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

Instructions and Data Element Definitions January 2006

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Revision Highlights and Coding Clarification

New Procedure Codes

As a reminder, please note two new procedure codes were added to the CSRS data collection effective January 1, 2005. They can be found in Attachment D.

243 – Aortic Valve Replacement - Heterograft 724 – Ventricular Reconstruction done with a CABG

Please note that code 724 is for a ventricular reconstruction due to an acquired disease that is performed at the same time as a CABG. If it is a ventricular reconstruction due to a congenital anomaly done with a CABG use codes 360 and 760.

Procedural Information

ISOLATED PATENT DUCTUS ARTERIOSUS: A pediatric CSRS form is **NOT** required 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.

Revised Data Elements

- 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 14)
- The risk factor "Significant Renal Dysfunction" has been revised such that the criteria for Preemies is Creatinine ≥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. (Pg16)
- The interpretation for the major event "Cardiac Tamponade" has been revised to read, "Cardiac Tamponade is equal to chest drainage." (Pg 17)
- The major event "Renal Failure" has been revised to include Continuous Renal Replacement Therapies (for example, PRISMA). (Pg 18)

Revision Highlights and Coding Clarification (Cont.)

Revised Data Elements (Cont.)

Discharge Information

The policy of a Hospice discharge counting as an in-hospital mortality has been amended: 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. (page 20)

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.

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.

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 18th birthday, please complete an Adult CSRS form NOT a Pediatric CSRS form.

Date of Birth

Enter the child's exact date of birth.

I. Patient Information (Cont.)

Sex

Check the appropriate box.

Ethnicity

Check the appropriate box.

Race

Check the appropriate box.

- 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 or in cases where more than one of the above responses could be coded. Please provide the specific race for any case marked "Other."

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

Please note that race should be based on the patient's racial/ethnic origins, which is not necessarily the same as their country/place of origin. If the patient's race is unclear, please indicate "8 – Other". For example, Puerto Rican is not a race. However, if you are unsure of the patient's race you may code "8 – Other" and then specify "Puerto Rican".

The CSRS race codes are parallel to SPARCS race categories and are based on CDC codes that follow guidelines for minimum race and ethnicity categories as established for Federal programs by the Office of Management and Budget (OMB). More information on these reporting categories and the process of developing them can be found at

http://www.whitehouse.gov/omb/fedreg/1997standards.html.

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 may 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.

Please note that starting in 2005, Worker's Compensation, Family Health Plus, and Other Federal Programs are reported as code "19 - Other."

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. Code 19 is 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://www.health.state.ny.us/nysdoh/hospital/main.htm 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 principle 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.

II. Procedural Information (Cont.)

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.

O. None

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

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 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

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.

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.

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 ≥1.5 mg /dl
Newborn Creatinine ≥1.5 mg/dl
>1 month of age Creatinine >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

21. Pulmonary Hypertension

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

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.

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.

O. 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 is equal to 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.

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).

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

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

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 within 14 days before the procedure.

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

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

A complete listing of NYS hospitals, including their PFI can be found by county at: http://www.health.state.ny.us/nysdoh/hospital/main.htm

PFI NUMBERS FOR CARDIAC DIAGNOSTIC AND SURGICAL CENTERS

PFI#	HOSPITAL
0001	Albany Medical Center Hospital
0116	Arnot Ogden Medical Center
1438	Bellevue Hospital Center
0989	Benedictine Hospital
1439	Beth Israel Medical Center / Petrie Campus
1164	Bronx Lebanon Hospital Center – Fulton Division
1286	Brookdale Hospital Medical Center
0885	Brookhaven Memorial Hospital Medical Center, Inc.
1288	Brooklyn Hospital Center – Downtown
0207	Buffalo General Hospital
0977	Cayuga Medical Center at Ithaca
0135	Champlain Valley Physicians Hospital Medical Center
0208	Children's Hospital of Buffalo
1626	City Hospital Center at Elmhurst
1294	Coney Island Hospital
0628	Community General
0636	Crouse Hospital
0829	Ellis Hospital
0210	Erie County Medical Center
0599	Faxton St. Luke's Healthcare, St. Luke's Division
1005	Glens Falls Hospital
0925	Good Samaritan Hospital Medical Center (West Islip)
0779	Good Samaritan Hospital of Suffern
1445	Harlem Hospital Center
0913	Huntington Hospital
1300	Interfaith Medical Center, Jewish Hosp. Med Ctr of Brooklyn Division
1165	Jacobi Medical Center
1629	Jamaica Hospital Medical Center
1301	Kings County Medical Center
0990	Kingston Hospital

ATTACHMENT A

PFI NUMBERS FOR CARDIAC DIAGNOSTIC AND SURGICAL CENTERS

PFI#	HOSPITAL
1450	Lenox Hill Hospital
1302	Long Island College Hospital
1630	Long Island Jewish Medical Center
1304	Lutheran Medical Center
1305	Maimonides Medical Center
0746	Mary Imogene Bassett Hospital
0213	Mercy Hospital of Buffalo
0215	Millard Fillmore Hospital
1169	Montefiore Medical Center – Henry and Lucy Moses Division
3058	Montefiore Medical Center – Jack D. Weiler Hosp. of A. Einstein College Div.
1456	Mount Sinai Hospital
0528	Nassau University Medical Center
2968	North General Hospital
0541	North Shore University Hospital
1637	NY Hospital Medical Center of Queens
1306	NY Methodist Hospital
1464	NY Presbyterian Hospital Columbia Presbyterian Center
1458	NY Presbyterian Hospital NY Weill Cornell Center
1463	NYU Hospitals Center
0686	Orange Regional Medical Center
0471	Park Ridge Hospital
0755	Rensselaer Regional Heart Institute - St. Mary's
0756	Rensselaer Regional Heart Institute - Samaritan
0411	Rochester General Hospital
0367	Samaritan Medical Center
0818	Saratoga Hospital
1072	Sound Shore Medical Center of Westchester
0527	South Nassau Communities Hospital
0924	Southside Hospital
1176	St. Barnabas Hospital
0943	St. Catherine of Siena Hospital
0598	St. Elizabeth Medical Center

ATTACHMENT A

PFI NUMBERS FOR CARDIAC DIAGNOSTIC AND SURGICAL CENTERS

PFI#	HOSPITAL
0563	St. Francis Hospital
0870	St. James Mercy Hospital (Closed 2005)
0630	St. Joseph's Hospital Health Center
0694	St. Luke's of Newburg
1469	St. Luke's Roosevelt Hospital - St. Luke's Hospital Division
1466	St. Luke's Roosevelt Hospital Center, Roosevelt Hospital Division
0005	St. Peter's Hospital
1740	Staten Island University Hospital - North
0413	Strong Memorial Hospital
1634	SVCMC – St Johns Queens
1471	SVCMC - St. Vincent's Manhattan
1738	SVCMC - St. Vincent's Staten Island
0058	United Health Services Hospital, Inc – Wilson Hospital Division
1320	University Hospital of Brooklyn
0245	University Hospital at Stony Brook
0635	University Hospital SUNY Health Science Center (Upstate)
0181	Vassar Brothers Hospital
1139	Westchester Medical Center
0511	Winthrop University Hospital
0103	Woman's Christian Association
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)

ATTACHMENT B

Residence Codes

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

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

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

0	1	0	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
	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 AŚD
114	PFO

Anomalies of Atrioventricular Valve(s)

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

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
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Anomalies of Ventricular Outflow Tracts

200 201	Pulmonary Ventricular Outflow Tract 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 Arterious

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
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

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 Cardiac821 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 Triatrialum
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

Anomalies of Atrioventricular Valves

	Tricuspid Valve
150	Repair (Non-Ebstein's Valve)
	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 supravalvular 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 Supravalvular AS
231	Resection of Discrete Subvalvular AS
235	Aortoventriculoplasty (Konno Procedure)
	Aortic Valve Replacement
240	Autograft
241	Homograft
242	Prosthetic
243	Heterograft

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

Repair with Non-Valved Conduit
 Repair with Valved Conduit
 Homograft
 Prosthetic

Univentricular Heart (Single Ventricle)

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

Univentricular Heart (Single Ventricle) (Cont.)

Transannular Patch
210 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

310 311	Arterial Switch Senning Procedure
312	9
313	
	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

Coronary Artery Anomalies

Translocation of LCA to Aorta
350 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 Unifocalization of Pulmonary Vessels 375 Shunts 381 Central Aortopulmonary Shunt Blalock Taussig Shunts 382 Classical 383 Modified Glenn Shunts Unidirectional (Classical) 384 385 Bidirectional 386 Bilateral Bidirectional **Cardiac Arrhythmia Surgery** 390

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

Other Operations for Congenital Heart Disease

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

Repair Of Aortic Deceleration Injury

420 With Shunt421 Without Shunt

398

498 Other Operation for Acquired Heart Disease,

Performed without Extracorporeal Circulation

Valvuloplasty - Single Valve

500 Aortic501 Mitral502 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

1 Periprosthetic Leak

2 Prosthetic Endocarditis

3 Prosthetic Malfunction

4 Failed Valvuloplasty

5 Disease of Another Valve

8 Other Reason

Examples: Aortic Heterograft, not a reoperation: 530

Valvuloplasty or Replacement, Triple, due to Prosthetic Endocarditis: 632

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
- 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, <u>not</u> 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.

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
- Maze Procedure 772

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

Heart Transplant

820

- 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)
- Extracorporeal Membrane Oxygenation (ECMO) 834
- 840 Ventricular Assist Device as a Destination Therapy (must also code either 830 or 831)
- 901 **Artificial Heart**

Other	
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