Prevention Quality Indicator 15 (PQI 15) Asthma in Younger Adults Admission Rate
July 2017
Area-Level Indicator
Type of Score: Rate

Prepared by:
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U.S. Department of Health and Human Services
www.qualityindicators.ahrq.gov

DESCRIPTION
Admissions for a principal diagnosis of asthma per 100,000 population, ages 18 to 39 years. Excludes admissions with an indication of cystic fibrosis or 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 18 through 39 years, with a principal ICD-10-CM diagnosis code for asthma (4CSASTD)∗.

[NOTE: By definition, discharges with a principal diagnosis of asthma 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.]
NUMERATOR EXCLUSIONS
Exclude cases:
• transfer from a hospital (different facility) (Appendix A)
• transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF) (Appendix A)
• transfer from another health care facility (Appendix A)
• with any-listed ICD-10-CM diagnosis codes for cystic fibrosis and anomalies of the respiratory system (RESPAN* )
  • 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

DENOMINATOR
Population ages 18 through 39 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.

* See below for code list
### Asthma diagnosis codes: (ACSASTD)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>J4521</td>
<td>Mild intermittent asthma with (acute) exacerbation</td>
<td>J4551</td>
<td>Severe persistent asthma with (acute) exacerbation</td>
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<tr>
<td>J4522</td>
<td>Mild intermittent asthma with status asthmaticus</td>
<td>J4552</td>
<td>Severe persistent asthma with status asthmaticus</td>
</tr>
<tr>
<td>J4531</td>
<td>Mild persistent asthma with (acute) exacerbation</td>
<td>J45901</td>
<td>Unspecified asthma with (acute) exacerbation</td>
</tr>
<tr>
<td>J4532</td>
<td>Mild persistent asthma with status asthmaticus</td>
<td>J45902</td>
<td>Unspecified asthma with status asthmaticus</td>
</tr>
<tr>
<td>J4541</td>
<td>Moderate persistent asthma with (acute) exacerbation</td>
<td>J45990</td>
<td>Exercise induced bronchospasm</td>
</tr>
<tr>
<td>J4542</td>
<td>Moderate persistent asthma with status asthmaticus</td>
<td>J45991</td>
<td>Cough variant asthma</td>
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<tr>
<td></td>
<td></td>
<td>J45998</td>
<td>Other asthma</td>
</tr>
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**Cystic fibrosis and anomalies of the respiratory system diagnosis codes: (RESPAN)**

- E840  Cystic fibrosis with pulmonary manifestations  Q320  Congenital tracheomalacia
- E841  Meconium ileus in cystic fibrosis  Q321  Other congenital malformations of trachea
- E8419  Cystic fibrosis with other intestinal manifestations  Q322  Congenital bronchomalacia
- E848  Cystic fibrosis with other manifestations  Q323  Congenital stenosis of bronchus
- E849  Cystic fibrosis, unspecified  Q324  Other congenital malformations of bronchus

- J8483  Surfactant mutations of the lung  Q330  Congenital cystic lung  Q331  Accessory lobe of lung
- J84841  Neuroendocrine cell hyperplasia of infancy  Q332  Sequestration of lung
- J84842  Pulmonary interstitial glycogenosis  Q333  Agenesis of lung
- J84843  Alveolar capillary dysplasia with vein misalignment  Q336  Congenital bronchiectasis

- P270  Wilson-Mikity syndrome  Q335  Ectopic tissue in lung
- P271  Bronchopulmonary dysplasia originating in the perinatal period  Q336  Congenital hypoplasia and dysplasia of lung
- P278  Other chronic respiratory diseases originating in the perinatal period  Q338  Other congenital malformations of lung
- P279  Unspecified chronic respiratory disease originating in the perinatal period  Q339  Congenital malformation of lung, unspecified

- Q254  Other congenital malformations of aorta  Q340  Anomaly of pleura
- Q2545  Double aortic arch  Q341  Congenital cyst of mediastinum
- Q2547  Right aortic arch  Q348  Other specified congenital malformations of respiratory system

- Q2548  Anomalous origin of subclavian artery  Q349  Congenital malformation of respiratory system, unspecified

- Q311  Congenital subglottic stenosis  Q390  Atresia of esophagus without fistula
- Q312  Laryngeal hypoplasia  Q391  Atresia of esophagus with tracheo-esophageal fistula
- Q313  Laryngocele  Q392  Congenital tracheo-esophageal fistula without atresia
- Q315  Congenital laryngomalacia  Q393  Congenital stenosis and stricture of esophagus

- Q318  Other congenital malformations of larynx  Q394  Esophageal web
- Q319  Congenital malformation of larynx, unspecified  Q893  Situs inversus