

Pediatric Heart Surgery Volume

Pediatric Quality Indicators #7

Technical Specifications

Provider-Level Indicator

Procedure Utilization Indicator

AHRQ Quality Indicators, Version 4.3, August 2011

Version 4.3a is a maintenance release of Version 4.3. The differences between the two versions are:

- Version 4.3a includes Version 29 of the Limited License edition of the 3M™ APR-DRG Grouper. This grouper corrects an issue found in Version 28 of the Limited License edition of the 3M™ APR-DRG Grouper. The grouper is only used with the Inpatient Quality Indicator (IQI) mortality measures. Version 4.3 includes Version 28 of the Limited License edition of the 3M™ APR-DRG Grouper, which was incorrectly assigning a Risk of Mortality (ROM) subclass for cases dated on or after 10/1/10.
- Version 4.3a allows users to calculate area-level indicators for years 2010 and 2011, correcting an issue previously identified in Version 4.3.

All other aspects of the software, including measure specifications, remain the same. Thus this document (related to Version 4.3) remains unchanged.

Numerator

Discharges under age 18 with ICD-9-CM procedure codes for either congenital heart disease (1P) **or** non-specific heart surgery (2P) with ICD-9-CM diagnosis of congenital heart disease (2D) in any field.

ICD-9-CM Congenital heart disease procedure codes (1P):

3500	CLOSED VALVOTOMY NOS	3528	REPLACE TRICUSP VALV NEC
3501	CLOSED AORTIC VALVOTOMY	3531	PAPILLARY MUSCLE OPS
3502	CLOSED MITRAL VALVOTOMY	3532	CHORDAE TENDINEAE OPS
3503	CLOSED PULMON VALVOTOMY	3533	ANNULOPLASTY
3504	CLOSED TRICUSP VALVOTOMY	3534	INFUNDIBULECTOMY
3510	OPEN VALVULOPLASTY NOS	3535	TRABECUL CARNEAE CORD OP
3511	OPN AORTIC VALVULOPLASTY	3539	TISS ADJ TO VALV OPS NEC
3512	OPN MITRAL VALVULOPLASTY	3541	ENLARGE EXISTING SEP DEF
3513	OPN PULMON VALVULOPLASTY	3542	CREATE SEPTAL DEFECT
3514	OPN TRICUS VALVULOPLASTY	3550	PROSTH REP HRT SEPTA NOS
3520	REPLACE HEART VALVE NOS	3551	PROS REP ATRIAL DEF-OPN
3521	REPLACE AORT VALV-TISSUE	3552	PROS REPAIR ATRIA DEF-CL
3522	REPLACE AORTIC VALVE NEC	3553	PROST REPAIR VENTRIC DEF
3523	REPLACE MITR VALV-TISSUE	3554	PROS REP ENDOCAR CUSHION
3524	REPLACE MITRAL VALVE NEC	3560	GRFT REPAIR HRT SEPT NOS
3525	REPLACE PULM VALV-TISSUE	3561	GRAFT REPAIR ATRIAL DEF
3526	REPLACE PULMON VALVE NEC	3562	GRAFT REPAIR VENTRIC DEF
3527	REPLACE TRIC VALV-TISSUE	3563	GRFT REP ENDOCAR CUSHION

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3570	HEART SEPTA REPAIR NOS	3599	OTHER OP ON HRT VALVES
3571	ATRIA SEPTA DEF REP NEC	3699	OTHER OPERATIONS ON VESSEL OF HEART
3572	VENTR SEPTA DEF REP NEC		
3573	ENDOCAR CUSHION REP NEC	3733	EXCISION OR DESTRUCTION OF OTHER LESION OR TISSUE OF HEART
3581	TOT REPAIR TETRAL FALLOT		
3582	TOTAL REPAIR OF TAPVC	3736	EXCISION OR DESTRUCTION OF LEFT ATRIAL APPENDAGE (LAA) (OCT08)
3583	TOT REP TRUNCUS ARTERIOS	375	HEART TRANSPLANTATION (invalid as of OCT03)
3584	TOT COR TRANSPOS GRT VES	3751	HEART TRANSPLANTATION (OCT03)
3591	INTERAT VEN RETRN TRANSP	3752	IMPLANT TOT REP HRT SYS (OCT03)
3592	CONDUIT RT VENT-PUL ART	390	SYSTEMIC-PULM ART SHUNT
3593	CONDUIT LEFT VENTR-AORTA	3921	CAVAL-PULMON ART ANASTOM
3594	CONDUIT ARTIUM-PULM ART		
3595	HEART REPAIR REVISION		
3598	OTHER HEART SEPTA OPS		

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

3834	RESECTION OF ABDOMINAL AORTA WITH ANASTOMOSIS	3885	OCCLUDE THORACIC VES NEC
3835	THOR VESSEL RESECT/ANAST	3949	OTHER REVISION OF VASCULAR PROCEDURE
3844	RESECTION OF ABDOMINAL AORTA WITH REPLACEMENT	3956	REPAIR OF BLOOD VESSEL WITH TISSUE PATCH GRAFT
3845	RESECT THORAC VES W REPL	3957	REPAIR OF BLOOD VESSEL WITH SYNTHETIC PATCH GRAFT
3864	OTHER EXCISION OF ABDOMINAL AORTA	3958	REPAIR OF BLOOD VESSEL WITH UNSPECIFIED TYPE OF PATCH GRAFT
3865	OTHER EXCISION OF THORACIC VESSEL	3959	REPAIR OF VESSEL NEC
3884	OTHER SURGICAL OCCLUSION OF ABDOMINAL AORTA		

ICD-9-CM Congenital heart disease diagnosis codes (2D):

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

Exclude cases:

- MDC 14 (pregnancy, childbirth and puerperium)
- with transcatheter interventions (either 3AP, 3BP, 3CP, 3DP, 3EP with 3D, or 3FP) as single cardiac procedures, performed without bypass (5P) but with catheterization (6P);
- with septal defects (4P) as single cardiac procedures without bypass (5P)
- with missing discharge gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

Transcatheter interventions procedure codes:

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

3500	CLOSED HEART VALVOTOMY, UNSPECIFIED VALUE	3503	CLOSED HEART VALVOTOMY, PULMONARY VALUE
3501	CLOSED HEART VALVOTOMY, AORTIC VALUE	3504	CLOSED HEART VALVOTOMY, TRICUSPID VALUE
3502	CLOSED HEART VALVOTOMY, MITRAL VALUE		

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

3541	ENLARGEMENT OF EXISTING ATRIAL SEPTAL DEFECT	3542	CREATION OF SEPTAL DEFECT IN HEART
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ICD-9-CM Atrial septal defect repair codes (3CP):

3551	REPAIR OF ATIAL SEPTAL DEFECT WITH PROSTHESIS, OPEN TECHNIQUE	3571	OTHER AND UNSPECIFIED REPAIR OF ATRIAL SEPTAL DEFECT
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ICD-9-CM Ventricular septal defect repair procedure codes (3DP):

3553	REPAIR OF VENTRICULAR SEPTAL DEFECT WITH PROSTHESIS	3572	OTHER AND UNSPECIFIED REPAIR OF VENTRICULAR SEPTAL DEFECT
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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	OTHER SURGICAL OCCLUSION OF AORTA, ABDOMINAL	3959	OTHER REPAIR OF VESSEL
3885	OTHER SURGICAL OCCLUSION OF THORACIC VESSEL		

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	8853	ANGIOCARDIOGRAPHY OF LEFT HEART STRUCTURES
3722	LEFT HEART CARDIAC CATH	8854	COMBINED RIGHT AND LEFT HEART ANGIOCARDIOGRAPHY
3723	RT/LEFT HEART CARD CATH	8855	CORONARY ARTERIOGRAPHY USING A SINGLE CATHETER
8842	CONTRAST AORTOGRAM	8856	CORONARY ARTERIOGRAPHY USING TWO CATHETERS
8843	CONTR PULMON ARTERIOGRAM	8857	OTHER AND UNSPECIFIED CORONARY ARTERIOGRAPHY
8844	ARTERIOGRAPHY OF OTHER INTRATHORACIC VESSELS	8858	NEGATIVE-CONTRAST CARDIAC ROENTGENOGRAPHY
8850	ANGIOCARDIOGRAPHY, NOT OTHERWISE SPECIFIED		
8851	ANGIOCARDIOGRAPHY OF VENAE CAVAE		
8852	ANGIOCARDIOGRAPHY OF RIGHT HEART STRUCTURES		

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

3541	ENLARGE EXISTING SEP DEF	3552	PROS REPAIR ATRIA DEF-CL
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Denominator

Not applicable