



# Prevention Quality Indicator 11 (PQI 11) Bacterial Pneumonia Admission Rate

**October 2016**

**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 bacterial pneumonia per 100,000 population, ages 18 years and older. Excludes sickle cell or hemoglobin-S admissions, other indications of immunocompromised state 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 bacterial pneumonia.

[NOTE: By definition, discharges with a principal diagnosis of bacterial pneumonia 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.]

### *Bacterial pneumonia diagnosis codes: (ACSBACD)*

481	PNEUMOCOCCAL PNEUMONIA	48242	METH RES PNEU D/T STAPH
4822	H.INFLUENZAE PNEUMONIA	48249	STAPH PNEUMONIA NEC
48230	STREP PNEUMONIA UNSPEC	4829	BACTERIAL PNEUMONIA NOS
48231	GRP A STREP PNEUMONIA	4830	MYCOPLASMA PNEUMONIA
48232	GRP B STREP PNEUMONIA	4831	CHLAMYDIA PNEUMONIA
48239	OTH STREP PNEUMONIA	4838	OTH SPEC ORG PNEUMONIA
48240	STAPH PNEU NOS	485	BRONCOPNEUMONIA ORG NOS
48241	METH SUS PNEUM D/T STAPH	486	PNEUMONIA, ORGANISM NOS

## NUMERATOR EXCLUSIONS

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
- with any-listed ICD-9-CM diagnosis codes for sickle cell anemia or HB-S disease
- with any-listed ICD-9-CM diagnosis codes or any-listed ICD-9-CM procedure codes for immunocompromised state
- 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 C – Immunocompromised State Diagnosis and Procedure Codes](#)

*Sickle cell anemia or HB-S disease diagnosis codes: (ACSBA2D)*

28241	THLASEMA HB-S W/O CRISIS	28263	SICKLE-CELL/HB-C DISEASE
28242	THLASSEMIA HB-S W CRISIS	28264	HB-S/HB-C DIS W CRISIS
28260	SICKLE-CELL ANEMIA NOS	28268	HB-S DIS W/O CRISIS NEC
28261	HB-S DISEASE W/O CRISIS	28269	SICKLE-CELL ANEMIA NEC
28262	HB-S DISEASE WITH CRISIS		

## **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.