

Prevention Quality Indicator 11 (PQI 11) Community-Acquired Pneumonia Admission Rate

July 2024

Area-Level Indicator

Type of Score: Rate

Prepared by:

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

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DESCRIPTION

Hospitalizations with a principal diagnosis of community-acquired bacterial pneumonia per 100,000 population, ages 18 years or older. Excludes hospitalizations with sickle cell or hemoglobin-S disease, other indications of immunocompromised state, obstetric hospitalizations, 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 hospitalizations per 100,000 population.]

NUMERATOR

Hospital discharges, for patients ages 18 years and older, with a principal ICD-10-CM diagnosis code for community-acquired pneumonia (**ACSBACD** *).

[NOTE: Obstetric discharges are not included in the PQI rate for PQI 11, though the AHRQ QI software does not explicitly exclude obstetric cases. By definition, discharges with a principal diagnosis of bacterial pneumonia exclude obstetric discharges, because the principal diagnosis for an obstetric discharge would identify it as obstetric, and no such diagnoses are included in the set of qualifying diagnoses.]

NUMERATOR EXCLUSIONS

Exclude discharges:

- with any listed ICD-10-CM diagnosis code for sickle cell or Hemoglobin S disease (*ACSB A2D**)
- with any listed ICD-10-CM diagnosis code for immunocompromised state (*Appendix C: IMMUNID*) or any listed ICD-10-PCS procedure code for immunocompromised state (*Appendix C: IMMUNIP*)
- with admission source for transferred from a different hospital or other health care facility (*Appendix A*) (UB04 Admission source - 2, 3)
- with a point of origin code for transfer from a hospital, skilled nursing facility (SNF) or intermediate care facility (ICF), or other healthcare facility (*Appendix A*) (UB04 Point of Origin - 4, 5, 6)
- with an ungroupable DRG (DRG=999)
- 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](#)

DENOMINATOR

Population ages 18 years and older in metropolitan area¹ 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.

¹ 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 AHRQ QI software.

* See below for code list

Community acquired pneumonia diagnosis codes: (ACSBACD)

| | | | |
|--------|--|------|---|
| J13 | Pneumonia due to streptococcus pneumoniae | J159 | Unspecified bacterial pneumonia |
| J14 | Pneumonia due to hemophilus influenzae | J160 | Chlamydial pneumonia |
| J15211 | Pneumonia due to methicillin susceptible staphylococcus aureus | J168 | Pneumonia due to other specified infectious organisms |
| J15212 | Pneumonia due to methicillin resistant staphylococcus aureus | J180 | Bronchopneumonia, unspecified organism |
| J153 | Pneumonia due to streptococcus, group B | J181 | Lobar pneumonia, unspecified organism |
| J154 | Pneumonia due to other streptococci | J188 | Other pneumonia, unspecified organism |
| J157 | Pneumonia due to mycoplasma pneumoniae | J189 | Pneumonia, unspecified organism |

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

| | | | |
|--------|---|--------|---|
| D5700 | Hb-SS disease with crisis, unspecified | D57431 | Sickle-Cell thalassemia beta zero with acute chest syndrome |
| D5701 | Hb-SS disease with acute chest syndrome | D57432 | Sickle-Cell thalassemia beta zero with splenic sequestration |
| D5702 | Hb-SS disease with splenic sequestration | D57433 | Sickle-Cell thalassemia beta zero with cerebral vascular involvement |
| D5704 | Hb-SS disease with dactylitis | D57434 | Sickle-Cell thalassemia beta zero with dactylitis |
| D571 | Sickle-Cell disease without crisis | D57438 | Sickle-Cell thalassemia beta zero with crisis with other specified complication |
| D5720 | Sickle-Cell/Hb-C disease without crisis | D57439 | Sickle-Cell thalassemia beta zero with crisis, unspecified |
| D57211 | Sickle-Cell/Hb-C disease with acute chest syndrome | D5744 | Sickle-Cell thalassemia beta plus without crisis |
| D57212 | Sickle-Cell/Hb-C disease with splenic sequestration | D57451 | Sickle-Cell thalassemia beta plus with acute chest syndrome |
| D57213 | Sickle-Cell/Hb-C disease with cerebral vascular involvement | D57452 | Sickle-Cell thalassemia beta plus with splenic sequestration |
| D57214 | Sickle-Cell/Hb-C disease with dactylitis | D57453 | Sickle-Cell thalassemia beta plus with cerebral vascular involvement |
| D57218 | Sickle-Cell/Hb-C disease with crisis with other specified complication | D57454 | Sickle-Cell thalassemia beta plus with dactylitis |
| D57219 | Sickle-Cell/Hb-C disease with crisis, unspecified | D57458 | Sickle-Cell thalassemia beta plus with crisis with other specified complication |
| D5740 | Sickle-Cell thalassemia without crisis | D57459 | Sickle-Cell thalassemia beta plus with crisis, unspecified |
| D57411 | Sickle-Cell thalassemia, unspecified, with acute chest syndrome | D5780 | Other sickle-cell disorders without crisis |
| D57412 | Sickle-Cell thalassemia, unspecified, with splenic sequestration | D57811 | Other sickle-cell disorders with acute chest syndrome |
| D57413 | Sickle-Cell thalassemia, unspecified, with cerebral vascular involvement | D57812 | Other sickle-cell disorders with splenic sequestration |
| D57414 | Sickle-Cell thalassemia, unspecified, with dactylitis | D57813 | Other sickle-cell disorders with cerebral vascular involvement |
| D57418 | Sickle-Cell thalassemia, unspecified, with crisis with other specified complication | D57814 | Other sickle-cell disorders with dactylitis |

| | | | |
|--------|---|--------|---|
| D57419 | Sickle-Cell thalassemia, unspecified, with crisis | D57818 | Other sickle-cell disorders with crisis with other specified complication |
| D5742 | Sickle-Cell thalassemia beta zero without crisis | D57819 | Other sickle-cell disorders with crisis, unspecified |