



**AHRQ Quality Indicators™ (AHRQ QI™)
ICD-9-CM and ICD-10-CM/PCS
Specification Enhanced Version 5.0**

Pediatric Quality Indicator #07 (PDI #7)
RACHS -1 Pediatric Heart Surgery Volume

October 2015

Provider-Level Indicator

Type of Score: Volume

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DESCRIPTION

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

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NUMERATOR			
Discharges, for patients ages 17 years and younger, with either			
<ul style="list-style-type: none"> • any-listed ICD-9-CM or ICD-10-PCS procedure codes for congenital heart disease (1P); or • any-listed ICD-9-CM or ICD-10-PCS procedure codes for non-specific heart surgery (2P) and any-listed ICD-9-CM or ICD-10-CM diagnosis codes for congenital heart disease (2D). 			
<i>Congenital heart disease procedure codes (1P):</i> ¹			
ICD-9-CM	Description	ICD-10-PCS	Description
3500	CLOSED VALVOTOMY NOS	<i>Not applicable; no equivalent ICD-10 code</i>	
3501	CLOSED AORTIC VALVOTOMY		
3502	CLOSED MITRAL VALVOTOMY		
3503	CLOSED PULMON VALVOTOMY		
3504	CLOSED TRICUSP VALVOTOMY		
3505	ENDOVAS REPL AORTC VALVE		
3506	TRANSAPCL REP AORTC VALVE		
3507	ENDOVAS REPL PULM VALVE		
3508	TRANSAPCL REPL PULM VALVE		
3510	OPEN VALVULOPLASTY NOS		
3511	OPN AORTIC VALVULOPLASTY		
3512	OPN MITRAL VALVULOPLASTY		
3513	OPN PULMON VALVULOPLASTY		
3514	OPN TRICUS VALVULOPLASTY		
3520	OPN/OTH REP HRT VLV NOS		
3521	OPN/OTH REP AORT VLV-TIS		
3522	OPN/OTH REP AORTIC VALVE		
3523	OPN/OTH REP MTRL VLV-TIS		
3524	OPN/OTH REP MITRAL VALVE		

¹ ***The procedure and diagnosis codes are continuously updated.***

3525	OPN/OTH REP PULM VLV-TIS
3526	OPN/OTH REPL PUL VALVE
3527	OPN/OTH REP TCSPD VLV-TS
3528	OPN/OTH REPL TCSPD VALVE
3531	PAPILLARY MUSCLE OPS
3532	CHORDAE TENDINEAE OPS
3533	ANNULOPLASTY
3534	INFUNDIBULECTOMY
3535	TRABECUL CARNEAE CORD OP
3539	TISS ADJ TO VALV OPS NEC
3541	ENLARGE EXISTING SEP DEF
3542	CREATE SEPTAL DEFECT
3550	PROSTH REP HRT SEPTA NOS
3551	PROS REP ATRIAL DEF-OPN
3552	PROS REPAIR ATRIA DEF-CL
3553	PROS REP VENTRIC DEF-OPN
3554	PROS REP ENDOCAR CUSHION
3560	GRFT REPAIR HRT SEPT NOS
3561	GRAFT REPAIR ATRIAL DEF
3562	GRAFT REPAIR VENTRIC DEF
3563	GRFT REP ENDOCAR CUSHION
3570	HEART SEPTA REPAIR NOS
3571	ATRIA SEPTA DEF REP NEC
3572	VENTR SEPTA DEF REP NEC
3573	ENDOCAR CUSHION REP NEC
3581	TOT REPAIR TETRAL FALLOT
3582	TOTAL REPAIR OF TAPVC
3583	TOT REP TRUNCUS ARTERIOS
3584	TOT COR TRANSPOS GRT VES
3591	INTERAT VEN RETRN TRANSP
3592	CONDUIT RT VENT-PUL ART

3593	CONDUIT LEFT VENTR-AORTA
3594	CONDUIT ARTIUM-PULM ART
3595	HEART REPAIR REVISION
3598	OTHER HEART SEPTA OPS
3599	OTHER HEART VALVE OPS
3699	HEART VESSEL OP NEC
3733	EXC/DEST HRT LESION OPEN
3736	EXC,DESTRCT,EXCLUS LAA
375	HEART TRANSPLANTATION
3751	HEART TRANSPLANTATION
3752	IMP TOT INT BI HT RP SYS
390	SYSTEMIC-PULM ART SHUNT
3921	CAVAL-PULMON ART ANASTOM

Non-specific cardiac procedure codes (2P):

ICD-9-CM	Description	ICD-10-PCS	Description
3834	AORTA RESECTION & ANAST		<i>Not applicable; no equivalent ICD-10 code</i>
3835	THOR VESSEL RESECT/ANAST		
3844	RESECT ABDM AORTA W REPL		
3845	RESECT THORAC VES W REPL		
3864	EXCISION OF AORTA		
3865	THORACIC VESSEL EXCISION		
3884	OCCLUDE AORTA NEC		
3885	OCCLUDE THORACIC VES NEC		
3949	VASC PROC REVISION NEC		
3956	REPAIR VESS W TIS PATCH		
3957	REP VESS W SYNTH PATCH		
3958	REPAIR VESS W PATCH NOS		
3959	REPAIR OF VESSEL NEC		

<i>Congenital heart disease diagnosis codes (2D): ¹</i>			
ICD-9-CM	Description	ICD-10-CM	Description
7450	COMMON TRUNCUS	<i>Not applicable; no equivalent ICD-10 code</i>	
74510	COMPL TRANSPOS GREAT VES		
74511	DOUBLE OUTLET RT VENTRIC		
74512	CORRECT TRANSPOS GRT VES		
74519	TRANSPOS GREAT VESS NEC		
7452	TETRALOGY OF FALLOT		
7453	COMMON VENTRICLE		
7454	VENTRICULAR SEPT DEFECT		
7455	SECUNDUM ATRIAL SEPT DEF		
74560	ENDOCARD CUSHION DEF NOS		
74561	OSTIUM PRIMUM DEFECT		
74569	ENDOCARD CUSHION DEF NEC		
7457	COR BILOCULARE		
7458	SEPTAL CLOSURE ANOM NEC		
7459	SEPTAL CLOSURE ANOM NOS		
74600	PULMONARY VALVE ANOM NOS		
74601	CONG PULMON VALV ATRESIA		
74602	CONG PULMON VALVE STENOS		
74609	PULMONARY VALVE ANOM NEC		
7461	CONG TRICUSP ATRES/STEN		
7462	EBSTEIN'S ANOMALY		
7463	CONG AORTA VALV STENOSIS		
7464	CONG AORTA VALV INSUFFIC		
7465	CONGEN MITRAL STENOSIS		
7466	CONG MITRAL INSUFFICIENC		
7467	HYPOPLAS LEFT HEART SYND		
74681	CONG SUBAORTIC STENOSIS		
74682	COR TRIARIATUM		
74683	INFUNDIB PULMON STENOSIS		

¹ ***The procedure and diagnosis codes are continuously updated.***

74684	OBSTRUCT HEART ANOM NEC
74685	CORONARY ARTERY ANOMALY
74687	MALPOSITION OF HEART
74689	CONG HEART ANOMALY NEC
7469	CONG HEART ANOMALY NOS
7470	PATENT DUCTUS ARTERIOSUS
74710	COARCTATION OF AORTA
74711	INTERRUPT OF AORTIC ARCH
74720	CONG ANOM OF AORTA NOS
74721	ANOMALIES OF AORTIC ARCH
74722	AORTIC ATRESIA/STENOSIS
74729	CONG ANOM OF AORTA NEC
7473	<i>PULMONARY ARTERY ANOM</i>
74731	PULMON ART COARCT/ATRES
74732	PULMONARY AV MALFORMATN
74739	OTH ANOM PUL ARTERY/CIRC
74740	GREAT VEIN ANOMALY NOS
74741	TOT ANOM PULM VEN CONNEC
74742	PART ANOM PULM VEN CONN
74749	GREAT VEIN ANOMALY NEC

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NUMERATOR EXCLUSIONS

Exclude cases:

- with any-listed ICD-9-CM or ICD-10-PCS procedure codes for closed heart valvotomy (3AP) as the only congenital heart disease procedure and any-listed ICD-9-CM or ICD-10-PCS procedure codes for catheterization (6P) without any-listed ICD-9-CM or ICD-10-PCS procedure codes for extracorporeal circulation (5P)
- with any-listed ICD-9-CM or ICD-10-PCS procedure codes for atrial septal enlargement (3BP) as the only congenital heart disease procedure and any-listed ICD-9-CM or ICD-10-PCS procedure codes for catheterization (6P) without any-listed ICD-9-CM or ICD-10-PCS procedure codes for extracorporeal circulation (5P)
- with any-listed ICD-9-CM or ICD-10-PCS procedure codes for atrial septal defect repair (3CP) as the only congenital heart disease procedure and any-listed ICD-9-CM or ICD-10-PCS procedure codes for catheterization (6P) without any-listed ICD-9-CM or ICD-10-PCS procedure codes for extracorporeal circulation (5P)
- with any-listed ICD-9-CM or ICD-10-PCS procedure codes for ventricular septal defect repair (3DP) as the only congenital heart disease procedure and any-listed ICD-9-CM or ICD-10-PCS procedure codes for catheterization (6P) without any-listed ICD-9-CM or ICD-10-PCS procedure codes for extracorporeal circulation (5P)
- with any-listed ICD-9-CM or ICD-10-PCS procedure codes for other surgical occlusion (3FP) as the only congenital heart disease procedure and any-listed ICD-9-CM or ICD-10-PCS procedure codes for catheterization (6P) without any-listed ICD-9-CM or ICD-10-PCS procedure codes for extracorporeal circulation (5P)
- with patent ductus arteriosus (PDA)† and any-listed ICD-9-CM or ICD-10-PCS procedure codes for catheterization (6P) without any-listed ICD-9-CM or ICD-10-PCS procedure codes for extracorporeal circulation (5P)
- with any-listed ICD-9-CM or ICD-10-PCS procedure codes for atrial septal defect repair and enlargement (4P) as the only congenital heart disease procedure without any-listed ICD-9-CM or ICD-10-PCS 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)

† PDA is defined as any-listed ICD-9-CM or ICD-10-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 or ICD-10-PCS procedure code for occlusion of thoracic vessel (3EP) as the only congenital heart disease procedure code.

Closed heart valvotomy procedure codes (3AP):

ICD-9-CM	Description	ICD-10-PCS	Description
3500	CLOSED VALVOTOMY NOS		<i>Not applicable; no equivalent ICD-10 code</i>
3501	CLOSED AORTIC VALVOTOMY		
3502	CLOSED MITRAL VALVOTOMY		
3503	CLOSED PULMON VALVOTOMY		
3504	CLOSED TRICUSP VALVOTOMY		

Atrial septal enlargement procedure codes (3BP):

ICD-9-CM	Description	ICD-10-PCS	Description
3541	ENLARGE EXISTING SEP DEF		<i>Not applicable; no equivalent ICD-10 code</i>
3542	CREATE SEPTAL DEFECT		

Atrial septal defect repair procedure codes (3CP):

ICD-9-CM	Description	ICD-10-PCS	Description
3551	PROS REP ATRIAL DEF-OPN		<i>Not applicable; no equivalent ICD-10 code</i>
3571	ATRIA SEPTA DEF REP NEC		

Ventricular septal defect repair procedure codes (3DP):

ICD-9-CM	Description	ICD-10-PCS	Description
3553	PROS REP VENTRIC DEF-OPN		<i>Not applicable; no equivalent ICD-10 code</i>
3572	VENTR SEPTA DEF REP NEC		

Occlusion of thoracic vessel procedure code (3EP):

ICD-9-CM	Description	ICD-10-PCS	Description
3885	OCCLUDE THORACIC VES NEC		<i>Not applicable; no equivalent ICD-10 code</i>

<i>PDA closure diagnosis code (3D):</i>			
ICD-9-CM	Description	ICD-10-CM	Description
7470	PATENT DUCTUS ARTERIOSUS	<i>Not applicable; no equivalent ICD-10 code</i>	

<i>Other surgical occlusion procedure codes (3FP):</i>			
ICD-9-CM	Description	ICD-10-PCS	Description
3884	OCCLUDE AORTA NEC	<i>Not applicable; no equivalent ICD-10 code</i>	
3885	OCCLUDE THORACIC VES NEC		
3959	REPAIR OF VESSEL NEC		

<i>Atrial septal defect repair and enlargement procedure codes (4P):</i>			
ICD-9-CM	Description	ICD-10-PCS	Description
3541	ENLARGE EXISTING SEP DEF	<i>Not applicable; no equivalent ICD-10 code</i>	
3552	PROS REPAIR ATRIA DEF-CL		

<i>Extracorporeal circulation procedure code (5P):</i>			
ICD-9-CM	Description	ICD-10-PCS	Description
3961	EXTRACORPOREAL CIRCULAT	<i>Not applicable; no equivalent ICD-10 code</i>	

<i>Catheterization procedure codes (6P):</i>			
ICD-9-CM	Description	ICD-10-PCS	Description
3721	RT HEART CARDIAC CATH	<i>Not applicable; no equivalent ICD-10 code</i>	
3722	LEFT HEART CARDIAC CATH		
3723	RT/LEFT HEART CARD CATH		
8842	CONTRAST AORTOGRAM		
8843	CONTR PULMON ARTERIOGRAM		
8844	CONTR THOR ARTERIOGR NEC		
8850	ANGIOCARDIOGRAPHY NOS		
8851	VENA CAV ANGIOCARDIOGRAM		

8852	RT HEART ANGIOCARDIOGRAM
8853	LT HEART ANGIOCARDIOGRAM
8854	RT & LT HEART ANGIOCARD
8855	CORONAR ARTERIOGR-1 CATH
8856	CORONAR ARTERIOGR-2 CATH
8857	CORONARY ARTERIOGRAM NEC
8858	NEGATVE-CONTR CARDIOGRAM

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DENOMINATOR
<i>Not Applicable</i>

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DENOMINATOR EXCLUSIONS
<i>Not Applicable</i>