

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

**Instructions and Data Element Definitions  
January 2007**

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## Revision Highlights and Coding Clarification

### Data Clarifications

The following are recent data clarifications or reminders of recent data changes. For all data elements, please consult the main body of this document to obtain the complete data element definition and all relevant notes, interpretations and clarifications.

- The risk factor “Dialysis within 14 days prior to surgery” has been revised to include Continuous Renal Replacement Therapies (for example, PRISMA). (Pg 13)
- The risk factor “Inotropic support immediately pre-op within 24 hours” has been revised to include “any agent for inotropic support in any dosage.” (Pg 13)
- The risk factor “Significant Renal Dysfunction” has been revised such that the criteria for Premies is Creatinine  $\geq 1.5$  mg/dl. (Pg 14)
- The risk factor “Balloon Atrial Septostomy” has been revised to include procedures done in any location, not just the cath lab. (Pg 16)
- The interpretation for the Post-Procedural Event “Cardiac Tamponade” has been revised to read, “Cardiac Tamponade is equal to chest drainage.” (Pg 16)
- The Post-Procedural Event “Renal Failure” has been revised to include Continuous Renal Replacement Therapies (for example, PRISMA). (Pg 18)

### 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 operation(s) on **the heart or great vessels**, with or without extracorporeal circulation.

If more than one cardiac surgery occurred during a single hospital stay, **complete a separate form for each visit to the operating room.**

**ISOLATED PATENT DUCTUS ARTERIOSUS:** A pediatric CSRS form should **NOT** be completed if the patient has had an isolated Patent Ductus Arteriosus (PDA) repair when the patient is less than 1500 grams at the time of operation **OR** has had a PDA repair any place but the operating room, regardless of size.

Do not include implantations of pacemakers, AICD, or other procedures done in the catheterization lab during the hospital stay.

***Only operations on the heart or great vessels should be reported.***

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

## Revision Highlights and Coding Clarification (Cont.)

### 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, 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. (Pg 19)

## ITEM-BY-ITEM INSTRUCTIONS

### PFI Number

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

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

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

### Medical Record Number

Enter the child's medical record number.

### Child's Social Security Number

Enter the child's social security number as shown in the medical record. If the medical record does not contain the child's social security number or the child does not have one, enter 000-00-0000.

This information can usually be found on the face sheet of the hospital medical record.

### Age in Years

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 18<sup>th</sup> birthday, please complete an Adult CSRS form NOT a Pediatric CSRS form.

## I. Patient Information (Cont.)

### Date of Birth

Enter the child's exact date of birth.

### Sex

Check the appropriate box.

### Ethnicity

Check the appropriate box.

### Race

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.

**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."

## I. Patient Information (Cont.)

### Residence Code

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

Enter the date that the current hospital stay began.

### Primary Payer

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

### 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.

#### **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.

## I. Patient Information (Cont.)

### PFI of Transferring Hospital

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

**REMINDER:** *fill out a separate pediatric cardiac surgery form for each visit to the operating room involving a surgery of the heart or great vessels during the current hospital admission.*

### Date of Surgery

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

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

### Time at Start of Procedure

For time at start of procedure, enter the time of the induction of anesthesia using military time (e.g. 1:00 am is 01:00, and 1:00 pm is 13:00).

### Primary Surgeon Performing Surgery

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

## II. Procedural Information (Cont.)

### Surgical 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 emergency as defined below.

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

**Emergency:** Patients requiring emergency procedures will have 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

Check the appropriate box to indicate whether the patient went to the operating room for any cardiac operation prior to the present operating room visit during the current hospital admission.

If "Yes" then the date of the most recent previous cardiac operation **MUST** be entered.

### Cardiac Diagnosis Code

Enter the 3-digit State Cardiac Advisory Committee Code (SCAC) from the diagnosis code list in Attachment D - Primary Cardiac Diagnosis Codes.

List up to 5 diagnoses. Please list all cardiac diagnoses, regardless of whether or not a procedure is being done to alleviate the condition. If there are more than 5 diagnoses, list the ones that are being corrected first and then list the remaining in order of severity.

## II. Procedural Information (Cont.)

### Cardiac Procedure Code

Enter the 3-digit State Cardiac Advisory Committee Code (SCAC) from the procedure code list in Attachment E – Congenital and Acquired Cardiac Procedure Codes.

List up to 4 cardiac procedures performed during this operating room visit.

If there are more, list the 4 most significant.

**Note:** Interval Procedures indicate a palliative procedure, temporizing procedure, or one step in a staged procedure. Codes for these procedures are included in Attachment E.

### Mode of Cardiopulmonary (CP) Bypass

Check all that apply. If none apply leave blank.

### Minimally Invasive

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

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

### CABG Information

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

#### Pre-op Interventional CATH Procedure (this admission only)

Check the appropriate box. If "Yes" then enter the date the procedure occurred.

If more than one, enter the date of the most recent procedure.

*Includes this admission only.*

#### **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**.

#### Weight at Time of Operation

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.

#### Weight at Birth in grams

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 may be left blank.

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

#### 0. None

None of the pre-operative conditions listed below were present prior to surgery.

### III. Pre-Operative Status (Cont.)

#### 1-3. Previous Open Heart Operations

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.

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

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

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.

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.**

#### 11. Severe Cyanosis or Severe Hypoxia

Code if any of the following are present and documented in the patient’s medical record:

Pulse oximetry saturation <70%  
Resting PO<sub>2</sub> < 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.”

### III. Pre-Operative Status (Cont.)

#### 12. Dialysis within 14 Days Prior to Surgery

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, PRISMA) within 14 days prior to surgery.

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

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

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  
Discharged on 6/13  
Admitted on 6/20  
Surgery on 6/26  
Discharge on 6/30

#### 14. Inotropic Support Immediately Pre-op within 24 hrs

Code if either of the following are present in the patient's medical record:

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

### III. Pre-Operative Status (Cont.)

#### 15. Positive Blood Cultures within 2 Weeks of Surgery

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.

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

Arterial pH < 7.25 within 12 hours prior to surgery but during the same hospital admission.

#### 17. Significant Renal Dysfunction

Code if Creatinine levels reach the indicated range for the patient's age and/or size:

Preemies	Creatinine $\geq$ 1.5 mg /dl
Newborn	Creatinine $\geq$ 1.5 mg/dl
>1 month of age	Creatinine $\geq$ 2.0 mg/dl

#### 18. Trisomy 21

Code for any patients with Trisomy 21 (Down's Syndrome).

#### 19. Major Extracardiac Anomalies

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; Diaphragmatic hernia

**Note:** As part of the data validation process, you will be asked to specify the nature of the "Major Extracardiac Anomaly." Please keep notes on cases with this risk factor to facilitate this validation.

### III. Pre-Operative Status (Cont.)

#### 21. Pulmonary Hypertension

Code when systolic pressure reaches > 50% systemic or when elevated pulmonary vascular resistance exists.

**Note:** Either pulmonary artery pressure > 50% systemic pressure by echo estimate or direct measurement at catheterization would meet criteria.

#### 22. Ventricular Assist

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

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

Documented intracranial bleed  
Hydrocephalus  
Arterial venous malformation  
Cerebral vascular accident (*CVA*)  
Seizure disorders

#### 25. Pneumonia at Time of Surgery

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

#### 26. Prostaglandin Dependence at Time of Surgery

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

### III. Pre-Operative Status (Cont.)

#### 27. Balloon Atrial Septostomy

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

#### 28. Any Previous Organ Transplant

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

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

#### 1. Cardiac Tamponade

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

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

## IV. Post-Procedural Events Requiring Intervention (Cont.)

### 3. Bleeding Requiring Reoperation

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).

### 4. Deep Sternal Wound Infection

Drainage of purulent material from the sternotomy or thoracotomy wound.

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

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

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

## IV. Post-Procedural Events Requiring Intervention (Cont.)

### 11. Renal Failure Requiring 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 (e.g. PRISMA) post-procedure.

**DO NOT** code if the patient required dialysis (or CRRT) within 14 days before the procedure.

### 12. Complete Heart Block at Discharge

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

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

New neurologic deficit **present at discharge**.

### 16. Ventricular Assist

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 or procedure codes 830 – 840 are also coded.

## V. Discharge Information

### Hospital Discharge Date

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

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 on page 4 under “Revision Highlights and Coding Clarifications”)**

*“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 an indication of where the patient was discharged to will be sent back during data verification and validation efforts.**

### Died in

Check the appropriate box.

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

### 30 Day Status

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

**ATTACHMENT A**  
**PFI NUMBERS FOR CARDIAC DIAGNOSTIC AND SURGICAL CENTERS**

**PFI FACILITY**

---

**ALBANY AREA**

0001 Albany Medical Center Hospital  
0135 Champlain Valley Physicians Hospital Medical Center  
0829 Ellis Hospital  
1005 Glens Falls Hospital  
0746 Mary Imogene Bassett Hospital  
0755 Rensselaer Regional Heart Institute – St. Mary’s  
0756 Rensselaer Regional Heart Institute – Samaritan  
0818 Saratoga Hospital  
0005 St. Peter's Hospital

**BUFFALO AREA**

0207 Buffalo General Hospital  
0208 Children’s Hospital of Buffalo  
0210 Erie County Medical Center  
0213 Mercy Hospital of Buffalo  
0215 Millard Fillmore Gates  
0103 Women's Christian Association

**ROCHESTER AREA**

0116 Arnot Ogden Medical Center  
0471 Park Ridge Hospital  
0411 Rochester General Hospital  
0413 Strong Memorial Hospital

**SYRACUSE AREA**

0977 Cayuga Medical Center at Ithaca  
0628 Community General  
0636 Crouse Hospital  
0599 Faxton-St. Luke's Healthcare, St. Luke’s Division  
0367 Samaritan Medical Center  
0598 St. Elizabeth Medical Center  
0630 St. Joseph's Hospital Health Center  
0058 United Health Services Hospital, Inc.-Wilson Hospital Division  
0635 University Hospital SUNY Health Science Center (Upstate)

**ATTACHMENT A**  
**PFI NUMBERS FOR CARDIAC DIAGNOSTIC AND SURGICAL CENTERS**

**PFI FACILITY**

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**NEW ROCHELLE AREA**

0989 Benedictine Hospital  
0885 Brookhaven Memorial Hospital Medical Center, Inc.  
0779 Good Samaritan Hospital-Suffern  
0925 Good Samaritan Hospital Medical Center-West Islip  
0913 Huntington Hospital  
0528 Nassau University Medical Center  
0541 North Shore University Hospital  
0686 Orange Regional Medical Center  
1072 Sound Shore Medical Center-Westchester  
0527 South Nassau Communities Hospital  
0924 Southside Hospital  
0943 St. Catherine of Siena Medical Center  
0563 St. Francis Hospital  
0694 St. Luke's Cornwall Hospital/Newburgh  
0245 Stony Brook University Hospital  
0990 The Kingston Hospital  
0181 Vassar Brothers Medical Center  
1139 Westchester Medical Center  
0511 Winthrop University Hospital

**NY CITY AREA**

1438 Bellevue Hospital Center  
1439 Beth Israel Medical Center / Petrie Campus  
1164 Bronx-Lebanon Hospital Center-Fulton Division  
1286 Brookdale Hospital Medical Center  
1288 Brooklyn Hospital Center-Downtown  
1626 City Hospital Center-Elmhurst  
1294 Coney Island Hospital  
1445 Harlem Hospital Center  
1300 Interfaith Medical Center, Jewish Hospital Medical Center of Brooklyn Division  
1165 Jacobi Medical Center  
1629 Jamaica Hospital Medical Center  
1301 King's County Medical Center

**ATTACHMENT A  
PFI NUMBERS FOR CARDIAC DIAGNOSTIC AND SURGICAL CENTERS**

**PFI FACILITY**

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**NY CITY AREA (cont.)**

- 1450 Lenox Hill Hospital
  - 1302 Long Island College Hospital
  - 1630 Long Island Jewish Medical Center
  - 1304 Lutheran Medical Center
  - 1305 Maimonides Medical Center
  - 3058 Montefiore Medical Center-Jack D. Weiler Hospital of  
A. Einstein College Division
  - 1169 Montefiore Medical Center-Henry and Lucy Moses Division
  - 1456 Mount Sinai Hospital
  - 1637 NY Hospital Medical Center of Queens
  - 1306 NY Methodist Hospital
  - 1464 NY Presbyterian-Columbia Presbyterian Center
  - 1458 NY Presbyterian-NY Weill Cornell Center
  - 1463 NYU Medical Center
  - 2968 North General Hospital
  - 1176 St. Barnabas Hospital
  - 1466 St. Luke's Roosevelt Hospital Center-Roosevelt Hospital Division
  - 1469 St. Luke's Roosevelt Hospital-St. Luke's Hospital Division
  - 1740 Staten Island University Hospital-North
  - 1634 SVCMC-St. John's Queens
  - 1471 SVCMC-St. Vincent's Manhattan
  - 1738 SVCMC-St. Vincent's Staten Island
  - 1320 University Hospital of Brooklyn
  - 1318 Wyckoff Heights Medical Center
- 
- 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://www.health.state.ny.us/nysdoh/hospital/main.htm>

## ATTACHMENT B

### Residence Codes

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

01 Albany	35 Oswego
02 Allegany	36 Otsego
03 Broome	37 Putnam
04 Cattaraugus	38 Rensselaer
05 Cayuga	39 Rockland
06 Chautauqua	40 St. Lawrence
07 Chemung	41 Saratoga
08 Chenango	42 Schenectady
09 Clinton	43 Schoharie
10 Columbia	44 Schuyler
11 Cortland	45 Seneca
12 Delaware	46 Steuben
13 Dutchess	47 Suffolk
14 Erie	48 Sullivan
15 Essex	49 Tioga
16 Franklin	50 Tompkins
17 Fulton	51 Ulster
18 Genesee	52 Warren
19 Greene	53 Washington
20 Hamilton	54 Wayne
21 Herkimer	55 Westchester
22 Jefferson	56 Wyoming
23 Lewis	57 Yates
24 Livingston	58 Bronx
25 Madison	59 Kings
26 Monroe	60 Manhattan
27 Montgomery	61 Queens
28 Nassau	62 Richmond
29 Niagara	
30 Oneida	
31 Onondaga	88 Unknown
32 Ontario	
33 Orange	99 Outside NYS
34 Orleans	

## ATTACHMENT C

### Payer Codes

- 01 Medicare—Fee For Service
- 02 Medicare—Managed Care
- 03 Medicaid—Fee For Service
- 04 Medicaid—Managed Care
- 05 Blue Cross
- 06 HMO/Managed Care
- 07 Other Private Insurance Company
- 11 Self Pay
- 19 Other

## ATTACHMENT D

### NEW YORK STATE DEPARTMENT OF HEALTH STATE CARDIAC ADVISORY COMMITTEE

#### PRIMARY CARDIAC DIAGNOSIS CODES

##### Atrial Situs Anomalies

- 010 Situs Inversus
- 011 Situs Ambiguous/Heterotaxy Syndrome

##### Cardiac Position Anomalies

- 020 Dextrocardia
- 021 Mesocardia
- 022 Ectopia cordis

##### Anomalies of Pulmonary Veins

- 100 Partial Anomalous Return
- 101 Total Anomalous Return
- 101 Supracardiac
- 102 Cardiac
- 103 Infracardiac
- 104 Mixed
- 105 Pulmonary Vein Stenosis
- 106 Cor Triatrialum

##### Anomalies of Atrial Septum

- 110 Secundum ASD
- 111 Single Atrium
- 112 Unroofed Coronary Sinus
- 113 Sinus Venosus ASD
- 114 PFO

##### Anomalies of Atrioventricular Valve(s)

- 120 Tricuspid Valve
- 120 Ebstein's Anomaly
- 121 Tricuspid Stenosis
- 122 Tricuspid Regurgitation
- 123 Straddling Tricuspid Valve

## ATTACHMENT D - PRIMARY CARDIAC DIAGNOSIS CODES (CONT.)

### Anomalies of Atrioventricular Valve(s) – (Cont.)

	Mitral Valve
130	Supravalvular Mitral Stenosis
131	Valvular Mitral Stenosis
132	Subvalvular Mitral Stenosis
133	Mitral Regurgitation
134	Straddling Mitral Valve
135	Papillary Muscle Abnormality
	Common AV Valve Abnormality
140	Stenosis
141	Regurgitation
142	Malaligned

### Anomalies of Ventricular Septum

150	Perimembranous VSD
151	Doubly committed VSD (Subarterial)
152	Inlet VSD
153	Muscular VSD
154	Multiple VSDs

### Atrioventricular Septal Defects (AVSD)

160	Partial AVSD (Primum ASD)
	Complete AVSD
161	Balanced
162	Unbalanced

### Univentricular Heart (Single Ventricle)

170	Double/Common Inlet LV
171	Double/Common Inlet RV
	Tricuspid Atresia
172	With IVS
173	With VSD
174	With TGA
175	Mitral Atresia
176	Indeterminate Ventricle
	Hypoplastic Right Ventricle
180	Pulmonary atresia with IVS
181	Other type of hypoplastic RV
	Hypoplastic Left Ventricle
190	Classical HLHS (Aortic Atresia w/ Hypoplastic LV)
191	Any other Hypoplastic LV

## ATTACHMENT D - PRIMARY CARDIAC DIAGNOSIS CODES (CONT.)

### Anomalies of Ventricular Outflow Tracts

200	Pulmonary Ventricular Outflow Tract
201	Pulmonary Valve Stenosis
202	Subvalvular/Infundibular Pulmonary Stenosis
203	Double Chamber Right Ventricle
204	Branch Pulmonary Artery Stenosis
205	Hypoplastic Pulmonary Arteries
206	Pulmonary Valve Regurgitation
207	Main Pulmonary Artery Atresia
208	Branch Pulmonary Artery Atresia
	Aortic Ventricular Outflow Tract
210	Valvular Aortic Stenosis
	Subvalvular Aortic Stenosis
211	Discrete
212	Long Segment/Tunnel
220	Supravalvular Aortic Stenosis
230	Aortic Valve Atresia
231	Aortic Valve Regurgitation
232	Aorto-Ventricular Tunnel

### Tetralogy of Fallot (TOF)

240	RV-PA Continuity
241	TOF with Pulmonary Valve Atresia
242	Absent Pulmonary Valve Syndrome

### Truncus Arteriosus

250	Type I
251	Type II
252	Type III

### Transposition of the Great Arteries (TGA)

260	D-TGA
261	Congenitally Corrected Transposition

### Double Outlet Right Ventricle (DORV)

270	Subaortic VSD
271	Subpulmonic VSD
272	Uncommitted VSD

## ATTACHMENT D - PRIMARY CARDIAC DIAGNOSIS CODES (CONT.)

### Double Outlet Right Ventricle (DORV) (cont.)

273	Doubly Committed VSD
274	Restrictive VSD

### Great Vessel Anomalies

280	Aortopulmonary Window
281	Patent Ductus Arteriosus
282	Origin of L/R PA from Aorta
283	Sinus of Valsalva Aneurysm/Fistula
284	Aortic Coarctation
285	Aortic Interruption
	Aortic Aneurysm
286	Ascending
287	Descending
288	Transverse
289	Vascular Ring
290	Origin of LPA from RPA (PA sling)
291	Discontinuous PAs
292	Bronchial PA Blood Flow (MAPCA)
293	Isolated LSVC
294	Bilateral SVCs
295	Azygous/Hemiazygous Continuous IVC
296	Other Great Vessel Anomalies

### Coronary Artery Anomalies

300	Coronary Artery Fistula
301	Coronary Artery Sinusoids
302	Coronary Artery Stenosis
303	Coronary Artery Aneurysm
304	Anomalous Origin Coronary Artery
305	Atresia Left Main Coronary Artery
306	Atresia Right Main Coronary Artery

### Cardiac Rhythm Anomalies

310	Supraventricular tachycardia
311	Ventricular tachycardia
312	Sinus bradycardia
313	Heart Block

## ATTACHMENT D - PRIMARY CARDIAC DIAGNOSIS CODES (CONT.)

### Cardiomyopathies

	Hypertrophic
320	Left Ventricle
321	Right Ventricle
322	Dilated

**398 Other Diagnoses NOT Listed**

### Acquired Disease

400	Kawasaki's Disease
401	Endocarditis
402	Myocarditis
403	Traumatic

### Organ Failure

820	Cardiac
821	Pulmonary

### Cardiac Neoplasms

900	Atrial
901	Ventricular
902	Valvular
903	Great Vessel

## ATTACHMENT E

### NEW YORK STATE DEPARTMENT OF HEALTH STATE CARDIAC ADVISORY COMMITTEE

#### CONGENITAL AND ACQUIRED CARDIAC PROCEDURE CODES

##### 100-398 Congenital Heart Disease - Operations Performed *With or Without Extracorporeal Circulation*

**Note:** Extracorporeal circulation will be determined from the data element Entire Procedure Off Pump reported under Section II. Procedural Information on the front of the form. Please accurately complete this item for all appropriate cases.

##### Anomalies of Pulmonary Veins

- 100 Repair of Anomalous Pulmonary Venous Return
- 101 Repair of Pulmonary Vein Stenosis
- 103 Repair of Partial Anomalous Pulmonary Venous Return

##### Anomalies of Atrial Septum

- 120 ASD Closure
- 121 Creation of ASD
- 122 Repair of Cor Triatriatum
- 123 PFO Closure

##### Atrioventricular Septal Defect (AVSD)

- 130 Repair of Complete AV Canal
- 131 Repair of Partial AV Canal

##### Anomalies of Ventricular Septum

- 140 Repair of VSD
- 141 Creation/Enlargement of VSD
- 142 Fenestration of VSD Patch

## ATTACHMENT E – Congenital and Acquired Cardiac Procedure Codes (Cont.)

### Anomalies of Atrioventricular Valves

	Tricuspid Valve
150	Repair ( <i>Non-Ebstein's Valve</i> )
	Replacement
151	Homograft
152	Prosthetic
153	Tricuspid Valve Closure
154	Repair Ebstein's Anomaly
	Mitral Valve
160	Resect supramitral ring
161	Repair (including annuloplasty)
	Replacement
162	Homograft
163	Prosthetic
170	Common AV Valve Repair

### Anomalies of Ventricular Outflow Tract(s)

	Pulmonary Ventricular Outflow Tract
180	Pulmonary Valvotomy/Valvectomy
181	Resection of subvalvular PS
182	Repair of supra-ventricular PS
	Pulmonary Valve Replacement
190	Homograft
191	Prosthetic
	Pulmonary Outflow Conduit
	Valved
200	Homograft
201	Prosthetic
202	Non-Valved
	Transannular Patch
210	With Monocusp Valve
211	Without Monocusp Valve
212	Repair Branch PS
	Aortic Ventricular Outflow Tract
220	Aortic Valvuloplasty
221	Aortic Valvotomy
230	Repair Supra-ventricular AS
231	Resection of Discrete Subvalvular AS
235	Aortoventriculoplasty ( <i>Konno Procedure</i> )
	Aortic Valve Replacement
240	Autograft
241	Homograft
242	Prosthetic
243	Heterograft

## ATTACHMENT E – Congenital and Acquired Cardiac Procedure Codes (Cont.)

### Anomalies of Ventricular Outflow Tract(s) (Cont.)

	Aortic Root Replacement
250	Autograft
251	Homograft
252	Prosthetic
255	LV Apex to Aorta Conduit

### Tetralogy of Fallot

260	Repair with Pulmonary Valvotomy
261	Repair with Transannular Patch
262	Repair with Non-valved Conduit
	Repair with Valved Conduit
263	Homograft
264	Prosthetic
265	Repair with reduction/plasty of PAs
	Repair with pulmonary valve replacement
266	Homograft
267	Prosthetic

### Truncus Arteriosus

262	Repair with Non-Valved Conduit
	Repair with Valved Conduit
263	Homograft
264	Prosthetic

### Univentricular Heart (Single Ventricle)

	Fontan Operations
270	Direct RV-PA Connection
	Total Cavopulmonary Connection
271	Lateral tunnel – nonfenestrated
272	Lateral tunnel – fenestrated
273	Extracardiac – nonfenestrated
274	Extracardiac – fenestrated
275	Septation of Single Ventricle
	Hypoplastic Right Ventricle
	Valved
200	Homograft
201	Prosthetic
202	Non-Valved

## ATTACHMENT E – Congenital and Acquired Cardiac Procedure Codes (Cont.)

### Univentricular Heart (Single Ventricle) (Cont.)

- 210 Transannular Patch  
    With Monocusp Valve
- 211           Without Monocusp Valve
- Hypoplastic Left Ventricle
- 280           Norwood
- 290      Damus Kaye Stansel (*DSK*)

### Transposition of Great Arteries or Double Outlet RV

- 310 Arterial Switch
- 311 Senning Procedure
- 312 Mustard Procedure
- 313 Intraventricular Repair of DORV
- Rastelli Procedure
- RV-PA Conduit
- Valved
- 320           Homograft
- 321           Prosthetic
- 322           Non-Valved
- 325      REV operation (*Modified Rastelli*)
- LV-PA Conduit
- Valved
- 326           Homograft
- 327           Prosthetic
- 328           Non-Valved

### Great Vessel Anomalies

- 330 PDA Ligation
- 331 Repair Aortopulmonary Window
- 332 Reimplantation of left or right pulmonary artery
- 333 Repair Sinus of Valsalva Aneurysm
- Aortic Repair (*Coarctation or Interruption*)
- 340      End to end anastomosis
- 341      Subclavian flap angioplasty
- 342      Onlay Patch
- 343      Interposition graft
- 344 Vascular Ring Division
- 345 Repair of PA Sling
- 346 Reimplantation of Innominate Artery
- 347 Aortoplexy

## ATTACHMENT E – Congenital and Acquired Cardiac Procedure Codes (Cont.)

### Coronary Artery Anomalies

- 350 Translocation of LCA to Aorta
  - Direct
- 351 Transpulmonary Tunnel (*Takeuchi*)
- 352 Coronary Artery Ligation
- 353 Coronary Fistula Ligation

### Cardiomyopathies

- 360 Left Ventricular Reconstruction (*Batiste Procedure, Surgical Ventricular Restoration*)
- 361 Radical Myomectomy

### Interval Procedures

- 370 Pulmonary Artery Band
  - 375 Unifocalization of Pulmonary Vessels Shunts
  - 381 Central Aortopulmonary Shunt
    - Blalock Taussig Shunts
  - 382 Classical
  - 383 Modified
    - Glenn Shunts
  - 384 Unidirectional (*Classical*)
  - 385 Bidirectional
  - 386 Bilateral Bidirectional
- 390 Cardiac Arrhythmia Surgery**
- 398 Other Operations for Congenital Heart Disease**

### 400-998 Acquired Heart Disease - Operations Performed *With or Without* Extracorporeal Circulation

- 401 Mitral Valvotomy
- 402 Pericardiectomy
- 403 Stab Wound of Heart or Great Vessel Repair (*without extracorporeal circulation*)
- 404 Saccular Aortic Aneurysm

## ATTACHMENT E – Congenital and Acquired Cardiac Procedure Codes (Cont.)

### Repair Of Aortic Deceleration Injury

- 420 With Shunt
- 421 Without Shunt
- 498 Other Operation for Acquired Heart Disease, Performed without Extracorporeal Circulation**

### Valvuloplasty - Single Valve

- 500 Aortic
- 501 Mitral
- 502 Tricuspid

### Replacement - Single Valve

- 510-518\* Ross Procedure
- 520-528\* Aortic Mechanical
- 530-538\* Aortic Heterograft
- 540-548\* Aortic Homograft
- 550-558\* Mitral Mechanical
- 560-568\* Mitral Heterograft
- 570-578\* Tricuspid Mechanical
- 580-588\* Tricuspid Heterograft
- 590-598\* Pulmonary
- 600-608\* Mitral Valve Homograft

### Multiple Valve Surgery - Valvuloplasty Or Replacement

- 610-618\* Double, Including Tricuspid
- 620-628\* Double, Not Including Tricuspid
- 630-638\* Triple

\*REOPERATIONS: For Single Valve Replacement or Multiple Valve Surgery (510-638), use third digit to indicate reason for reoperation, as follows:

- |                           |                            |
|---------------------------|----------------------------|
| 0 Not a Reoperation       | 4 Failed Valvuloplasty     |
| 1 Periprosthetic Leak     | 5 Disease of Another Valve |
| 2 Prosthetic Endocarditis | 8 Other Reason             |
| 3 Prosthetic Malfunction  |                            |

*Examples: Aortic Heterograft, not a reoperation: 530  
Valvuloplasty or Replacement, Triple, due to Prosthetic Endocarditis: 632*

## ATTACHMENT E – Congenital and Acquired Cardiac Procedure Codes (Cont.)

### Valve Conduits

***Aortic Valve and Ascending Aorta Replacement: Record Under Aneurysms***

660 Apical Aortic Conduit

### Coronary Artery Bypass Grafts

670 Coronary Artery Bypass Graft

*Please Note: If you code a 670 then you must complete the CABG Information under the Procedural Information Section of the Form.*

### Other Revascularization

710 Transmyocardial Revascularization

715 Growth Factor Installation

### Combined CABG With Other

720 Acquired Ventricular Septal Defect

721 Resection or Plication of LV Aneurysm

722 Carotid Endarterectomy

723 Implantation of AICD

724 Ventricular Reconstruction (*Batiste Procedure, Surgical Ventricular Restoration*)

*Please Note: If you code 720-724 then you must complete the CABG Information under the Procedural Information Section of the Form.*

### Valve Surgery And CABG

740 Mitral Valve Replacement Plus Single or Multiple CABG

741 Mitral Valvuloplasty Plus Single or Multiple CABG

742 Aortic Valvuloplasty or Replacement Plus Single or Multiple CABG

744 Double Valvuloplasty or Replacement, including Tricuspid, Plus Single or Multiple CABG

745 Double Valvuloplasty or Replacement, not including Tricuspid, plus Single or Multiple CABG

746 Other Single Valve Surgery Plus Single or Multiple CABG

747 Other Multiple Valve Surgery Plus Single or Multiple CABG

*Please Note: If you code a 740-747 then you must complete the CABG Information under the Procedural Information Section of the Form.*

## ATTACHMENT E – Congenital and Acquired Cardiac Procedure Codes (Cont.)

### Surgery For Complication Of CAD Without CABG

- 760 Acquired Ventricular Septal Defect
- 761 Resection or Plication of LV Aneurysm
- 762 Ventricular Reconstruction (*Batiste Procedure, Surgical Ventricular Restoration*)

### Radiofrequency or Operative Ablation

- 770 Atrial
- 771 Ventricular
- 772 Maze Procedure

### Aortic Aneurysm Repair/Aortic Root Replacement

- 780 Ascending Aorta, With Graft, With Coronary Reimplantation
- 781 Ascending Aorta, Replacement or Repair, Without Coronary Reimplantation
- 782 Transverse Aorta
- 783 Descending Thoracic Aorta (*Excluding Acute Deceleration Injury*)
- 784 Thoracoabdominal
- 785 Aortic Root Replacement or Repair, With Graft, With Coronary Reimplantation

### Dissecting Aneurysm Surgery

- 800 Intraluminal Graft
- 801 Intraluminal Graft with Aortic Valve Suspension
- 802 Tube Graft with Aortic Valve Suspension
- 803 Tube Graft with Aortic Valve Replacement
- 818 Other Dissecting Aneurysm Surgery

### Transplant Procedures

- 820 Heart Transplant
- 821 Heart and Lung Transplant
- 822 Lung Transplant
- 830 Left Ventricular Assist Device (*LVAD*) – Extracorporeal
- 831 Left Ventricular Assist Device (*LVAD*) – Implantable
- 832 Right Ventricular Assist Device (*RVAD*)
- 833 Bi-Ventricular Assist Device (*BIVAD*)
- 834 Extracorporeal Membrane Oxygenation (*ECMO*)
- 840 Ventricular Assist Device as a Destination Therapy (*must also code either 830 or 831*)
- 901 Artificial Heart

## ATTACHMENT E – Congenital and Acquired Cardiac Procedure Codes (Cont.)

<b>Other</b>
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- 902 Pulmonary Embolectomy
- 903 Stab Wound of Heart or Great Vessel Repair (*with extracorporeal circulation*)
- 904 Removal of Intracardiac Tumor
- 905 Removal of Intracardiac Catheter
- 906 Repair of Aortic Deceleration Injury (*With Aortofemoral Bypass*)
- 907 Repair of a Cardiac Laceration due to Trauma
- 915 Septal Myomectomy
- 916 Ventricular Myomectomy
- 920 Ventricular Free Wall Rupture
  
- 998 Other Operation for Acquired Heart Disease,  
Performed with Extracorporeal Circulation**