



Asthma Medication Ratio

November 2020

Measure Description

The percentage of members 5–64 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.

Evaluation Period

Calendar Year

Numerator

The number of members who have a medication ratio of 0.50 or greater during the measurement year. Follow the steps below to calculate the ratio.

Use all the medication lists in the Asthma Controller Medications table below to identify asthma controller medications. Use all the medication lists in the Asthma Reliever Medications table below to identify asthma reliever medications.

1. For each member, count the units of asthma controller medications dispensed during the measurement year.
2. For each member, count the units of asthma reliever medications dispensed during the measurement year.
3. For each member, sum the units calculated in step 1 and step 2 to determine units of total asthma medications.
4. For each member, calculate the ratio of controller medications to total asthma medications using the following formula. Round (using the .5 rule) to the nearest whole number.

$$\text{Asthma Medication Ratio} = \frac{\text{Units of Controller Medication}}{\text{Units of Controller Medication} + \text{Units of Reliever Medication}}$$



Asthma Controller Medications

Description	Prescriptions	Route
Antiasthmatic combinations	• Dyphylline-guaifenesin	Oral
Antibody inhibitors	• Omalizumab	Injection
Anti-interleukin-4	• Dupilumab	Injection
Anti-interleukin-5	• Benralizumab	Injection
Anti-interleukin-5	• Mepolizumab	Injection
Anti-interleukin-5	• Reslizumab	Injection
Inhaled steroid combinations	• Budesonide-formoterol	Inhalation
Inhaled steroid combinations	• Fluticasone-salmeterol	Inhalation
Inhaled steroid combinations	• Fluticasone-vilanterol	Inhalation
Inhaled steroid combinations	• Formoterol-mometasone	Inhalation
Inhaled corticosteroids	• Beclomethasone	Inhalation
Inhaled corticosteroids	• Budesonide	Inhalation
Inhaled corticosteroids	• Ciclesonide	Inhalation
Inhaled corticosteroids	• Flunisolide	Inhalation
Inhaled corticosteroids	• Fluticasone	Inhalation
Inhaled corticosteroids	• Mometasone	Inhalation
Leukotriene modifiers	• Montelukast	Oral
Leukotriene modifiers	• Zafirlukast	Oral
Leukotriene modifiers	• Zileuton	Oral
Methylxanthines	• Theophylline	Oral

Asthma Reliever Medications

Description	Prescriptions	Route
Short-acting, inhaled beta-2 agonists	Albuterol	Inhalation
Short-acting, inhaled beta-2 agonists	Levalbuterol	Inhalation



Denominator

Members ages 5–64 as of December 31 of the measurement year who have persistent asthma (see codes below) and who met at least one of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.

- At least one ED visit, with a principal diagnosis of asthma.
- At least one acute inpatient encounter with a principal diagnosis of asthma without telehealth.
- At least one acute inpatient discharge with a principal diagnosis of asthma on the discharge claim. To identify an acute inpatient discharge:
 1. Identify all acute and nonacute inpatient stays
 2. Exclude nonacute inpatient stays
 3. Identify the discharge date for the stay
- At least four outpatient visits, observation visits, telephone visits or e-visits or virtual check-ins, on different dates of service, with any diagnosis of asthma and at least two asthma medication dispensing events for any controller or reliever medication. Visit type need not be the same for the four visits. Use all the medication lists in the tables above to identify asthma controller and reliever medications.
- At least four asthma medication dispensing events for any controller or reliever medication. Use all the medication lists in the tables above to identify asthma controller and reliever medications.

Condition Description	Detailed Criteria
Persistent Asthma	ICD10 Codes (J45.21, J45.22, J45.30, J45.31, J45.32, J45.40, J45.41, J45.42, J45.50, J45.51, J45.902, J45.909, J45.991, J45.998)

Denominator Exclusions

Exclude members who met any of the following criteria:

- Members who had any diagnosis from any of the following value sets, any time during the member’s history through December 31 of the measurement year:
 - Emphysema
 - COPD
 - Obstructive Chronic Bronchitis
 - Chronic Respiratory Conditions Due to Fumes or Vapors
 - Cystic Fibrosis
 - Acute Respiratory Failure
- Members who had no asthma controller or reliever medications dispensed during the measurement year. Use all the medication lists in the tables below to identify asthma controller and reliever medications.



Notes

- Measure Steward is NCQA

