

# RACHS-1 Pediatric Heart Surgery Volume Technical Specifications

## Pediatric Quality Indicators #7 (PDI #7)

AHRQ Quality Indicators™, Version 5.0

March 2015

Provider-Level Indicator

Type of Score: Volume

### Description

The number of hospital discharges with a pediatric heart surgery procedure for patients with congenital heart disease ages 17 years and younger.

### Numerator

Discharges, for patients ages 17 years and younger, with either

- any-listed ICD-9-CM procedure codes for congenital heart disease (1P); or
- any-listed ICD-9-CM procedure codes for non-specific heart surgery (2P) and any-listed ICD-9-CM diagnosis codes for congenital heart disease (2D).

#### ICD-9-CM Congenital heart disease procedure codes (1P)<sup>1</sup>:

3500	CLOSED VALVOTOMY NOS	3531	PAPILLARY MUSCLE OPS
3501	CLOSED AORTIC VALVOTOMY	3532	CHORDAE TENDINEAE OPS
3502	CLOSED MITRAL VALVOTOMY	3533	ANNULOPLASTY
3503	CLOSED PULMON VALVOTOMY	3534	INFUNDIBULECTOMY
3504	CLOSED TRICUSP VALVOTOMY	3535	TRABECUL CARNEAE CORD OP
3505	ENDOVAS REPL AORTC VALVE	3539	TISS ADJ TO VALV OPS NEC
3506	TRNSAPCL REP AORTC VALVE	3541	ENLARGE EXISTING SEP DEF
3507	ENDOVAS REPL PULM VALVE	3542	CREATE SEPTAL DEFECT
3508	TRNSAPCL REPL PULM VALVE	3550	PROSTH REP HRT SEPTA NOS
3510	OPEN VALVULOPLASTY NOS	3551	PROS REP ATRIAL DEF-OPN
3511	OPN AORTIC VALVULOPLASTY	3552	PROS REPAIR ATRIA DEF-CL
3512	OPN MITRAL VALVULOPLASTY	3553	PROS REP VENTRIC DEF-OPN
3513	OPN PULMON VALVULOPLASTY	3554	PROS REP ENDOCAR CUSHION
3514	OPN TRICUS VALVULOPLASTY	3560	GRFT REPAIR HRT SEPT NOS
3520	OPN/OTH REP HRT VLV NOS	3561	GRAFT REPAIR ATRIAL DEF
3521	OPN/OTH REP AORT VLV-TIS	3562	GRAFT REPAIR VENTRIC DEF
3522	OPN/OTH REP AORTIC VALVE	3563	GRFT REP ENDOCAR CUSHION
3523	OPN/OTH REP MTRL VLV-TIS	3570	HEART SEPTA REPAIR NOS
3524	OPN/OTH REP MITRAL VALVE	3571	ATRIA SEPTA DEF REP NEC
3525	OPN/OTH REP PULM VLV-TIS	3572	VENTR SEPTA DEF REP NEC
3526	OPN/OTH REPL PUL VALVE	3573	ENDOCAR CUSHION REP NEC
3527	OPN/OTH REP TCSPD VLV-TS	3581	TOT REPAIR TETRAL FALLOT
3528	OPN/OTH REPL TCSPD VALVE	3582	TOTAL REPAIR OF TAPVC

3583	TOT REP TRUNCUS ARTERIOS	3699	HEART VESSEL OP NEC
3584	TOT COR TRANSPOS GRT VES	3733	EXC/DEST HRT LESION OPEN
3591	INTERAT VEN RETRN TRANSP	3736	EXC,DESTRCT,EXCLUS LAA
3592	CONDUIT RT VENT-PUL ART	375	<i>HEART TRANSPLANTATION</i>
3593	CONDUIT LEFT VENTR-AORTA	3751	HEART TRANSPLANTATION
3594	CONDUIT ARTIUM-PULM ART	3752	IMP TOT INT BI HT RP SYS
3595	HEART REPAIR REVISION	390	SYSTEMIC-PULM ART SHUNT
3598	OTHER HEART SEPTA OPS	3921	CAVAL-PULMON ART ANASTOM
3599	OTHER HEART VALVE OPS		

<sup>1</sup>The procedure or diagnosis codes are continuously updated. The current list of ICD-9-CM codes is valid for October 2012 through September 2013. Italicized codes are not active in Fiscal Year 2013.

**ICD-9-CM Non-specific cardiac procedure codes (2P):**

3834	AORTA RESECTION & ANAST	3885	OCCLUDE THORACIC VES NEC
3835	THOR VESSEL RESECT/ANAST	3949	VASC PROC REVISION NEC
3844	RESECT ABDM AORTA W REPL	3956	REPAIR VESS W TIS PATCH
3845	RESECT THORAC VES W REPL	3957	REP VESS W SYNTH PATCH
3864	EXCISION OF AORTA	3958	REPAIR VESS W PATCH NOS
3865	THORACIC VESSEL EXCISION	3959	REPAIR OF VESSEL NEC
3884	OCCLUDE AORTA NEC		

**ICD-9-CM Congenital heart disease diagnosis codes (2D)<sup>1</sup>:**

7450	COMMON TRUNCUS	7467	HYPOPLAS LEFT HEART SYND
74510	COMPL TRANSPOS GREAT VES	74681	CONG SUBAORTIC STENOSIS
74511	DOUBLE OUTLET RT VENTRIC	74682	COR TRIATRIATUM
74512	CORRECT TRANSPOS GRT VES	74683	INFUNDIB PULMON STENOSIS
74519	TRANSPOS GREAT VESS NEC	74684	OBSTRUCT HEART ANOM NEC
7452	TETRALOGY OF FALLOT	74685	CORONARY ARTERY ANOMALY
7453	COMMON VENTRICLE	74687	MALPOSITION OF HEART
7454	VENTRICULAR SEPT DEFECT	74689	CONG HEART ANOMALY NEC
7455	SECUNDUM ATRIAL SEPT DEF	7469	CONG HEART ANOMALY NOS
74560	ENDOCARD CUSHION DEF NOS	7470	PATENT DUCTUS ARTERIOSUS
74561	OSTIUM PRIMUM DEFECT	74710	COARCTATION OF AORTA
74569	ENDOCARD CUSHION DEF NEC	74711	INTERRUPT OF AORTIC ARCH
7457	COR BILOCULARE	74720	CONG ANOM OF AORTA NOS
7458	SEPTAL CLOSURE ANOM NEC	74721	ANOMALIES OF AORTIC ARCH
7459	SEPTAL CLOSURE ANOM NOS	74722	AORTIC ATRESIA/STENOSIS
74600	PULMONARY VALVE ANOM NOS	74729	CONG ANOM OF AORTA NEC
74601	CONG PULMON VALV ATRESIA	7473	<i>PULMONARY ARTERY ANOM</i>
74602	CONG PULMON VALVE STENOS	74731	PULMON ART COARCT/ATRES
74609	PULMONARY VALVE ANOM NEC	74732	PULMONARY AV MALFORMATN
7461	CONG TRICUSP ATRES/STEN	74739	OTH ANOM PUL ARTERY/CIRC
7462	EBSTEIN'S ANOMALY	74740	GREAT VEIN ANOMALY NOS
7463	CONG AORTA VALV STENOSIS	74741	TOT ANOM PULM VEN CONN
7464	CONG AORTA VALV INSUFFIC	74742	PART ANOM PULM VEN CONN
7465	CONGEN MITRAL STENOSIS	74749	GREAT VEIN ANOMALY NEC
7466	CONG MITRAL INSUFFICIENC		

<sup>1</sup>The procedure or diagnosis codes are continuously updated. The current list of ICD-9-CM codes is valid for October 2012 through September 2013. Italicized codes are not active in Fiscal Year 2013.

**Exclude cases:**

- with any-listed ICD-9-CM procedure codes for closed heart valvotomy (3AP) as the only congenital heart disease procedure and any-listed ICD-9-CM procedure codes for

- catheterization (6P) without any-listed ICD-9-CM procedure codes for extracorporeal circulation (5P)
- with any-listed ICD-9-CM procedure codes for atrial septal enlargement (3BP) as the only congenital heart disease procedure and any-listed ICD-9-CM procedure codes for catheterization (6P) without any-listed ICD-9-CM procedure codes for extracorporeal circulation (5P)
  - with any-listed ICD-9-CM procedure codes for atrial septal defect repair (3CP) as the only congenital heart disease procedure and any-listed ICD-9-CM procedure codes for catheterization (6P) without any-listed ICD-9-CM procedure codes for extracorporeal circulation (5P)
  - with any-listed ICD-9-CM procedure codes for ventricular septal defect repair (3DP) as the only congenital heart disease procedure and any-listed ICD-9-CM procedure codes for catheterization (6P) without any-listed ICD-9-CM procedure codes for extracorporeal circulation (5P)
  - with any-listed ICD-9-CM procedure codes for other surgical occlusion (3FP) as the only congenital heart disease procedure and any-listed ICD-9-CM procedure codes for catheterization (6P) without any-listed ICD-9-CM procedure codes for extracorporeal circulation (5P)
  - with patent ductus arteriosus (PDA)<sup>†</sup> and any-listed ICD-9-CM procedure codes for catheterization (6P) without any-listed ICD-9-CM procedure codes for extracorporeal circulation (5P)
  - with any-listed ICD-9-CM procedure codes for atrial septal defect repair and enlargement (4P) as the only congenital heart disease procedure without any-listed ICD-9-CM procedure codes for extracorporeal circulation (5P)
  - MDC 14 (pregnancy, childbirth and puerperium)
  - with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

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<sup>†</sup> PDA is defined as any-listed ICD-9-CM diagnosis code for PDA closure (3D) as the only congenital heart disease diagnosis code besides atrial septal defect or ventricular septal defect (5D), and any-listed ICD-9-CM procedure code for occlusion of thoracic vessel (3EP) as the only congenital heart disease procedure code.

**ICD-9-CM Closed heart valvotomy procedure codes (3AP):**

3500	CLOSED VALVOTOMY NOS	3503	CLOSED PULMON VALVOTOMY
3501	CLOSED AORTIC VALVOTOMY	3504	CLOSED TRICUSP VALVOTOMY
3502	CLOSED MITRAL VALVOTOMY		

**ICD-9-CM Atrial septal enlargement procedure codes (3BP):**

3541	ENLARGE EXISTING SEP DEF	3542	CREATE SEPTAL DEFECT
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**ICD-9-CM Atrial septal defect repair procedure codes (3CP):**

3551	PROS REP ATRIAL DEF-OPN	3571	ATRIA SEPTA DEF REP NEC
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**ICD-9-CM Ventricular septal defect repair procedure codes (3DP):**

3553	PROS REP VENTRIC DEF-OPN	3572	VENTR SEPTA DEF REP NEC
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**ICD-9-CM Occlusion of thoracic vessel procedure code (3EP):**

3885	OCCLUDE THORACIC VES NEC
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**ICD-9-CM PDA closure diagnosis code (3D):**

7470	PATENT DUCTUS ARTERIOSUS
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**ICD-9-CM Other surgical occlusion procedure codes (3FP):**

3884	OCCLUDE AORTA NEC	3959	REPAIR OF VESSEL NEC
3885	OCCLUDE THORACIC VES NEC		

**ICD-9-CM Atrial septal defect repair and enlargement procedure codes (4P):**

3541	ENLARGE EXISTING SEP DEF	3552	PROS REPAIR ATRIA DEF-CL
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**ICD-9-CM Extracorporeal circulation procedure code (5P):**

3961	EXTRACORPOREAL CIRCULAT
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**ICD-9-CM Catheterization procedure codes (6P):**

3721	RT HEART CARDIAC CATH	8852	RT HEART ANGIOCARDIOGRAM
3722	LEFT HEART CARDIAC CATH	8853	LT HEART ANGIOCARDIOGRAM
3723	RT/LEFT HEART CARD CATH	8854	RT & LT HEART ANGIOCARD
8842	CONTRAST AORTOGRAM	8855	CORONAR ARTERIOGR-1 CATH
8843	CONTR PULMON ARTERIOGRAM	8856	CORONAR ARTERIOGR-2 CATH
8844	CONTR THOR ARTERIOGR NEC	8857	CORONARY ARTERIOGRAM NEC
8850	ANGIOCARDIOGRAPHY NOS	8858	NEGATVE-CONTR CARDIOGRAM
8851	VENA CAV ANGIOCARDIOGRAM		

## Denominator

Not applicable.