

Bilateral Cardiac Catheterization Rate

Inpatient Quality Indicators #25

Technical Specifications

Provider-Level Indicator

Procedure Utilization Indicator

AHRQ Quality Indicators, Version 4.3, August 2011

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	40291	HYPERTEN HEART DIS W CHF
3911	ACUTE RHEUMATIC ENDOCARD	40400	MAL HY HT/REN W/O HF/RF
3912	AC RHEUMATIC MYOCARDITIS	40401	MAL HYPER HRT/REN W HF
3918	AC RHEUMAT HRT DIS NEC	40402	MAL HY HT/REN W REN FAIL
3919	AC RHEUMAT HRT DIS NOS	40403	MAL HYP HRT/REN W HF/RF
3920	RHEUM CHOREA W HRT INVOL	40410	BEN HY HT/REN W/O HF/RF
3929	RHEUMATIC CHOREA NOS	40411	BEN HYPER HRT/REN W HF
393	CHR RHEUMATIC PERICARD	40412	BEN HY HT/REN W REN FAIL
3940	MITRAL STENOSIS	40413	BEN HYP HRT/REN W HF/RF
3941	RHEUMATIC MITRAL INSUFF	40490	HY HT/REN NOS W/O HF/RF
3942	MITRAL STENOSIS W INSUFF	40491	HYP HRT/REN NOS W HF
3949	MITRAL VALVE DIS NEC/NOS	40492	HY HT/REN NOS W REN FAIL
3960	MITRAL/AORTIC STENOSIS	74684	OBSTRUCT HEART ANOM NEC
3961	MITRAL STENOS/AORT INSUF	74685	CORONARY ARTERY ANOMALY
3962	MITRAL INSUF/AORT STENOS	74686	CONGENITAL HEART BLOCK
3963	MITRAL/AORTIC VAL INSUFF	74687	MALPOSITION OF HEART
3968	MITR/AORTIC MULT INVOLV	74689	CONG HEART ANOMALY NEC
3969	MITRAL/AORTIC V DIS NOS	7469	CONG HEART ANOMALY NOS
3970	TRICUSPID VALVE DISEASE	7470	PATENT DUCTUS ARTERIOSUS
3971	RHEUM PULMON VALVE DIS	74710	COARCTATION OF AORTA
3979	RHEUM ENDOCARDITIS NOS	74711	INTERRUPT OF AORTIC ARCH
3980	RHEUMATIC MYOCARDITIS	74720	CONG ANOM OF AORTA NOS
39890	RHEUMATIC HEART DIS NOS	74721	ANOMALIES OF AORTIC ARCH
39891	RHEUMATIC HEART FAILURE	74722	AORTIC ATRESIA/STENOSIS
39899	RHEUMATIC HEART DIS NEC	74729	CONG ANOM OF AORTA NEC
40200	MAL HYPERTEN HRT DIS NOS	7473	PULMONARY ARTERY ANOM
40201	MAL HYPERT HRT DIS W CHF	74740	GREAT VEIN ANOMALY NOS
40210	BEN HYPERTEN HRT DIS NOS	40493	HYP HRT/REN NOS W HF/RF
40211	BENIGN HYP HRT DIS W CHF	4150	ACUTE COR PULMONALE
40290	HYPERTENSIVE HRT DIS NOS	4151	PULM EMBOLISM/INFARCT-

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41511	IATROGENIC PULMON. EMBOLISM	42831	AC DIASTOLIC HRT FAILURE
41512	SEPTIC PULMONARY EMBOLISM	42832	CHR DIASTOLIC HRT FAIL
41519	OTHER PULMON EMBOLISM	42833	AC ON CHR DIAST HRT FAIL
4160	PRIM PULM HYPERTENSION	42840	SYST/DIAST HRT FAIL NOS
4161	KYPHOSCOLIOTIC HEART DIS	42841	AC SYST/DIASTOL HRT FAIL
4168	CHR PULMON HEART DIS NEC	42842	CHR SYST/DIASTL HRT FAIL
4169	CHR PULMON HEART DIS NOS	42843	AC/CHR SYST/DIA HRT FAIL
4170	ARTERIOVEN FISTU PUL VES	4289	HEART FAILURE NOS
4171	PULMON ARTERY ANEURYSM	7450	COMMON TRUNCUS
4178	PULMON CIRCULAT DIS NEC	74510	COMPL TRANSPG GREAT VES
4179	PULMON CIRCULAT DIS NOS	74511	DOUBLE OUTLET RT VENTRIC
4200	AC PERICARDIT IN OTH DIS	74512	CORRECT TRANSPG GRT VES
42090	ACUTE PERICARDITIS NOS	74519	TRANSPG GREAT VESS NEC
42091	AC IDIOPATH PERICARDITIS	7452	TETRALOGY OF FALLOT
42099	ACUTE PERICARDITIS NEC	7453	COMMON VENTRICLE
4210	AC/SUBAC BACT ENDOCARD	7454	VENTRICULAR SEPT DEFECT
4211	AC ENDOCARDIT IN OTH DIS	7455	SECUNDUM ATRIAL SEPT DEF
4219	AC/SUBAC ENDOCARDIT NOS	74560	ENDOCARD CUSHION DEF NOS
4220	AC MYOCARDIT IN OTH DIS	74561	OSTIUM PRIMUM DEFECT
42290	ACUTE MYOCARDITIS NOS	74569	ENDOCARD CUSHION DEF NEC
42291	IDIOPATHIC MYOCARDITIS	7457	COR BILOCULARE
42292	SEPTIC MYOCARDITIS	7458	SEPTAL CLOSURE ANOM NEC
42293	TOXIC MYOCARDITIS	7459	SEPTAL CLOSURE ANOM NOS
42299	ACUTE MYOCARDITIS NEC	74600	PULMONARY VALVE ANOM NOS
4230	HEMOPERICARDIUM	74601	CONG PULMON VALV ATRESIA
4231	ADHESIVE PERICARDITIS	74602	CONG PULMON VALVE STENOS
4232	CONSTRICIV PERICARDITIS	74609	PULMONARY VALVE ANOM NEC
4233	CARDIAC TAMPONADE	7461	CONG TRICUSP ATRES/STEN
4238	PERICARDIAL DISEASE NEC	7462	EBSTEIN'S ANOMALY
4239	PERICARDIAL DISEASE NOS	7463	CONG AORTA VALV STENOSIS
4240	MITRAL VALVE DISORDER	7464	CONG AORTA VALV INSUFFIC
4241	AORTIC VALVE DISORDER	7465	CONGEN MITRAL STENOSIS
4242	NONRHEUM TRICUSP VAL DIS	7466	CONG MITRAL INSUFFICIENC
4243	PULMONARY VALVE DISORDER	7467	HYPOPLAS LEFT HEART SYND
42490	ENDOCARDITIS NOS	74681	CONG SUBAORTIC STENOSIS
42491	ENDOCARDITIS IN OTH DIS	74682	COR TRIATIATUM
42499	ENDOCARDITIS NEC	74683	INFUNDIB PULMON STENOSIS
4250	ENDOMYOCARDIAL FIBROSIS	74741	TOT ANOM PULM VEN CONNEC
4251	HYPERTRO OBSTR CARDIOMYOP	74742	PART ANOM PULM VEN CONN
4252	OBSC AFRIC CARDIOMYOPATH	74749	GREAT VEIN ANOMALY NEC
4253	ENDOCARD FIBROELASTOSIS	7475	UMBILICAL ARTERY ABSENCE
4254	PRIM CARDIOMYOPATHY NEC	74760	UNSP PRPHERL VASC ANOMAL
4255	ALCOHOLIC CARDIOMYOPATHY	74761	GSTRONTEST VESL ANOMALY
4257	METABOLIC CARDIOMYOPATHY	74762	RENAL VESSEL ANOMALY
4258	CARDIOMYOPATH IN OTH DIS	74763	UPR LIMB VESSEL ANOMALY
4259	SECOND CARDIOMYOPATH NOS	74764	LWR LIMB VESSEL ANOMALY
4280	CHF NOS	74769	OTH SPCF PRPH VSCL ANOML
4281	LEFT HEART FAILURE	74781	CEREBROVASCULAR ANOMALY
42820	SYSTOLIC HRT FAILURE NOS	74782	SPINAL VESSEL ANOMALY
42821	AC SYSTOLIC HRT FAILURE	74783	PERSISTENT FETAL CIRC (OCT02)
42822	CHR SYSTOLIC HRT FAILURE	74789	CIRCULATORY ANOMALY NEC
42823	AC ON CHR SYST HRT FAIL	7479	CIRCULATORY ANOMALY NOS
42830	DIASTOLC HRT FAILURE NOS		

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		