Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated</td>
</tr>
<tr>
<td>5000</td>
<td>Status post - Fontan, TCPC, External conduit, Fenestrated</td>
</tr>
<tr>
<td>5010</td>
<td>Status post - Fontan, TCPC, External conduit, Nonfenestrated</td>
</tr>
<tr>
<td>5025</td>
<td>Status post - Fontan revision or conversion (Re-do Fontan)</td>
</tr>
<tr>
<td>5030</td>
<td>Status post - Fontan, Other</td>
</tr>
<tr>
<td>6340</td>
<td>Status post - Fontan + Atrioventricular valvuloplasty</td>
</tr>
</tbody>
</table>

---

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Attachment E: Congenital Cardiac Diagnosis Codes

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### STATUS POST

#### SINGLE VENTRICLE (CONTINUED)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5035</td>
<td>Status post - Ventricular septation</td>
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### STATUS POST

#### TRANSPOSITION OF THE GREAT ARTERIES

**Congenitally Corrected TGA**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5050</td>
<td>Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double switch)</td>
</tr>
<tr>
<td>5060</td>
<td>Status post - Congenitally corrected TGA repair, Atrial switch and Rastelli</td>
</tr>
<tr>
<td>5070</td>
<td>Status post - Congenitally corrected TGA repair, VSD closure</td>
</tr>
<tr>
<td>5080</td>
<td>Status post - Congenitally corrected TGA repair, VSD closure and LV to PA conduit</td>
</tr>
<tr>
<td>5090</td>
<td>Status post - Congenitally corrected TGA repair, Other</td>
</tr>
</tbody>
</table>

**Transposition of the Great Arteries**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5110</td>
<td>Status post - Arterial switch operation (ASO)</td>
</tr>
<tr>
<td>5120</td>
<td>Status post - Arterial switch operation (ASO) and VSD repair</td>
</tr>
<tr>
<td>5123</td>
<td>Status post - Arterial switch procedure + Aortic arch repair</td>
</tr>
<tr>
<td>5125</td>
<td>Status post - Arterial switch procedure and VSD repair + Aortic arch repair</td>
</tr>
<tr>
<td>5130</td>
<td>Status post – Senning</td>
</tr>
<tr>
<td>5140</td>
<td>Status post – Mustard</td>
</tr>
<tr>
<td>5145</td>
<td>Status post - Atrial baffle procedure, Mustard or Senning revision</td>
</tr>
<tr>
<td>5150</td>
<td>Status post – Rastelli</td>
</tr>
<tr>
<td>5160</td>
<td>Status post – REV</td>
</tr>
<tr>
<td>5180</td>
<td>Status post - DORV, Intraventricular tunnel repair</td>
</tr>
<tr>
<td>5200</td>
<td>Status post - DOLV repair</td>
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</table>

### STATUS POST

#### DORV

<table>
<thead>
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<th>Description</th>
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</thead>
<tbody>
<tr>
<td>5180</td>
<td>Status post - DORV, Intraventricular tunnel repair</td>
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### STATUS POST

#### DOLV

<table>
<thead>
<tr>
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<th>Description</th>
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</thead>
<tbody>
<tr>
<td>5200</td>
<td>Status post - DOLV repair</td>
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</tbody>
</table>

### STATUS POST

#### THORACIC ARTERIES AND VEINS

**Coarctation of Aorta and Aortic Arch Hypoplasia**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5210</td>
<td>Status post - Coarctation repair, End to end</td>
</tr>
<tr>
<td>5220</td>
<td>Status post - Coarctation repair, End to end, Extended</td>
</tr>
<tr>
<td>5230</td>
<td>Status post - Coarctation repair, Subclavian flap</td>
</tr>
<tr>
<td>5240</td>
<td>Status post - Coarctation repair, Patch aortoplasty</td>
</tr>
<tr>
<td>5250</td>
<td>Status post - Coarctation repair, Interposition graft</td>
</tr>
<tr>
<td>5260</td>
<td>Status post - Coarctation repair, Other</td>
</tr>
<tr>
<td>5275</td>
<td>Status post - Coarctation repair + VSD repair</td>
</tr>
<tr>
<td>5280</td>
<td>Status post - Aortic arch repair</td>
</tr>
<tr>
<td>5285</td>
<td>Status post - Aortic arch repair + VSD repair</td>
</tr>
</tbody>
</table>
## Attachment E
### Congenital Cardiac Diagnosis Codes

### Status Post
#### Thoracic Arteries and Veins (continued)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5290</td>
<td>Status post - Coronary artery fistula ligation</td>
</tr>
<tr>
<td>5291</td>
<td>Status post - Anomalous origin of coronary artery from pulmonary artery repair</td>
</tr>
<tr>
<td>5300</td>
<td>Status post - Coronary artery bypass</td>
</tr>
<tr>
<td>5305</td>
<td>Status post - Anomalous aortic origin of coronary artery from aorta (AAOCA) repair</td>
</tr>
<tr>
<td>5310</td>
<td>Status post - Coronary artery procedure, Other</td>
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</tbody>
</table>

### Coronary Artery Anomalies

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>5320</td>
<td>Status post - Interrupted aortic arch repair</td>
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### Patent Ductus Arteriosus

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>5330</td>
<td>Status post - PDA closure, Surgical</td>
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<tr>
<td>5340</td>
<td>Status post - PDA closure, Device</td>
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### Vascular Rings and Slings

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<tbody>
<tr>
<td>5360</td>
<td>Status post - Vascular ring repair</td>
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<tr>
<td>5365</td>
<td>Status post – Aortopexy</td>
</tr>
<tr>
<td>5370</td>
<td>Status post - Pulmonary artery sling repair</td>
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### Aortic Aneurysm

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>5380</td>
<td>Status post - Aortic aneurysm repair</td>
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### Aortic Dissection

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>5390</td>
<td>Status post - Aortic dissection repair</td>
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### Status Post
#### Thoracic and Mediastinal Disease

<table>
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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>5400</td>
<td>Status post - Lung biopsy</td>
</tr>
<tr>
<td>1600</td>
<td>Status post - Transplant, Lung(s)</td>
</tr>
<tr>
<td>5420</td>
<td>Status post - Lung procedure, Other</td>
</tr>
</tbody>
</table>

### Lung Disease

<table>
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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>5430</td>
<td>Status post - Pectus repair</td>
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### Pectus Excavatum, Carinatum

<table>
<thead>
<tr>
<th>Code</th>
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<tr>
<td>5440</td>
<td>Status post - Tracheal procedure</td>
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### Status Post
#### Electrophysiological

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>5450</td>
<td>Status post - Pacemaker implantation, Permanent</td>
</tr>
<tr>
<td>5460</td>
<td>Status post - Pacemaker procedure</td>
</tr>
<tr>
<td>6350</td>
<td>Status post - Explantation of pacing system</td>
</tr>
<tr>
<td>5470</td>
<td>Status post - ICD (AICD) implantation</td>
</tr>
<tr>
<td>5480</td>
<td>Status post - ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure</td>
</tr>
<tr>
<td>5490</td>
<td>Status post - Arrhythmia surgery - atrial, Surgical Ablation</td>
</tr>
<tr>
<td>5500</td>
<td>Status post - Arrhythmia surgery - ventricular, Surgical Ablation</td>
</tr>
</tbody>
</table>

---

1 Society of Thoracic Surgeons, Adult Cardiac Surgery Database, Version 2.73, used with permission.
Attachment E: Congenital Cardiac Diagnosis Codes
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2013 Discharges
### Interventional Cardiology Procedures

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>6500</td>
<td>Status post - Cardiovascular catheterization procedure, Diagnostic</td>
</tr>
<tr>
<td>6520</td>
<td>Status post - Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained</td>
</tr>
<tr>
<td>6550</td>
<td>Status post - Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration</td>
</tr>
<tr>
<td>6540</td>
<td>Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration</td>
</tr>
<tr>
<td>6510</td>
<td>Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained</td>
</tr>
<tr>
<td>6530</td>
<td>Status post - Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion</td>
</tr>
<tr>
<td>6410</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic</td>
</tr>
<tr>
<td>6570</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy</td>
</tr>
<tr>
<td>6590</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic, Balloon dilation</td>
</tr>
<tr>
<td>6670</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy</td>
</tr>
<tr>
<td>6600</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic, Coil implantation</td>
</tr>
<tr>
<td>6610</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic, Device implantation</td>
</tr>
<tr>
<td>6640</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)</td>
</tr>
<tr>
<td>6580</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic, Septostomy</td>
</tr>
<tr>
<td>6620</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic, Stent insertion</td>
</tr>
<tr>
<td>6630</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation</td>
</tr>
<tr>
<td>6650</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion</td>
</tr>
<tr>
<td>6660</td>
<td>Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve</td>
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<tr>
<td>6680</td>
<td>Status post - Cardiovascular electrophysiological catheterization procedure</td>
</tr>
<tr>
<td>6690</td>
<td>Status post - Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation</td>
</tr>
</tbody>
</table>

### Palliative Procedures

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5590</td>
<td>Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)</td>
</tr>
<tr>
<td>5600</td>
<td>Status post - Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)</td>
</tr>
<tr>
<td>5610</td>
<td>Status post - Shunt, Systemic to pulmonary, Other</td>
</tr>
<tr>
<td>5630</td>
<td>Status post - Shunt, Ligation and takedown</td>
</tr>
<tr>
<td>6095</td>
<td>Status post - Shunt, Reoperation</td>
</tr>
<tr>
<td>5640</td>
<td>Status post - PA banding (PAB)</td>
</tr>
<tr>
<td>5650</td>
<td>Status post - PA debanding</td>
</tr>
<tr>
<td>5660</td>
<td>Status post - Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)</td>
</tr>
<tr>
<td>5670</td>
<td>Status post - Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)</td>
</tr>
<tr>
<td>5680</td>
<td>Status post - Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)</td>
</tr>
<tr>
<td>5690</td>
<td>Status post - Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)</td>
</tr>
<tr>
<td>5700</td>
<td>Status post – HemiFontan</td>
</tr>
<tr>
<td>6330</td>
<td>Status post - Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty</td>
</tr>
<tr>
<td>6130</td>
<td>Status post - Superior Cavopulmonary anastomosis(es) + PA reconstruction</td>
</tr>
<tr>
<td>5710</td>
<td>Status post - Palliation, Other</td>
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</table>
## Status Post

### Mechanical Support

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>6360</td>
<td>Status post - ECMO cannulation</td>
</tr>
<tr>
<td>6370</td>
<td>Status post - ECMO decannulation</td>
</tr>
<tr>
<td>5910</td>
<td>Status post - ECMO procedure</td>
</tr>
<tr>
<td>5900</td>
<td>Status post - Intraaortic balloon pump (IABP) insertion</td>
</tr>
<tr>
<td>5920</td>
<td>Status post - Right/left heart assist device procedure</td>
</tr>
<tr>
<td>6390</td>
<td>Status post - VAD explantation</td>
</tr>
<tr>
<td>6380</td>
<td>Status post - VAD implantation</td>
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### Anesthetic Procedures

<table>
<thead>
<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>6420</td>
<td>Status post - Echocardiography procedure, Sedated transesophageal echocardiogram</td>
</tr>
<tr>
<td>6430</td>
<td>Status post - Echocardiography procedure, Sedated transthoracic echocardiogram</td>
</tr>
<tr>
<td>6435</td>
<td>Status post - Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia</td>
</tr>
<tr>
<td>6440</td>
<td>Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)</td>
</tr>
<tr>
<td>6450</td>
<td>Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)</td>
</tr>
<tr>
<td>6460</td>
<td>Status post - Radiology procedure on cardiac patient, Diagnostic radiology</td>
</tr>
<tr>
<td>6470</td>
<td>Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient</td>
</tr>
<tr>
<td>6480</td>
<td>Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient</td>
</tr>
<tr>
<td>6490</td>
<td>Status post - Interventional radiology procedure on cardiac patient</td>
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### Miscellaneous Procedures

<table>
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<tr>
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<tr>
<td>5720</td>
<td>Status post - Aneurysm, Ventricular, Right, Repair</td>
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<td>Status post - Aneurysm, Ventricular, Left, Repair</td>
</tr>
<tr>
<td>5740</td>
<td>Status post - Aneurysm, Pulmonary artery, Repair</td>
</tr>
<tr>
<td>5760</td>
<td>Status post - Cardiac tumor resection</td>
</tr>
<tr>
<td>5780</td>
<td>Status post - Pulmonary AV fistula repair/occlusion</td>
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<tr>
<td>5790</td>
<td>Status post - Ligation, Pulmonary artery</td>
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<tr>
<td>5802</td>
<td>Status post - Pulmonary embolectomy, Acute pulmonary embolus</td>
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<tr>
<td>5804</td>
<td>Status post - Pulmonary embolectomy, Chronic pulmonary embolus</td>
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<td>Status post - Pleural drainage procedure</td>
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<td>Status post - Pleural procedure, Other</td>
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<td>Status post - Ligation, Thoracic duct</td>
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<td>5840</td>
<td>Status post – Decortication</td>
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<td>Status post - Esophageal procedure</td>
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<td>Status post - Mediastinal procedure</td>
</tr>
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<td>5870</td>
<td>Status post – Bronchoscopy</td>
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<td>Status post - Diaphragm procedure, Other</td>
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<td>Status post - Minimally invasive procedure</td>
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<td>Status post - Bypass for noncardiac lesion</td>
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<tr>
<td>5960</td>
<td>Status post - Delayed sternal closure</td>
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<table>
<thead>
<tr>
<th>1 Society of Thoracic Surgeons, Adult Cardiac Surgery Database, Version 2.73, used with permission.</th>
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### Attachment E
### Congenital Cardiac Diagnosis Codes

**Status Post**

**Miscellaneous Procedures (Continued)**

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<td>Status post - Sternotomy wound drainage</td>
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<td>Status post - Thoracotomy, Other</td>
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<td>Status post - Cardiotomy, Other</td>
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<td>6010</td>
<td>Status post - Cardiac procedure, Other</td>
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<tr>
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<td>Status post - Thoracic and/or mediastinal procedure, Other</td>
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<td>Status post - Peripheral vascular procedure, Other</td>
</tr>
<tr>
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<td>Status post - Miscellaneous procedure, Other</td>
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<td>6050</td>
<td>Status post - Organ procurement</td>
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