



## PQI #7 Hypertension Admission Rate

### Numerator

All discharges of age 18 years and older with ICD-9-CM principal diagnosis code for hypertension (see below).

*ICD-9-CM hypertension diagnosis codes:*

4010	MALIGNANT HYPERTENSION	40310	BEN HYP REN W/O REN FAIL
4019	HYPERTENSION NOS	40390	HYP REN NOS W/O REN FAIL
40200	MAL HYPERTEN HRT DIS NOS	40400	MAL HY HT/REN W/O CHF/RF
40210	BEN HYPERTEN HRT DIS NOS	40410	BEN HY HT/REN W/O CHF/RF
40290	HYPERTENSIVE HRT DIS NOS	40490	HY HT/REN NOS W/O CHF/RF
40300	MAL HYP REN W/O REN FAIL		

See *Prevention Quality Indicators Appendices*:

- Appendix A – Admission Codes for Transfers

Exclude cases:

- transfer from a hospital (different facility)
- transfer from a skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)
- transfer from another health care facility
- MDC 14 (pregnancy, childbirth, and puerperium)
- with a cardiac procedure code
- with any diagnosis of Stage I-IV kidney disease, only if accompanied by procedure code for preparation for hemodialysis (dialysis access procedures)

*ICD-9-CM Cardiac procedure codes*

0050	IMPL CRT PACEMAKER SYS OCT02-	1751	IMPLANTATION OF RECHARGEABLE
0051	IMPL CRT DEFIBRILLAT OCT02-		CARDIAC CONTRACTILITY MODULATION
0052	IMP/REP LEAD LF VEN SYS OCT02-		[CCM], TOTAL SYSTEM OCT09-
0053	IMP/REP CRT PACEMKR GEN OCT02-	1752	IMPLANTATION OR REPLACEMENT OF
0054	IMP/REP CRT DEFIB GENAT OCT02-		CARDIAC CONTRACTILITY MODULATION
0056	INS/REP IMPL SENSOR LEAD OCT06-		[CCM] RECHARGEABLE PULSE
0057	IMP/REP SUBCUE CARD DEV OCT06-		GENERATOR ONLY OCT09-
0066	PTCA OCT06-	3500	CLOSED VALVOTOMY NOS
		3501	CLOSED AORTIC VALVOTOMY
		3502	CLOSED MITRAL VALVOTOMY

3503	CLOSED PULMON VALVOTOMY	3614	AORTCOR BYPAS-4+ COR ART
3504	CLOSED TRICUSP VALVOTOMY	3615	1 INT MAM-COR ART BYPASS
3510	OPEN VALVULOPLASTY NOS	3616	2 INT MAM-COR ART BYPASS
3511	OPN AORTIC VALVULOPLASTY	3617	ABD-CORON ART BYPASS OCT96-
3512	OPN MITRAL VALVULOPLASTY	3619	HRT REVAS BYPS ANAS NEC
3513	OPN PULMON VALVULOPLASTY	362	ARTERIAL IMPLANT REVASC
3514	OPN TRICUS VALVULOPLASTY	363	OTH HEART REVASCULAR
3520	REPLACE HEART VALVE NOS	3631	OPEN CHEST TRANS REVASC
3521	REPLACE AORT VALV-TISSUE	3632	OTH TRANSMYO REVASCULAR
3522	REPLACE AORTIC VALVE NEC	3633	ENDO TRANSMYO REVASCULAR OCT06-
3523	REPLACE MITR VALV-TISSUE	3634	PERC TRANSMYO REVASCULAR OCT06-
3524	REPLACE MITRAL VALVE NEC	3639	OTH HEART REVASULAR
3525	REPLACE PULM VALV-TISSUE	3691	CORON VESS ANEURYSM REP
3526	REPLACE PULMON VALVE NEC	3699	HEART VESSLE OP NEC
3527	REPLACE TRIC VALV-TISSUE	3731	PERICARDIECTOMY
3528	REPLACE TRICUSP VALV NEC	3732	HEART ANEURYSM EXCISION
3531	PAPILLARY MUSCLE OPS	3733	EXC/DEST HRT LESION OPEN
3532	CHORDAE TENDINEAE OPS	3734	EXC/DEST HRT LES OTHER
3533	ANNULOPLASTY	3735	PARTIAL VENTRICULECTOMY
3534	INFUNDIBULECTOMY	3736	EXCISION OR DESTRUCTION OF LEFT
3535	TRABECUL CARNEAE CORD OP		ATRIAL APPENDAGE (LAA) OCT08-
3539	TISS ADJ TO VALV OPS NEC	3741	IMPLANT PROSTH CARD SUPPORT DEV
3541	ENLARGE EXISTING SEP DEF		OCT06
3542	CREATE SEPTAL DEFECT	375	HEART TRANSPLANTATION (NOT VALID
3550	PROSTH REP HRT SEPTA NOS		AFTER OCT 03)
3551	PROS REP ATRIAL DEF-OPN	3751	HEART TRANPLANTATION OCT03-
3552	PROS REPAIR ATRIA DEF-CL	3752	IMPLANT TOT REP HRT SYS OCT03-
3553	PROST REPAIR VENTRIC DEF	3753	REPL/REP THORAC UNIT HRT OCT03-
3554	PROS REP ENDOCAR CUSHION	3754	REPL/REP OTH TOT HRT SYS OCT03-
3555	PROS REP VENTRC DEF-CLOS OCT06-	3755	REMOVAL OF INTERNAL BIVENTRICULAR
3560	GRFT REPAIR HRT SEPT NOS		HEART REPLACEMENT SYSTEM OCT08-
3561	GRAFT REPAIR ATRIAL DEF	3760	IMPLANTATION OR INSERTION OF
3562	GRAFT REPAIR VENTRIC DEF		BIVENTRICULAR EXTERNAL HEART
3563	GRFT REP ENDOCAR CUSHION		ASSIST SYSTEM OCT08-
3570	HEART SEPTA REPAIR NOS	3761	IMPLANT OF PULSATION BALLOON
3571	ATRIA SEPTA DEF REP NEC	3762	INSERTION OF NON-IMPLANTABLE
3572	VENTR SEPTA DEF REP NEC		HEART ASSIST SYSTEM
3573	ENDOCAR CUSHION REP NEC	3763	REPAIR OF HEART ASSIST SYSTEM
3581	TOT REPAIR TETRAL FALLOT	3764	REMOVAL OF HEART ASSIST SYSTEM
3582	TOTAL REPAIR OF TAPVC	3765	IMPLANT OF EXTERNAL HEART ASSIST
3583	TOT REP TRUNCUS ARTERIOS		SYSTEM
3584	TOT COR TRANSPOS GRT VES	3766	INSERTION OF IMPLANTABLE HEART
3591	INTERAT VEN RETRN TRANSP		ASSIST SYSTEM
3592	CONDUIT RT VENT-PUL ART	3770	INT INSERT PACEMAK LEAD
3593	CONDUIT LEFT VENTR-AORTA	3771	INT INSERT LEAD IN VENT
3594	CONDUIT ARTIUM-PULM ART	3772	INT INSERT LEAD ATRI-VENT
3595	HEART REPAIR REVISION	3773	INT INSER LEAD IN ATRIUM
3596	PERC HEART VALVULOPLASTY	3774	INT OR REPL LEAD EPICAR
3598	OTHER HEART SEPTA OPS	3775	REVISION OF LEAD
3599	OTHER HEART VALVE OPS	3776	REPL TV ATRI-VENT LEAD
3601	PTCA-1 VESSEL W/O AGENT	3777	REMOVAL OF LEAD W/O REPL
3602	PTCA-1 VESSEL WITH AGNT	3778	INSER TEAM PACEMAKER SYS
3603	OPEN CORONRY ANGIOPLASTY	3779	REVIS OR RELOCATE POCKET
3604	INTRCORONRY THROMB INFUS	3780	INT OR REPL PERM PACEMKR
3605	PTCA-MULTIPLE VESSEL	3781	INT INSERT 1-CHAM, NON
3606	INSERT OF COR ART STENT OCT95-	3782	INT INSERT 1-CHAM, RATE
3607	INS DRUG-ELUT CORONRY ST OCT02-	3783	INT INSERT DUAL-CHAM DEV
3609	REM OF COR ART OBSTR NEC	3785	REPL PACEM W 1-CHAM, NON
3610	AORTOCORONARY BYPASS NOS	3786	REPL PACEM 1-CHAM, RATE
3611	AORTOCOR BYPAS-1 COR ART	3787	REPL PACEM W DUAL-CHAM
3612	AORTOCOR BYPAS-2 COR ART	3789	REVISE OR REMOVE PACEMAK
3613	AORTOCOR BYPAS-3 COR ART	3794	IMPLT/REPL CARDDEFIB TOT

3795	IMPLT CARDIODEFIB LEADS	3797	REPL CARDIODEFIB LEADS
3796	IMPLT CARDIODEFIB GENATR	3798	REPL CARDIODEFIB GENRATR

*ICD-9-CM Stage I-IV Kidney Disease diagnosis codes:*

40300	HYPERTENSIVE CHRONIC KIDNEY DISEASE, MALIGNANT, WITH CHRONIC KIDNEY DISEASE STAGE I THROUGH STAGE IV, OR UNSPECIFIED	40410	HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE, BENIGN, WITHOUT HEART FAILURE AND WITH CHRONIC KIDNEY DISEASE STAGE I THROUGH STAGE IV, OR UNSPECIFIED
40310	HYPERTENSIVE CHRONIC KIDNEY DISEASE, BENIGN, WITH CHRONIC KIDNEY DISEASE STAGE I THROUGH STAGE IV, OR UNSPECIFIED	40490	HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE, UNSPECIFIED, WITHOUT HEART FAILURE AND WITH CHRONIC KIDNEY DISEASE STAGE I THROUGH STAGE IV, OR UNSPECIFIED
40390	HYPERTENSIVE CHRONIC KIDNEY DISEASE, UNSPECIFIED, WITH CHRONIC KIDNEY DISEASE STAGE I THROUGH STAGE IV, OR UNSPECIFIED		
40400	HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE, MALIGNANT, WITHOUT HEART FAILURE AND WITH CHRONIC KIDNEY DISEASE STAGE I THROUGH STAGE IV, OR UNSPECIFIED		

*Only if ICD-9-CM Dialysis Access procedure codes:*

3895	VENOUS CATHETERIZATION FOR RENAL DIALYSIS	3943	FOR RENAL DIALYSIS REMOVAL OF ARTERIOVENOUS SHUNT FOR RENAL DIALYSIS
3927	ARTERIOVENOSTOMY FOR RENAL DIALYSIS	3993	INSERTION OF VESSEL-TO-VESSEL CANNULA
3929	OTHER (PERIPHERAL) VASCULAR SHUNT OR BYPASS	3994	REPLACEMENT OF VESSEL-TO-VESSEL CANNULA
3942	REVISION OF ARTERIOVENOUS SHUNT		

## Denominator

Population in Metro Area<sup>1</sup> or county, age 18 years and older.

*Exclude ICD-9-CM Cardiac procedure codes*

1751	IMPLANTATION OF RECHARGEABLE CARDIAC CONTRACTILITY MODULATION [CCM], TOTAL SYSTEM OCT09-
1752	IMPLANTATION OR REPLACEMENT OF CARDIAC CONTRACTILITY MODULATION [CCM] RECHARGEABLE PULSE GENERATOR ONLY OCT09-

<sup>1</sup> The term "metropolitan area" (MA) was adopted by the U.S. Census in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs) and primary metropolitan statistical areas (PMSAs). In addition, "area" could refer to either 1) FIPS county, 2) modified FIPS county, 3) 1999 OMB Metropolitan Statistical Area or 3) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.