



## **Prevention Quality Indicator 07 (PQI 07) Hypertension Admission Rate**

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**Area-Level Indicator**

**Type of Score: Rate**

**Prepared by:**

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

[www.qualityindicators.ahrq.gov](http://www.qualityindicators.ahrq.gov)

### **DESCRIPTION**

Admissions with a principal diagnosis of hypertension per 100,000 population, ages 18 years and older. Excludes kidney disease combined with dialysis access procedure admissions, cardiac procedure admissions, obstetric admissions, and transfers from other institutions.

*[NOTE: The software provides the rate per population. However, common practice reports the measure as per 100,000 population. The user must multiply the rate obtained from the software by 100,000 to report admissions per 100,000 population]*

## NUMERATOR

Discharges, for patients ages 18 years and older, with a principal ICD-9-CM diagnosis code for hypertension.

[NOTE: By definition, discharges with a principal diagnosis of hypertension are precluded from an assignment of MDC 14 by grouper software. Thus, obstetric discharges should not be considered in the PQI rate, though the AHRQ QI™ software does not explicitly exclude obstetric cases.]

### *Hypertension diagnosis codes: (ACSHYPD)*

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		

**NUMERATOR EXCLUSIONS**

Exclude cases:

- with any-listed ICD-9-CM procedure codes for cardiac procedure
- with any-listed ICD-9-CM diagnosis codes of Stage I-IV kidney disease, only if accompanied by any-listed ICD-9-CM procedure codes for dialysis access
- transfer from a hospital (different facility)
- transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)
- transfer from another health care facility
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

[Appendix A – Admission Codes for Transfers](#)

[Appendix B – Cardiac Procedure Codes](#)

***Stage I-IV kidney disease diagnosis codes: (ACSHY2D)***

40300	MAL HYP REN W/O REN FAIL	40400	MAL HY HT/REN W/O CHF/RF
40310	BEN HYP REN W/O REN FAIL	40410	BEN HY HT/REN W/O CHF/RF
40390	HYP REN NOS W/O REN FAIL	40490	HY HT/REN NOS W/O CHF/RF

***Dialysis access procedure codes: (ACSHYPP)***

3895	VEN CATH RENAL DIALYSIS	3943	REMOV REN DIALYSIS SHUNT
3927	DIALYSIS ARTERIOVENOSTOM	3993	INSERT VES-TO-VES CANNUL
3929	VASC SHUNT & BYPASS NEC	3994	REPLAC VES-TO-VES CANNUL
3942	REVIS REN DIALYSIS SHUNT		

## **DENOMINATOR**

Population ages 18 years and older in metropolitan area† or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

† 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 4) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.