

# Heart Failure Admission Rate Technical Specifications

## Prevention Quality Indicators #8 (PQI #8)

AHRQ Quality Indicators™, Version 4.5, May 2013

Area-Level Indicator

Type of Score: Rate

### Description

Admissions with a principal diagnosis of heart failure per 100,000 population, ages 18 years and older. Excludes 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 heart failure.

*[NOTE: By definition, discharges with a principal diagnosis of heart failure 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.]*

For discharges prior to October 1, 2002, heart failure is defined as follows:

#### ICD-9-CM Heart failure diagnosis codes:

40201	MAL HYPERT HRT DIS W HF	40411	BEN HYP HT/KD I-IV W HF
40211	BENIGN HYP HT DIS W HF	40413	BEN HYP HT/KD STG V W HF
40291	HYP HT DIS NOS W HT FAIL	40491	HYP HT/KD NOS I-IV W HF
40401	MAL HYP HT/KD I-IV W HF	40493	HYP HT/KD NOS ST V W HF
40403	MAL HYP HT/KD STG V W HF		

For discharges on or after October 1, 2002, heart failure is defined as follows:

#### ICD-9-CM Heart failure diagnosis codes:

39891	RHEUMATIC HEART FAILURE	42823	AC ON CHR SYST HRT FAIL
4280	CHF NOS	42830	DIASTOLC HRT FAILURE NOS
4281	LEFT HEART FAILURE	42831	AC DIASTOLIC HRT FAILURE
42820	SYSTOLIC HRT FAILURE NOS	42832	CHR DIASTOLIC HRT FAIL
42821	AC SYSTOLIC HRT FAILURE	42833	AC ON CHR DIAST HRT FAIL
42822	CHR SYSTOLIC HRT FAILURE	42840	SYST/DIAST HRT FAIL NOS

42841 AC SYST/DIASTOL HRT FAIL  
42842 CHR SYST/DIASTL HRT FAIL

42843 AC/CHR SYST/DIA HRT FAIL  
4289 HEART FAILURE NOS

Exclude cases:

- with any-listed ICD-9-CM procedure codes for cardiac procedure
- 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)

See *Prevention Quality Indicators Appendices*:

- Appendix A – Admission Codes for Transfers
- Appendix B – Cardiac Procedure Codes

## Denominator

Population ages 18 years and older in metropolitan area<sup>†</sup> 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.

---

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