

# NQF 0047: Asthma Pharmacologic Therapy

## Clinical Quality Measure Quick Reference Guide and Technical Supplement

### **Provided By:**

The National Learning Consortium (NLC)

### **Developed By:**

Health Information Technology Research Center (HITRC)

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## NATIONAL LEARNING CONSORTIUM

The National Learning Consortium (NLC) is a virtual and evolving body of knowledge and tools designed to support healthcare providers and health IT professionals working towards the implementation, adoption and meaningful use of certified EHR systems.

The NLC represents the collective EHR implementation experiences and knowledge gained directly from the field of ONC's outreach programs ([REC](#), [Beacon](#), [State HIE](#)) and through the [Health Information Technology Research Center \(HITRC\)](#) Communities of Practice (CoPs).

The following resource is an example of a tool used in the field today that is recommended by "boots-on-the-ground" professionals for use by others who have made the commitment to implement or upgrade to certified EHR systems.

## DESCRIPTION

The Clinical Quality Measure (CQM) quick reference guides provide a summary of key information for CQMs and are intended to be shared with clinical staff using an electronic health record (EHR).

The first section, *Quick Facts*, comes from the CQM e-specifications and is intended to provide an overview of the measure. This section provides information on the measure definition, whether the measure is a core, alternate core, or menu set measure, whether it is related to other measures by common data elements, and what data goes into a numerator, denominator, and denominator exclusion.

The second section, *Key Clinical Activities* and *Planning Your EHR Documentation*, is intended to be a space to plan EHR documentation. It provides a "to-do list" of clinical and documentation activities for the measure and lists each data element that is required to calculate the numerator, denominator, and denominator exclusions. Providers can use this space to assign individuals or roles to tasks in the to-do list.

The third section, *Technical Supplement*, provides clarifications regarding what "counts" toward this measure. First, it provides English "translations" of the numeric SNOMED-CT, HL7, and CPT codes that may be used in this measure. Second, it includes clarifications on what constitutes a numerator "hit" or a denominator exclusion based on questions that have arisen during technical assistance calls.

To access the official electronic specifications, visit the CMS Electronic Specifications page <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/ElectronicSpecifications.html> and locate the "EP Measure Specifications" zip file, which contains electronic specifications for all 44 Stage 1 Meaningful Use clinical quality measures.

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## NQF 0047: Asthma Pharmacologic Therapy

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

Quick Facts	
Type of measure: core, alternate core, or menu?	<ul style="list-style-type: none"> <li>• Menu Set Measure</li> </ul>
Related to other measures?	<ul style="list-style-type: none"> <li>• Information entered for this clinical quality measure also can be used for calculations in the following measure: <ul style="list-style-type: none"> <li>– NQF 0001 Asthma Assessment</li> <li>– NQF 0036 Use of appropriate medications for asthma</li> </ul> </li> </ul>
Data required to identify the <u>denominator</u> (total cases eligible to be counted in measure)	<ul style="list-style-type: none"> <li>• Age</li> <li>• Encounter codes<sup>1</sup></li> <li>• Active diagnosis of persistent asthma</li> </ul>
Data required to identify the <u>exceptions or exclusions</u>	<ul style="list-style-type: none"> <li>• Patient reason medication not done</li> <li>• Medication allergy, adverse event, or intolerance</li> </ul>
Data required to identify the <u>numerator</u> (cases in which the process or outcome being measured occurred)	<ul style="list-style-type: none"> <li>• Prescription of inhaled corticosteroid or alternative asthma medication<sup>1</sup></li> </ul>

**Note:** This document is meant to supplement and not replace the official electronic specifications for the measure. To access the official specifications, please visit: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/ElectronicSpecifications.html>

<sup>1</sup> This data element(s) must be documented within the measurement period.

Key Clinical Activities		Planning Your EHR Documentation	
To-Do List	Why Needed?	Data Elements Needed	Responsible Person or Role
1. <b>Confirm the patient's date of birth</b>	<ul style="list-style-type: none"> <li>Ensures only patients who 5 to 50 years of age during the measurement period are captured in the <b>denominator</b>.</li> </ul>	<ul style="list-style-type: none"> <li>Date of birth</li> </ul>	
2. <b>Record date and type of visit</b>	<ul style="list-style-type: none"> <li>Ensures appropriate patient visits are captured in the <b>denominator</b>.</li> </ul>	<ul style="list-style-type: none"> <li>Date of visit</li> <li>Encounter code<sup>2</sup></li> </ul>	
3. <b>Check patient record or assess patient for persistent asthma</b>	<ul style="list-style-type: none"> <li>Ensures only patients with persistent asthma are captured in the <b>denominator</b>.</li> </ul>	<ul style="list-style-type: none"> <li>Document active diagnosis of persistent asthma<sup>3</sup></li> </ul>	
4. <b>Record reason medication not given if applicable.</b>	<ul style="list-style-type: none"> <li>Ensure patients who have not prescribed medication appropriately are captured as <b>exclusions or exceptions</b></li> </ul>	<ul style="list-style-type: none"> <li>Document patient reason<sup>4</sup>, if applicable</li> <li>Document medication allergy, adverse event, or intolerance, if applicable</li> </ul>	
5. <b>Document prescription for inhaled corticosteroid or alternative asthma medication as ordered or active</b>	<ul style="list-style-type: none"> <li>Ensure patients who prescribed medication are captured in the <b>numerator</b>.</li> </ul>	<ul style="list-style-type: none"> <li>Document prescription of inhaled corticosteroid or alternative asthma medication<sup>5</sup></li> </ul>	

<sup>2</sup> See Technical Supplement for denominator inclusion details (visits): [pp. TS-2](#)

<sup>3</sup> See Technical Supplement for denominator inclusion details (asthma diagnosis): [pp. TS-2](#)

<sup>4</sup> See Technical Supplement for exclusion/exception details (patient reason): [pp. TS-3](#)

<sup>5</sup> See Technical Supplement for numerator inclusion details (asthma medication): [pp. TS-3](#)

## Technical Supplement

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The following pages list the technical definitions of the codes that could be included in the calculation of this measure. Use these lists as needed to confirm that your clinical documentation includes item(s) that are on this list, where appropriate, to ensure accurate calculation of your quality measure numerator and denominator.

## DENOMINATOR INCLUSION CRITERIA

### What counts as a visit? (CPT Codes)

- Office or other outpatient visit for the evaluation and management of a new patient, which requires these 3 key components: a history, an examination, and medical decision making.
- Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: a history, an examination, and medical decision making.
- Office consultation for a new or established patient, which requires these 3 key components: a history, an examination, and medical decision making.

### What counts as a diagnosis of asthma? (ICD-9 Codes)

- |   |        |
|---|--------|
| • Extrinsic asthma, unspecified                       | 493.00 |
| • Extrinsic asthma with status asthmaticus            | 493.01 |
| • Extrinsic asthma with acute exacerbation            | 493.02 |
| • Intrinsic asthma, unspecified                       | 493.10 |
| • Intrinsic asthma with status asthmaticus            | 493.11 |
| • Intrinsic asthma with acute exacerbation            | 493.12 |
| • Chronic obstructive asthma, unspecified             | 493.20 |
| • Chronic obstructive asthma, with acute exacerbation | 493.22 |
| • Other forms of asthma                               | 493.81 |
| • Cough variant asthma                                | 493.82 |
| • Asthma, unspecified                                 | 493.90 |
| • Unspecified asthma with status asthmaticus          | 493.91 |
| • Unspecified asthma with acute exacerbation          | 493.92 |

### What counts as a diagnosis of asthma? (SNOMED-CT Codes)

- Moderate persistent asthma
- Mild persistent asthma (disorder)
- Severe persistent asthma (disorder)

## EXCLUSION OR EXCEPTION CRITERIA

### What counts as a patient reason medication not done? (SNO-MED CT codes)

- Medication refused

### What counts as a patient reason medication not done? (HL7 codes)

- The Patient requested the action
- Moved at the request of the patient.
- Client deceased.
- The patient is not (or is no longer) able to use the medication in a manner prescribed. Example: Can't swallow.
- The patient refused to take the product.
- The patient or their guardian objects to receiving the vaccine on religious grounds.
- The patient or their guardian objects to receiving the vaccine because of concerns over its safety.

#### What counts as a patient reason medication not done? (HL7 codes)

- The intended vaccine has expired or is otherwise believed to no longer be effective. Example: Due to temperature exposure.
- Patient has compliance issues with medication such as differing appearance, flavor, size, shape or consistency.
- Patient changed their mind regarding obtaining medication

## NUMERATOR INCLUSION CRITERIA

#### What counts as asthma medication? (RXNorm codes)

- Budesonide
- Montelukast
- Theophylline
- Isoetharine
- Isoproterenol
- Cholinophyllin
- Zileuton
- bitolterol
- Albuterol
- Levalbuterol
- zafirlukast
- formoterol
- Methylprednisolone
- Cholinophyllin
- Mometasone furoate
- Brompheniramine / Phenylephrine
- Flunisolide
- Cromolyn sodium
- Albuterol / Ipratropium Bromide
- Terbutaline Sulfate
- Salmeterol
- Fluticasone propionate
- Fluticasone propionate / salmeterol



## TYPES OF CODES REQUIRED FROM YOUR EHR FOR CALCULATING THIS CLINICAL QUALITY MEASURE

NQF0047	CPT	CPT Modifier	CVX	Grouping	HCPCS	HL7	ICD-9*	ICD-10	LOINC	RxNorm	SNOMED*
<b>Numerator<sup>1</sup></b>										✗	
<b>Denominator<sup>2</sup></b>	✗			✗		✗	✗	✗		✗	✗
<b>Exceptions or exclusions<sup>3</sup></b>				✗		✗					✗

- (Codes with an asterisk (\*) are required from certified EHRs)
- <sup>1</sup> To identify the numerator in this CQM, the following standard codes are required: one "medication" code from RxNorm
- <sup>2</sup> To identify the denominator in this CQM, the following standard codes are required: an "asthma diagnosis" code from ICD-9, ICD-10 or SNOMED, AND an "outpatient encounter" code from CPT AND an "individual characteristic" code from HL7.
- <sup>3</sup> To identify the exceptions or exclusions in this CQM, the following standard codes are required: a "negation rationale" code from HL7 or SNOMED.

Abbreviation	Long Name	Definition/Description
CPT	Current Procedural Terminology	The CPT (Current Procedural Terminology) is produced by the American Medical Association (AMA). CPT codes are used to report medical procedures and services. (Source: CDC)
CVX	Codes for Vaccine Administered	This vocabulary provides terminology for Vaccine Administered. The vocabulary is defined in Health Level Seven (HL7) Version 2.5.1. (Source: USHIK)
HCPCS	Healthcare Common Procedure Coding System	Level I of the HCPCS is comprised of CPT (Current Procedural Terminology), a numeric coding system maintained by the American Medical Association (AMA). Level II of the HCPCS is a standardized coding system that is used primarily to identify products, supplies, and services not included in the CPT codes, such as ambulance services and durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) when used outside a physician's office. (Source: CMS)
HL7	Health Level Seven	HL7 is an accredited ANSI standard organization that produces the HL7 messaging standard. It is the accepted messaging standard for communicating clinical data. It is supported by every major medical informatics system vendor in the US. (Source: ASPE)
ICD-9	International Statistical Classification of Diseases and Related Health Problems, 9th revision	The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) is based on the World Health Organization's Ninth Revision, International Classification of Diseases (ICD-9). ICD-9-CM is the official system of assigning codes to diagnoses and procedures associated with hospital utilization in the United States. The ICD-9 is used to code and classify mortality data from death certificates. (Source: CDC)

Abbreviation	Long Name	Definition/Description
ICD-10	International Statistical Classification of Diseases and Related Health Problems, 10th revision	The International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10), published by the World Health Organization (WHO), is the foundation of ICD-10-CM. ICD-10 continues to be the classification used in cause-of-death coding in the United States. The ICD-10-CM is comparable with the ICD-10 (Source: CDC)
LOINC	Logical Observation Identifiers Names and Codes	A universal code system for identifying laboratory and clinical observations. (Source: LOINC)
RxNorm	RxNorm	RxNorm provides normalized names for clinical drugs and links its names to many of the drug vocabularies commonly used in pharmacy management and drug interaction software, including those of First Databank, Micromedex, MediSpan, Gold Standard Alchemy, and Multum. By providing links between these vocabularies, RxNorm can mediate messages between systems not using the same software and vocabulary. (Source: NLM NIH)
SNOMED-CT	Systematic Nomenclature of Medicine - Clinical Terms	SNOMED CT (Systematized Nomenclature of Medicine--Clinical Terms) is a comprehensive clinical terminology, originally created by the College of American Pathologists (CAP) and, as of April 2007, owned, maintained, and distributed by the International Health Terminology Standards Development Organisation (IHTSDO), a not-for-profit association in Denmark. (Source: NLM NIH)

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