

**Asthma Control: Minimal Important Difference Improvement – National Quality Strategy  
Domain: Person and Caregiver-Centered Experience and Outcomes**

**DESCRIPTION:**

Percentage of patients aged 12 years and older whose asthma is not well-controlled as indicated by the Asthma Control Test, Asthma Control Questionnaire, or Asthma Therapy Assessment Questionnaire and who demonstrated a minimal important difference improvement upon a subsequent office visit during the 12-month reporting period.

**INSTRUCTIONS:**

This outcomes measure is to be reported a **minimum of once per reporting period** for all patients with a diagnosis of asthma who demonstrate a score  $\leq 19$  on the Asthma Control Test (ACT),  $\geq 1.5$  on the Asthma Control Questionnaire (ACQ) or  $\geq 1$  on the Asthma Therapy Assessment Questionnaire (ATAQ) and who had at least one follow-up ACT, ACQ, or ATAQ within the 12-month reporting period. In order to meet this measure, the patient must demonstrate a minimal importance difference (MID) improvement between their asthma control score from the initial visit and a subsequent score taken during the 12-month reporting period using the same patient-completed questionnaire. An increase in score by greater than or equal to 3 points on the ACT, decrease in score by greater than or equal to .5 points on the ACQ or a decrease in score by greater than or equal to 1 point on the ATAQ will indicate a minimal importance difference improvement and a higher measure performance. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific coding.

**Data Source:**

ICD-10-CM diagnosis codes, CPT codes, patient demographics and medical record data are used to identify patients who are included in the measure's denominator. Medical record data and the listed numerator options are used to report the numerator of the measure.

**DENOMINATOR:**

All patients aged 12 years or older whose asthma is not well-controlled and who had at least one follow-up ACT, ACQ, or ATAQ within the 12-month reporting period.

**Definition:**

For the purposes of this measure, asthma that is not well-controlled will be defined by a score of  $\leq 19$  on the ACT,  $\geq 1.5$  on the ACQ or  $\geq 1$  on the ATAQ.

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 12$  years on date of encounter

**AND**

**Diagnosis for asthma (ICD-10-CM):** J45.20, J45.21, J45.22, J45.30, J45.31, J45.32, J45.40, J45.41, J45.42, J45.50, J45.51, J45.52, J45.901, J45.902, J45.909, J45.990, J45.991, J45.998

**AND**

**At least two patient encounters during the reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**AND**

Asthma was not well-controlled based on score of  $\leq 19$  on the ACT or  $\geq 1.5$  on the ACQ or  $\geq 1$  on the ATAQ at one visit

**AND**

At least one subsequent patient encounter during the reporting period with completion of the same asthma assessment patient-completed questionnaire (ACT, ACQ or ATAQ)

**AND NOT**

**Diagnosis for COPD (ICD-10-CM):** J41.0, J41.1, J41.8, J42, J43.0, J43.1, J43.2, J43.8, J43.9, J44.0, J44.1, J44.9

## **NUMERATOR:**

Patients who demonstrate a minimal important difference (MID) improvement using one of the following three asthma assessment patient-completed questionnaires:

- Change in the Asthma Control Test (ACT) by  $\geq 3$  points
- Change in Asthma Control Questionnaire (ACQ) by  $\geq 0.5$  points
- Change in Asthma Therapy Assessment Questionnaire (ATAQ) by  $\geq 1$  point

### **Numerator Options:**

#### ***Performance Met:***

MID improvement demonstrated, increase in score by  $\geq 3$  points on the ACT

#### **OR**

#### ***Performance Met:***

MID improvement demonstrated, decrease in score by  $\geq 0.5$  points on the ACQ

#### **OR**

#### ***Performance Met:***

MID improvement demonstrated, decrease in score by  $\geq 1$  point on the ATAQ

#### **OR**

#### ***Medical Performance Exclusion:***

Medical reason(s) for patient not demonstrating MID improvement (eg, respiratory infection within 4 weeks of follow-up visit)

#### **OR**

#### ***Patient Performance Exclusion:***

Patient reasons for not demonstrating MID improvement (eg, patients with poor adherence to controller therapy as determined by self-report or pharmacy records (per cent of days covered  $< 50$  %))

#### **OR**

#### ***Performance Not Met:***

MID improvement **NOT** demonstrated, reason not otherwise specified

## **RATIONALE:**

Current asthma guidelines recommend assessing an asthma patient's level of control and emphasize that the goal of asthma therapy is to achieve control. Several validated asthma questionnaires can be used to assess control. In order to assess clinical improvement or worsening of asthma control in an individual or population overtime, the minimal important difference (MID) [also referred to as the minimal clinically important difference or MCID] can be used. The MID is defined as the smallest difference in score on the instrument that represents a clinically significant change (Schatz 2009).

Lack of asthma control impairs quality of life and is a risk factor for subsequent exacerbations. When control is not achieved, escalation of therapy is warranted to attain and maintain control.

Schatz M, Kosinski M, Yarlas AS, Hanlon J, Watson ME, Jhingran P. The minimally important difference of the Asthma Control Test. J Allergy Clin Immunol 2009;124(4):719-723 e1, Epub 2009/09/22.

## **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

Once treatment is started, the results of the measures of impairment and risk are used to monitor asthma control rather than severity. Monitoring the level of asthma control is used to adjust medication as needed.

National Asthma Education and Prevention Program Guidelines Implementation Panel Report for: Expert Panel Report 3—Guidelines for the Diagnosis and Management of Asthma, 2008. Bethesda, MD: National Heart, Lung, and Blood Institute, US Dept of Health and Human Services; 2008.

Four instruments have established cutoff values for uncontrolled versus controlled asthma: ACQ score of 1.5 or greater, ACT score of 19 or less, ATAQ score of 1 or greater, and Childhood Asthma Control Test [cACT] score of 19 or less (US study).

Two asthma control composite score instruments (ACQ and ACT) have been designated as core measures for the NIH-initiated clinical research in adults because of (1) the importance of asthma control as a goal of therapy; (2) extensive validation data for these instruments, using the widest range of criterion and construct measures and including demonstration of responsiveness to therapy and an MCID; and (3) low patient burden and risk.

Cloutier MM, Schatz M, Castro M, Clark N, Kelly HW, Mangione-Smith R, et al. Asthma outcomes: composite scores of asthma control. *J Allergy Clin Immunol.* 2012;129(3 ) Suppl:S24–S33. doi: 10.1016/j.jaci.2011.12.980

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The Asthma Control: Minimal Important Difference Improvement measure was developed by the American Academy of Allergy Asthma and Immunology (AAAAI). The measure is not a clinical guideline, does not establish a standard of medical care, and has not been tested for all potential applications. The CPT® contained in the measure specification is copyright 2004-2014 American Medical Association.

**Measure Type:** Outcome