

Prevention Quality Indicator in Emergency Department Settings 04 (PQE 04) Visits for Asthma

July 2024

Area-Level Indicator

Type of Score: Rate

Prepared by:

Agency for Healthcare Research and Quality
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qualityindicators.ahrq.gov

DESCRIPTION

Emergency Department (ED) visits for asthma, for individuals ages 5 to 39 years, per 100,000 population.

[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 visits per 100,000 population.]

NUMERATOR

Visits to any ED (within state), for patients ages 5 to 39 years, with a first-listed diagnosis of asthma with and without exacerbation or status asthmaticus (ASTHMA*), or a first-listed diagnosis of bronchitis (**QE4BRONCHITIS***) with a secondary diagnosis of asthma, in patients residing in a community.

NUMERATOR EXCLUSIONS

Exclude visits:

- With any listed ICD-10-CM diagnosis code for cystic fibrosis (**CYSTICFIBROSIS***)
- With any listed ICD-10-CM diagnosis code for respiratory anomalies (**RESPIRATORYANOMALIES***)
- With any listed ICD-10-CM diagnosis code for pneumonia (**QE4EXC_PNEUMONIA***)
- With missing gender (SEX=missing), age (AGE=missing), first-listed diagnosis (DX1=missing), or county (PSTCO=missing)

DENOMINATOR

Population ages 5 to 39 in the metropolitan area¹ or county. Visits 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

Asthma diagnosis codes: (ASTHMA)

J4520	Mild intermittent asthma, uncomplicated	J4550	Severe persistent asthma, uncomplicated
J4521	Mild intermittent asthma with (acute) exacerbation	J4551	Severe persistent asthma with (acute) exacerbation
J4522	Mild intermittent asthma with status asthmaticus	J4552	Severe persistent asthma with status asthmaticus
J4530	Mild persistent asthma, uncomplicated	J45901	Unspecified asthma with (acute) exacerbation
J4531	Mild persistent asthma with (acute) exacerbation	J45902	Unspecified asthma with status asthmaticus
J4532	Mild persistent asthma with status asthmaticus	J45909	Unspecified asthma, uncomplicated
J4540	Moderate persistent asthma, uncomplicated	J45990	Exercise induced bronchospasm
J4541	Moderate persistent asthma with (acute) exacerbation	J45991	Cough variant asthma
J4542	Moderate persistent asthma with status asthmaticus	J45998	Other asthma

Bronchitis diagnosis codes: (QE4BRONCHITIS)

J200	Acute bronchitis due to mycoplasma pneumoniae	J209	Acute bronchitis, unspecified
J201	Acute bronchitis due to hemophilus influenzae	J40	Bronchitis, not specified as acute or chronic
J202	Acute bronchitis due to streptococcus	J410	Simple chronic bronchitis
J203	Acute bronchitis due to coxsackievirus	J411	Mucopurulent chronic bronchitis
J204	Acute bronchitis due to parainfluenza virus	J418	Mixed simple and mucopurulent chronic bronchitis
J205	Acute bronchitis due to respiratory syncytial virus	J42	Unspecified chronic bronchitis
J206	Acute bronchitis due to rhinovirus	J441	Chronic obstructive pulmonary disease with (acute) exacerbation
J207	Acute bronchitis due to echovirus	J449	Chronic obstructive pulmonary disease, unspecified
J208	Acute bronchitis due to other specified organisms		

Cystic fibrosis diagnosis codes: (CYSTICFIBROSIS)

E840	Cystic fibrosis with pulmonary manifestations	E848	Cystic fibrosis with other manifestations
E8411	Meconium ileus in cystic fibrosis	E849	Cystic fibrosis, unspecified
E8419	Cystic fibrosis with other intestinal manifestations		

Respiratory anomalies diagnosis codes: (RESPIRATORYANOMALIES)

J8483	Surfactant mutations of the lung	Q322	Congenital bronchomalacia
J84841	Neuroendocrine cell hyperplasia of infancy	Q323	Congenital stenosis of bronchus
J84842	Pulmonary interstitial glycogenosis	Q324	Other congenital malformations of bronchus
J84843	Alveolar capillary dysplasia with vein misalignment	Q330	Congenital cystic lung
J84848	Other interstitial lung diseases of childhood	Q331	Accessory lobe of lung
P270	Wilson-Mikity syndrome	Q332	Sequestration of lung
P271	Bronchopulmonary dysplasia originating in the perinatal period	Q333	Agenesis of lung
P278	Other chronic respiratory diseases originating in the perinatal period	Q334	Congenital bronchiectasis
P279	Unspecified chronic respiratory disease originating in the perinatal period	Q335	Ectopic tissue in lung
Q254	Other congenital malformations of aorta	Q336	Congenital hypoplasia and dysplasia of lung
Q2545	Double aortic arch	Q338	Other congenital malformations of lung
Q2546	Tortuous aortic arch	Q339	Congenital malformation of lung, unspecified
Q2547	Right aortic arch	Q340	Anomaly of pleura
Q2548	Anomalous origin of subclavian artery	Q341	Congenital cyst of mediastinum
Q311	Congenital subglottic stenosis	Q348	Other specified congenital malformations of respiratory system
Q312	Laryngeal hypoplasia	Q349	Congenital malformation of respiratory system, unspecified
Q313	Laryngocele	Q390	Atresia of esophagus without fistula
Q315	Congenital laryngomalacia	Q391	Atresia of esophagus with tracheo-esophageal fistula
Q318	Other congenital malformations of larynx	Q392	Congenital tracheo-esophageal fistula without atresia
Q319	Congenital malformation of larynx, unspecified	Q393	Congenital stenosis and stricture of esophagus
Q320	Congenital tracheomalacia	Q394	Esophageal web
Q321	Other congenital malformations of trachea	Q893	Situs inversus

Pneumonia diagnosis codes: (QE4EXC_PNEUMONIA)

J13	Pneumonia due to streptococcus pneumoniae	J157	Pneumonia due to mycoplasma pneumoniae
J14	Pneumonia due to hemophilus influenzae	J159	Unspecified bacterial pneumonia
J1520	Pneumonia due to staphylococcus, unspecified	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
J1529	Pneumonia due to other staphylococcus	J181	Lobar pneumonia, unspecified organism
J153	Pneumonia due to streptococcus, group B	J188	Other pneumonia, unspecified organism
J154	Pneumonia due to other streptococci	J189	Pneumonia, unspecified organism