Asthma Admission Rate
Technical Specifications

Pediatric Quality Indicators #14 (PDI #14)
AHRQ Quality Indicators™, Version 4.5, May 2013
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.

ICD-9-CM Asthma diagnosis codes:

49300  EXTRINSIC ASTHMA NOS
49301  EXT ASTHMA W STATUS ASTH
49302  EXT ASTHMA W (ACUTE) EXAC
49310  INTRINSIC ASTHMA NOS
49311  INT ASTHMA W STATUS ASTH
49312  INT ASTHMA W (AC) EXAC
49320  CHRONIC OBST ASTHMA NOS
49321  CH OB ASTHMA W STAT ASTH
49322  CH OBST ASTH W (AC) EXAC
49381  EXERCISE IND BRONCHOSPASM
49382  COUGH VARIANT ASTHMA
49390  ASTHMA NOS
49391  ASTHMA W STATUS ASTHMAT
49392  ASTHMA NOS W (AC) EXAC

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>27700</td>
<td>CYSTIC FIBROS W/O ILEUS</td>
<td>7483</td>
<td>LARYNGOTRACH ANOMALY NEC</td>
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<tr>
<td>27701</td>
<td>CYSTIC FIBROSIS W ILEUS</td>
<td>7484</td>
<td>CONGENITAL CYSTIC LUNG</td>
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<td>27702</td>
<td>CYSTIC FIBROSIS W PUL MAN</td>
<td>7485</td>
<td>AGENESIS OF LUNG</td>
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<td>27703</td>
<td>CYSTIC FIBROSIS W GI MAN</td>
<td>74860</td>
<td>LUNG ANOMALY NOS</td>
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<tr>
<td>27709</td>
<td>CYSTIC FIBROSIS NEC</td>
<td>74861</td>
<td>CONGEN BRONCHIECTASIS</td>
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<tr>
<td>51661</td>
<td>NEUROEND CELL HYPRPL INF</td>
<td>74869</td>
<td>LUNG ANOMALY NEC</td>
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<td>51662</td>
<td>PULM INTERSTITL GLYCogen</td>
<td>7488</td>
<td>RESPIRATORY ANOMALY NEC</td>
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<td>51663</td>
<td>SURFACTANT MTLTION LUNG</td>
<td>7489</td>
<td>RESPIRATORY ANOMALY NOS</td>
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<tr>
<td>51664</td>
<td>ALV CAP DYSP W VN MISALN</td>
<td>7503</td>
<td>CONG ESOPH FISTULA/ATRES</td>
</tr>
<tr>
<td>51669</td>
<td>OTH INTRST LUNG DIS CHLD</td>
<td>7593</td>
<td>SITUS INVERSUS</td>
</tr>
<tr>
<td>74721</td>
<td>ANOMALIES OF AORTIC ARCH</td>
<td>7707</td>
<td>PERINATAL CHR RESP DIS</td>
</tr>
</tbody>
</table>

Denominator

Population ages 2 through 17 years 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.