

Asthma

Measure 1: Pediatric Asthma Emergency Department Use

Description

This measure estimates the rate of emergency department visits for children ages 3 – 21 who are being managed for identifiable asthma, using specified definitions. The measure is reported in visits per 100 child-years.

Calculation

This measure requires administrative data and is calculated as follows:

$$\frac{\text{Numerator}}{\text{Denominator}} = \frac{\# \text{ of ED visits and hospitalizations for asthma}}{100 \text{ child years for children withwith identifiable asthma}}$$

Definitions

Identifiable asthma

Please see the attached excel sheet for a more detailed definition of exclusion and inclusion criteria for identifiable asthma and asthma-related prescriptions. Identifiable asthma is present when there is evidence as specified for any of the following:

- a. Prior hospitalization with asthma as primary or secondary diagnosis
- b. Other qualifying events after the fifth birthday (age is age at occurrence):
 - i. One or more prior ambulatory visits with asthma as the primary diagnosis AND a subsequent ED visit in the Reporting Month, OR
 - ii. Two or more ambulatory visits with asthma as a diagnosis, OR
 - iii. One ambulatory visit with asthma as a diagnosis AND at least one asthma-related prescription
- c. Other qualifying events, any age:
 - i. Three or more ambulatory visits with diagnosis of asthma, OR
 - ii. Two or more ambulatory visits with a diagnosis of asthma AND one or more asthma- related prescriptions

Eligible Population

Ages	Children aged 3 -21 years.
Enrollment	Children who have been enrolled for three consecutive months including the month being assessed.
Event/Diagnosis	Children who have evidence of claims sufficient to meet the eligibility criteria for identifiable asthma
Assessment Period	The assessment period for denominator definition of identifiable asthma includes the full year before the reporting year and each full calendar month before the reporting month being assessed for asthma ED visits.

Specification

Denominator

The denominator represents the person-time experience among eligible children with identifiable asthma (definition above). Assessment of eligibility is determined for each child monthly. The total number of child months in the measurement year experienced is summed and divided by 1200 to achieve the units of 100 child years for the denominator.

Numerator

The numerator counts all emergency visits or hospitalizations with a primary or secondary ICD-based diagnosis of asthma in a child who was eligible in the reporting month. The asthma ICD codes are in the attached excel sheets. Since most hospitalizations for asthma are from the ED and many ED visits that result in hospitalization are not captured in encounter data, a numerator event may be identified either as an ED visit or as a hospitalization.