Asthma Admission Rate
Technical Specifications

Pediatric Quality Indicators #14 (PDI #14)
AHRQ Quality Indicators™, Version 5.0
March 2015
Area-Level Indicator
Type of Score: Rate

Description

Admissions with a principal diagnosis of asthma per 100,000 population, ages 2 through 17 years. Excludes cases with a diagnosis code for cystic fibrosis and anomalies of the respiratory system, 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 2 through 17 years, with a principal ICD-9-CM diagnosis code for asthma.

<table>
<thead>
<tr>
<th>ICD-9-CM Asthma diagnosis codes:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>49300  EXT ASTHMA W/O STAT ASTH</td>
<td>49321  CH OB ASTHMA W STAT ASTH</td>
</tr>
<tr>
<td>49301  EXT ASTHMA W STATUS ASTH</td>
<td>49322  CH OBS ASTH W ACUTE EXAC</td>
</tr>
<tr>
<td>49302  EXT ASTHMA W ACUTE EXAC</td>
<td>49381  EXERCISE IND BRONCHOSPASM</td>
</tr>
<tr>
<td>49310  INT ASTHMA W/O STAT ASTH</td>
<td>49382  COUGH VARIANT ASTHMA</td>
</tr>
<tr>
<td>49311  INT ASTHMA W STATUS ASTH</td>
<td>49390  ASTHMA W/O STATUS ASTHM</td>
</tr>
<tr>
<td>49312  INT ASTHMA W ACUTE EXAC</td>
<td>49391  ASTHMA W STATUS ASTHMAT</td>
</tr>
<tr>
<td>49320  CH OB ASTH W/O STAT ASTH</td>
<td>49392  ASTHMA W ACUTE EXACERBTN</td>
</tr>
</tbody>
</table>

Exclude cases:
• with any-listed ICD-9-CM diagnosis codes for cystic fibrosis and anomalies of the respiratory system
• 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 missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

See Pediatric Quality Indicators Appendices:
• Appendix J – Admission Codes for Transfers
ICD-9-CM Cystic fibrosis and anomalies of the respiratory system diagnosis codes:

27700  CYSTIC FIBROS W/O ILEUS
27701  CYSTIC FIBROS W ILEUS
27702  CYSTIC FIBROS W PUL MAN
27703  CYSTIC FIBROSIS W GI MAN
27709  CYSTIC FIBROSIS NEC
51661  NEUROENDOCRINE CELL HYPERPLASIA OF INFANCY
51662  PULMONARY INTERSTITIAL GLYCOGENESIS
51663  SURFACTANT MUTATIONS OF THE LUNG
51664  ALVEOLAR CAPILLARY DYSPLASIA WITH VEIN MISALIGNMENT
51669  OTHER INTERSTITIAL LUNG DISEASES OF THE CHILDHOOD
74721  ANOMALIES OF AORTIC ARCH
7483   LARYNGOTRACH ANOMALY NEC
7484   CONGENITAL CYSTIC LUNG
7485   AGENESIS OF LUNG
74860  LUNG ANOMALY NOS
74861  CONGEN BRONCHIECTASIS
74869  LUNG ANOMALY NEC
7488   RESPIRATORY ANOMALY NEC
7489   RESPIRATORY ANOMALY NOS
7503   CONG ESOPH FISTULA/ATRES
7593   SITUS INVERSUS
7707   PERINATAL CHR RESP DIS

Denominator

Population ages 2 through 17 years in metropolitan area\(^1\) 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 QI software.