Asthma Pharmacologic Therapy (NQF 0047)

EMeasure Name	Asthma Pharmacologic Therapy	EMeasure Id	Pending
Version Number	1	Set Id	Pending
Available Date	No information	Measurement Period	January 1, 20xx through December 31, 20xx
Measure Steward	American Medical Association – Physician Consortium for Performance Improvement		
Endorsed by	National Quality Forum		
Description	Percentage of patients aged 5 through 40 years with a diagnosis of mild, moderate, or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment.		
Measure scoring	Proportion		
Measure type	Process		
Rationale	Although current guidelines recommend inhaled corticosteroids as the preferred pharmacological treatment for persistent asthma, other long-term control medications are acceptable alternatives. Long Acting-inhaled Beta2 Agonists (LABA) are recommended in combination with Inhaled Corticosteroids.		
Clinical Recommendation Statement	A stepwise approach to therapy is recommended to maintain long-term control: Step 1: Mild Intermittent Asthma • No daily medication needed Step 2: Mild Persistent Asthma • Preferred treatment: Low-dose inhaled corticosteroids (ICS) • Alternative treatment: Cromolyn, leukotriene modifier, nedocromil, OR sustained-release theophylline Step 3: Moderate Persistent Asthma • Preferred treatment: Low-medium dose ICS + long-acting inhaled beta2-agonists (LABA) • Alternative treatment: Increase medium-dose ICS OR low-medium dose ICS and either leukotriene modifier or theophylline (If needed, may increase ICS within medium-dose range in either treatment) Step 4: Severe Persistent Asthma • Preferred treatment: High-dose ICS + LABA AND, if needed, corticosteroid tablets or syrup long-term Studies comparing ICS to cromolyn, nedocromil, theophylline, or leukotriene receptor antagonists are limited, but available evidence shows that none of these long-term control medications appear to be as effective as ICS in improving asthma outcomes. For quick relief for all patients, a short-acting bronchodilator is recommended as needed for symptoms. (NAEPP/NHLBI)		
References			
Definitions			

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Please refer to the spreadsheet for this measure for detail regarding data criteria and code lists.

Population criteria

- **Initial Patient Population** =

    - AND: "Patient characteristic: birth date" (age) >= 5 years;
    - AND: "Patient characteristic: birth date" (age) <= 40 years;
    - AND:
        - OR: "Diagnosis active: asthma";
        - OR: "Diagnosis active: asthma persistent";
    - AND: >=2 count(s) of "Encounter: encounter office & outpatient consult";

- **Denominator** =

    - AND: All patients in the initial patient population;
    - AND: "Diagnosis active: asthma", severity = "persistent";

- **Numerator** =

    - AND:
        - OR: "Medication order: corticosteroid, inhaled or alternative asthma medication";
        - OR: "Medication active: corticosteroid, inhaled, or alternative asthma medication";

- **Exclusions** =

    - AND: "Medication not done: patient reason";
    - AND:
        - OR: "Medication allergy: corticosteroid, inhaled, or alternative asthma medication";
        - OR: "Medication adverse event: corticosteroid, inhaled, or alternative asthma medication";
        - OR: "Medication intolerance: corticosteroid, inhaled, or alternative asthma medication";

Data criteria (QDS Data Elements)

- **Initial Patient Population =**

    - "Patient characteristic: birth date" using the "birth date code list" before the beginning of the measurement period;

- o "Diagnosis active: asthma" using the "asthma code list" before or simultaneously to the "measurement period";
- o "Diagnosis active: asthma persistent" using the "asthma persistent code list grouping" before or simultaneously to the "measurement period";
- o "Encounter: encounter office & outpatient consult" using the "encounter outpatient office & outpatient consult code list" during the "measurement period";

- **Denominator =**

  - o All patients in the initial patient population;
  - o "Diagnosis active: asthma persistent" using the "asthma persistent code list grouping" before or simultaneously to the "measurement period";

- **Numerator =**

  - o "Medication order: corticosteroid, inhaled, or alternative asthma medication" using the "corticosteroid, inhaled, or alternative asthma medication code list" during the "measurement period";
  - o "Medication active: corticosteroid, inhaled, or alternative asthma medication" using the "corticosteroid, inhaled, or alternative asthma medication code list" during the "measurement period";

- **Exclusions =**

  - o "Medication not done: patient reason" using the "patient reason code list grouping" for "Medication active: corticosteroid, inhaled, or alternative asthma medication" OR "Medication order: corticosteroid, inhaled, or alternative asthma medication";
  - o "Medication allergy: corticosteroid, inhaled, or alternative asthma medication" using the "corticosteroid, inhaled, or alternative asthma medication code list" before or simultaneously to "Encounter: encounter office & outpatient consult";
  - o "Medication adverse event: corticosteroid, inhaled, or alternative asthma medication" using the "corticosteroid, inhaled, or alternative asthma medication code list" before or simultaneously to "Encounter: encounter office & outpatient consult";
  - o "Medication intolerance: corticosteroid, inhaled, or alternative asthma medication" using the "corticosteroid, inhaled, or alternative asthma medication code list" before or simultaneously to "Encounter: encounter office & outpatient consult";

Summary Calculation

Calculation is generic to all measures:
- Calculate the final denominator by adding all that meet denominator criteria.
- Subtract from the final denominator all that do not meet numerator criteria yet also meet exclusion criteria. Note some measures do not have exclusion criteria.
- The performance calculation is the number meeting numerator criteria divided by the final denominator.
- For measures with multiple patient populations, repeat this process for each patient population and report each result separately.
- For measures with multiple numerators, calculate each numerator separately within each population using the paired exclusion.

Measure set	CLINICAL QUALITY MEASURE SET 2011-2012