

Bilateral Cardiac Catheterization Rate

Inpatient Quality Indicators #25

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

Number of simultaneous right and left heart catheterizations (procedures) among cases meeting the inclusion and exclusion rules for the denominator.

ICD-9-CM Right and left heart catheterization procedure code:

3723 RT/LEFT HEART CARD CATH

Exclude cases:

- with valid indications for right-sided catheterization
- MDC 14 (pregnancy, childbirth, and puerperium)
- with missing discharge disposition (DISP=missing), gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

ICD-9-CM Indications for right heart catheterization diagnosis codes:

3910	ACUTE RHEUMATIC PERICARD	3962	MITRAL INSUF/AORT STENOS
3911	ACUTE RHEUMATIC ENDOCARD	3963	MITRAL/AORTIC VAL INSUFF
3912	AC RHEUMATIC MYOCARDITIS	3968	MITR/AORTIC MULT INVOLV
3918	AC RHEUMAT HRT DIS NEC	3969	MITRAL/AORTIC V DIS NOS
3919	AC RHEUMAT HRT DIS NOS	3970	TRICUSPID VALVE DISEASE
3920	RHEUM CHOREA W HRT INVOL	3971	RHEUM PULMON VALVE DIS
3929	RHEUMATIC CHOREA NOS	3979	RHEUM ENDOCARDITIS NOS
393	CHR RHEUMATIC PERICARD	3980	RHEUMATIC MYOCARDITIS
3940	MITRAL STENOSIS	39890	RHEUMATIC HEART DIS NOS
3941	RHEUMATIC MITRAL INSUFF	39891	RHEUMATIC HEART FAILURE
3942	MITRAL STENOSIS W INSUFF	39899	RHEUMATIC HEART DIS NEC
3949	MITRAL VALVE DIS NEC/NOS	40200	MAL HYPERTEN HRT DIS NOS
3960	MITRAL/AORTIC STENOSIS	40201	MAL HYPERT HRT DIS W CHF
3961	MITRAL STENOS/AORT INSUF	40210	BEN HYPERTEN HRT DIS NOS

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40211	BENIGN HYP HRT DIS W CHF	4241	AORTIC VALVE DISORDER
40290	HYPERTENSIVE HRT DIS NOS	4242	NONRHEUM TRICUSP VAL DIS
40291	HYPERTEN HEART DIS W CHF	4243	PULMONARY VALVE DISORDER
40400	MAL HY HT/REN W/O HF/RF	42490	ENDOCARDITIS NOS
40401	MAL HYPER HRT/REN W HF	42491	ENDOCARDITIS IN OTH DIS
40402	MAL HY HT/REN W REN FAIL	42499	ENDOCARDITIS NEC
40403	MAL HYP HRT/REN W HF/RF	4250	ENDOMYOCARDIAL FIBROSIS
40410	BEN HY HT/REN W/O HF/RF	4251	HYPERTR OBSTR CARDIOMYOP
40411	BEN HYPER HRT/REN W HF	4252	OBSC AFRIC CARDIOMYOPATH
40412	BEN HY HT/REN W REN FAIL	4253	ENDOCARD FIBROELASTOSIS
40413	BEN HYP HRT/REN W HF/RF	4254	PRIM CARDIOMYOPATHY NEC
40490	HY HT/REN NOS W/O HF/RF	4255	ALCOHOLIC CARDIOMYOPATHY
40491	HYP HRT/REN NOS W HF	4257	METABOLIC CARDIOMYOPATHY
40492	HY HT/REN NOS W REN FAIL	4258	CARDIOMYOPATH IN OTH DIS
74684	OBSTRUCT HEART ANOM NEC	4259	SECOND CARDIOMYOPATH NOS
74685	CORONARY ARTERY ANOMALY	4280	CHF NOS
74686	CONGENITAL HEART BLOCK	4281	LEFT HEART FAILURE
74687	MALPOSITION OF HEART	42820	SYSTOLIC HRT FAILURE NOS
74689	CONG HEART ANOMALY NEC	42821	AC SYSTOLIC HRT FAILURE
7469	CONG HEART ANOMALY NOS	42822	CHR SYSTOLIC HRT FAILURE
7470	PATENT DUCTUS ARTERIOSUS	42823	AC ON CHR SYST HRT FAIL
74710	COARCTATION OF AORTA	42830	DIASTOLC HRT FAILURE NOS
74711	INTERRUPT OF AORTIC ARCH	42831	AC DIASTOLIC HRT FAILURE
74720	CONG ANOM OF AORTA NOS	42832	CHR DIASTOLIC HRT FAIL
74721	ANOMALIES OF AORTIC ARCH	42833	AC ON CHR DIAST HRT FAIL
74722	AORTIC ATRESIA/STENOSIS	42840	SYST/DIAST HRT FAIL NOS
74729	CONG ANOM OF AORTA NEC	42841	AC SYST/DIASTOL HRT FAIL
7473	PULMONARY ARTERY ANOM	42842	CHR SYST/DIASTL HRT FAIL
74740	GREAT VEIN ANOMALY NOS	42843	AC/CHR SYST/DIA HRT FAIL
40493	HYP HRT/REN NOS W HF/RF	4289	HEART FAILURE NOS
4150	ACUTE COR PULMONALE	7450	COMMON TRUNCUS
4151	PULM EMBOLISM/INFARCT-	74510	COMPL TRANSPPOS GREAT VES
41511	IATROGENIC PULMON. EMBOLISM	74511	DOUBLE OUTLET RT VENTRIC
41512	SEPTIC PULMONARY EMBOLISM	74512	CORRECT TRANSPPOS GRT VES
41519	OTHER PULMON EMBOLISM	74519	TRANSPPOS GREAT VESS NEC
4160	PRIM PULM HYPERTENSION	7452	TETRALOGY OF FALLOT
4161	KYPHOSCOLIOTIC HEART DIS	7453	COMMON VENTRICLE
4168	CHR PULMON HEART DIS NEC	7454	VENTRICULAR SEPT DEFECT
4169	CHR PULMON HEART DIS NOS	7455	SECUNDUM ATRIAL SEPT DEF
4170	ARTERIOVEN FISTU PUL VES	74560	ENDOCARD CUSHION DEF NOS
4171	PULMON ARTERY ANEURYSM	74561	OSTIUM PRIMUM DEFECT
4178	PULMON CIRCULAT DIS NEC	74569	ENDOCARD CUSHION DEF NEC
4179	PULMON CIRCULAT DIS NOS	7457	COR BILOCULARE
4200	AC PERICARDIT IN OTH DIS	7458	SEPTAL CLOSURE ANOM NEC
42090	ACUTE PERICARDITIS NOS	7459	SEPTAL CLOSURE ANOM NOS
42091	AC IDIOPATH PERICARDITIS	74600	PULMONARY VALVE ANOM NOS
42099	ACUTE PERICARDITIS NEC	74601	CONG PULMON VALV ATRESIA
4210	AC/SUBAC BACT ENDOCARD	74602	CONG PULMON VALVE STENOS
4211	AC ENDOCARDIT IN OTH DIS	74609	PULMONARY VALVE ANOM NEC
4219	AC/SUBAC ENDOCARDIT NOS	7461	CONG TRICUSP ATRES/STEN
4220	AC MYOCARDIT IN OTH DIS	7462	EBSTEIN'S ANOMALY
42290	ACUTE MYOCARDITIS NOS	7463	CONG AORTA VALV STENOSIS
42291	IDIOPATHIC MYOCARDITIS	7464	CONG AORTA VALV INSUFFIC
42292	SEPTIC MYOCARDITIS	7465	CONGEN MITRAL STENOSIS
42293	TOXIC MYOCARDITIS	7466	CONG MITRAL INSUFFICIENC
42299	ACUTE MYOCARDITIS NEC	7467	HYOPLAS LEFT HEART SYND
4230	HEMOPERICARDIUM	74681	CONG SUBAORTIC STENOSIS
4231	ADHESIVE PERICARDITIS	74682	COR TRIATRIATUM
4232	CONSTRICIV PERICARDITIS	74683	INFUNDIB PULMON STENOSIS
4233	CARDIAC TAMPONADE	74741	TOT ANOM PULM VEN CONNEC
4238	PERICARDIAL DISEASE NEC	74742	PART ANOM PULM VEN CONN
4239	PERICARDIAL DISEASE NOS	74749	GREAT VEIN ANOMALY NEC
4240	MITRAL VALVE DISORDER	7475	UMBILICAL ARTERY ABSENCE

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74760	UNSP PRPHERL VASC ANOMAL	74781	CEREBROVASCULAR ANOMALY
74761	GSTRONTEST VESL ANOMALY	74782	SPINAL VESSEL ANOMALY
74762	RENAL VESSEL ANOMALY	74783	PERSISTENT FETAL CIRC (OCT02)
74763	UPR LIMB VESSEL ANOMALY	74789	CIRCULATORY ANOMALY NEC
74764	LWR LIMB VESSEL ANOMALY	7479	CIRCULATORY ANOMALY NOS
74769	OTH SPCF PRPH VSCL ANOML		

Denominator

All discharges, age 18 years and older, with heart catheterization.

ICD-9-CM Heart catheterization procedure codes:

3722	LEFT HEART CARDIAC CATH	3723	RT/LEFT HEART CARD CATH
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Include:

Only cases with any diagnosis code of coronary artery disease.

ICD-9-CM Coronary artery disease diagnosis codes:

41000	AMI ANTEROLATERAL, UNSPEC	41091	AMI NOS, INITIAL
41001	AMI ANTEROLATERAL, INIT	41092	AMI NOS, SUBSEQUENT
41002	AMI ANTEROLATERAL, SUBSEQ	4110	POST MI SYNDROME
41010	AMI ANTERIOR WALL, UNSPEC	4111	INTERMED CORONARY SYND
41011	AMI ANTERIOR WALL, INIT	41181	CORONARY OCCLSN W/O MI
41012	AMI ANTERIOR WALL, SUBSEQ	41189	AC ISCHEMIC HRT DIS NEC
41020	AMI INFEROLATERAL, UNSPEC	412	OLD MYOCARDIAL INFARCT
41021	AMI INFEROLATERAL, INIT	4130	ANGINA DECUBITUS
41022	AMI INFEROLATERAL, SUBSEQ	4131	PRINZMETAL ANGINA
41030	AMI INFEROPOST, UNSPEC	4139	ANGINA PECTORIS NEC/NOS
41031	AMI INFEROPOST, INITIAL	4140	COR ATHEROSCLEROSIS (OCT94)
41032	AMI INFEROPOST, SUBSEQ	41400	COR ATH UNSP VSL NTV/GFT (OCT94)
41040	AMI INFERIOR WALL, UNSPEC	41401	CRNRY ATHRSCL NATVE VSSL (OCT94)
41041	AMI INFERIOR WALL, INIT	41402	CRN ATH ATLG VN BPS GRFT (OCT94)
41042	AMI INFERIOR WALL, SUBSEQ	41403	CRN ATH NONATLG BLG GRFT (OCT94)
41050	AMI LATERAL NEC, UNSPEC	41404	COR ATH ARTRY BYPAS GRFT (OCT96)
41051	AMI LATERAL NEC, INITIAL	41405	COR ATH BYPASS GRAFT NOS (OCT96)
41052	AMI LATERAL NEC, SUBSEQ	41406	COR ATH NATV ART TP HRT (OCT02)
41060	TRUE POST INFARCT, UNSPEC	41407	COR ATH BPS GRAFT TP HRT (OCT03)
41061	TRUE POST INFARCT, INIT	41410	ANEURYSM, HEART (WALL)
41062	TRUE POST INFARCT, SUBSEQ	41411	CORONARY VESSEL ANEURYSM
41070	SUBENDO INFARCT, UNSPEC	41412	DISSECTION COR ARTERY (OCT02)
41071	SUBENDO INFARCT, INITIAL	41419	ANEURYSM OF HEART NEC
41072	SUBENDO INFARCT, SUBSEQ	4143	CORONARY ATHEROSCLEROSIS DUE TO LIPID RICH PLAQUE (OCT08)
41080	AMI NEC, UNSPECIFIED	4148	CHR ISCHEMIC HRT DIS NEC
41081	AMI NEC, INITIAL	4149	CHR ISCHEMIC HRT DIS NOS
41082	AMI NEC, SUBSEQUENT		
41090	AMI NOS, UNSPECIFIED		