

# **AAAAI Allergy, Asthma & Immunology Quality Clinical Data Registry in collaboration with CECity**

## **2016 Measure Specifications**

Hosting Measures Owned and Developed by:

**The Physician Consortium for Performance Improvement® ®**

**Health Care Incentives Improvement Institute, Inc.  
Bridges to Excellence®**

**The Joint Task Force on Quality and Performance Measures Workgroup  
Approved by the American Academy of Allergy, Asthma & Immunology (AAAAI),  
American College of Allergy, Asthma & Immunology (ACAAI) and  
The Joint Council of Allergy, Asthma and Immunology**

**MN Community Measurement**

January 2016

These performance measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.

Use of these measures is at the discretion and permission of the measure owners and are used by the American Academy of Allergy, Asthma and Immunotherapy (AAAAI) with such permission. They may be available for use, reproduction and distribution with appropriate permission and licensing from the respective measure owner. The AAAAI is not responsible for any use of the measures other than that agreed to with each of the measure owners for the development of this QCDR.

THE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.

Physician Consortium for Performance Improvement™ (PCPI) Measures:

Physician Performance Measures (Measures) and related data specifications, developed by the Physician Consortium for Performance Improvement® (the Consortium), are intended to facilitate quality improvement activities by physicians.

These measures are intended to assist physicians in enhancing quality of care. Measures are designed for use by any physician who manages the care of a patient for a specific condition or for prevention. These performance measures are not clinical guidelines and do not establish a standard of medical care. The Consortium has not tested its measures for all potential applications. The Consortium encourages the testing and evaluation of its measures.

Measures are subject to review and may be revised or rescinded at any time by the Consortium. The measures may not be altered without the prior written approval of the Consortium. Measures developed by the Consortium, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, eg, use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of measures for commercial gain, or incorporation of the measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial uses of the measures require a license agreement between the user and American Medical Association, on behalf of the Consortium. Neither the Consortium nor its members shall be responsible for any use of these measures.

© 2006 American Medical Association. All Rights Reserved.

CPT® contained in the Measures specifications is copyright 2008-2014 American Medical Association. All rights reserved.

Bridges to Excellence® Measures (BTE):

Measures developed by Bridges to Excellence® are copyright protected by the Health Care Incentives Improvement Institute, Inc. All rights reserved.

Bridges to Excellence® is a registered trademark of the Health Care Incentives Improvement Institute

MN Community Measurement Measures (MNCM):

Permission granted by MN Community Measurement for denominator modification from patients aged 5 - 50 years to patients aged 5 years and older.

Joint Task Force on Quality Performance Measures (JTF QPM):

Measures developed by the Joint Task Force on Quality and Performance Measures Workgroup have been approved by the American Academy of Allergy, Asthma & Immunology (AAAAI), American College of Allergy, Asthma & Immunology (ACAAI) and the Joint Council of Allergy, Asthma and Immunology. The AAAAI is responsible for the development of the specifications of the measures as included in this document in the QCDR.

## Table of Contents

Measure	e-CQM for Meaningful Use	Measure Type	Page
<b>Asthma Measures</b>			
PQRS Measure #53 (NQF 0047): Asthma: Pharmacologic Therapy for Persistent Asthma - Ambulatory Care Setting	N/A	P	7
PQRS Measure #398: Optimal Asthma Control	N/A	O	9
AAAAI Measure: Asthma: Assessment of Asthma Control - Ambulatory Care Setting	N/A	P	14
AAAAI Measure: Asthma Control: Minimal Important Difference Improvement	N/A	O	17
BTE Measure: Asthma Assessment and Classification	N/A	P	20
BTE Measure: Lung Function/Spirometry Evaluation	N/A	P	22
BTE Measure: Patient Self-Management and Action Plan	N/A	P	24
<b>Allergen Immunotherapy Measures AAAAI/ACAAI Measures:</b>			
Allergen Immunotherapy Treatment: Allergen Specific Immunoglobulin E (IgE) Sensitivity Assessed and Documented Prior to Treatment	N/A	P	26
Documentation of Clinical Response to Allergen Immunotherapy within One Year	N/A	P	28
Documented Rationale to Support Long-Term Aeroallergen Immunotherapy Beyond Five years, as Indicated	N/A	P	30
Achievement of Projected Effective Dose of Standardized Allergens for Patient Treated With Allergen Immunotherapy for at Least One Year	N/A	O	32
Assessment of Asthma Symptoms Prior to Administration of Allergen Immunotherapy Injection(s)	N/A	P	34
Documentation of the Consent Process for Subcutaneous Allergen Immunotherapy in the Medical Record	N/A	P	36
<b>Drug Allergy Measure</b>			
AAAAI Measure: Penicillin Allergy: Appropriate Removal or Confirmation	N/A	O	38
<b>Sinusitis Measures</b>			
PQRS Measure #331: Adult Sinusitis: Antibiotic Prescribed for Acute Sinusitis (Appropriate Use)	N/A	P	41
PQRS Measure #332: Adult Sinusitis: Appropriate Choice of Antibiotic: Amoxicillin Prescribed for Patients with Acute Bacterial Sinusitis (Appropriate Use)	N/A	P	44
PQRS Measure #333: Adult Sinusitis: Computerized Tomography (CT) for Acute Sinusitis (Overuse)	N/A	P	47
PQRS Measure #334: Adult Sinusitis: More than One Computerized Tomography (CT) Scan Within 90 Days for Chronic Sinusitis (Overuse)	N/A	E	50
<b>General Care Measures</b>			
PQRS Measure #226 (NQF 0028, e-CQM CMS 138v4): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	Yes	P	53
PQRS Measure #402: Tobacco Use and Help with Quitting Among Adolescents	No	P	56
PQRS Measure #111 (NQF 0043, e-CQM CMS 127v4): Pneumonia Vaccination Status for Older Adults	Yes	P	58
PQRS Measure #130 (NQF 0419, e-CQM CMS 68v5): Documentation of Current Medications in the Medical Record	Yes	P	60
PQRS Measure #128 (NQF 0421, e-CQM CMS 69v4): Body Mass Index	Yes	P	64
PQRS Measure #110 (NQF 0041, e-CQM CMS 147v5): Influenza Immunization	Yes	P	69

<b>***NEW*** Additional e-CQM Measures added to the Registry for 2016 Reporting:</b>			
PQRS Measure #65 (NQF 0069, e-CQM CMS 154v4): Appropriate Treatment for Children with Upper Respiratory Infection (URI)	Yes	P	72
PQRS Measure #374 (e-CQM CMS 50v4) Closing the Referral Loop: Receipt of Specialist Report	Yes	P	75
PQRS Measure #317 (e-CQM CMS 22v4) Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented	Yes	P	77
PQRS Measure #66 (NQF 0002, e-CQM CMS 146v4) Appropriate Testing for Children with Pharyngitis	Yes	P	82
PQRS Measure #238 (NQF 0022, e-CQM CMS 156v4) Use of High-Risk Medications in the Elderly	Yes	P	86
PQRS Measure #240 (NQF 0038, e-CQM CMS 117v4) Childhood Immunization Status	Yes	P	94
PQRS Measure #311 (NQF 0036, e-CQM CMS 126v4) Use of Appropriate Medications for Asthma	Yes	P	99

### List of Measures by National Quality Strategy (NQS) Domain

<b>Measure</b>	<b>e-CQM for Meaningful Use</b>	<b>Measure Type</b>	<b>Page</b>
<b>Communication and Care Coordination</b>			
AAAAI/ACAAI Measure: Documentation of Clinical Response to Allergen Immunotherapy within One Year	N/A	P	28
AAAAI Measure: Penicillin Allergy: Appropriate Removal or Confirmation	N/A	O	38
PQRS Measure #374 (e-CQM CMS 50v4) Closing the Referral Loop: Receipt of Specialist Report	Yes	P	75
<b>Community Population Health</b>			
PQRS Measure #226 (NQF 0028, e-CQM CMS 138v4): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	Yes	P	53
PQRS Measure #402: Tobacco Use and Help with Quitting Among Adolescents	No	P	56
PQRS Measure #111 (NQF 0043, e-CQM CMS 127v4): Pneumonia Vaccination Status for Older Adults	Yes	P	58
PQRS Measure #128 (NQF 0421, e-CQM CMS 69v4): Body Mass Index	Yes	P	64
PQRS Measure #110 (NQF 0041, e-CQM CMS 147v5): Influenza Immunization	Yes	P	69
PQRS Measure #317 (e-CQM CMS 22v4) Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented	Yes	P	76
PQRS Measure #240 (NQF 0038, e-CQM CMS 117v4) Childhood Immunization Status	Yes	P	94
<b>Effective Clinical Care</b>			
PQRS Measure #53 (NQF 0047): Asthma: Pharmacologic Therapy for Persistent Asthma - Ambulatory Care Setting	N/A	P	7
PQRS Measure #398: Optimal Asthma Control	N/A	O	9
AAAAI Measure: Asthma: Assessment of Asthma Control - Ambulatory Care Setting	N/A	P	14
BTE Measure: Asthma Assessment and Classification	N/A	P	20
BTE Measure: Lung Function/Spirometry Evaluation	N/A	P	22
AAAAI/ACAAI Measure: Achievement of Projected Effective Dose of Standardized Allergens for Patient Treated With Allergen Immunotherapy for at Least One Year	N/A	O	32
PQRS Measure #311 (NQF 0036, e-CQM CMS 126v4) Use of Appropriate Medications for Asthma	Yes	P	98

<b>Efficiency and Cost Reduction</b>			
AAAAI/ACAAI Measure: Documented Rationale to Support Long-Term Aeroallergen Immunotherapy Beyond Five years, as Indicated	N/A	P	30
PQRS Measure #331: Adult Sinusitis: Antibiotic Prescribed for Acute Sinusitis (Appropriate Use)	N/A	P	41
PQRS Measure #332: Adult Sinusitis: Appropriate Choice of Antibiotic: Amoxicillin Prescribed for Patients with Acute Bacterial Sinusitis (Appropriate Use)	N/A	P	44
PQRS Measure #333: Adult Sinusitis: Computerized Tomography (CT) for Acute Sinusitis (Overuse)	N/A	P	47
PQRS Measure #334: Adult Sinusitis: More than One Computerized Tomography (CT) Scan Within 90 Days for Chronic Sinusitis (Overuse)	N/A	P	50
PQRS Measure #65 (NQF 0069, e-CQM CMS 154v4): Appropriate Treatment for Children with Upper Respiratory Infection (URI)	Yes	P	72
PQRS Measure #66 (NQF 0002, e-CQM CMS 146v4) Appropriate Testing for Children with Pharyngitis	Yes	P	82
<b>Patient Safety</b>			
AAAAI/ACAAI Measure: Allergen Immunotherapy Treatment: Allergen Specific Immunoglobulin E (IgE) Sensitivity Assessed and Documented Prior to Treatment	N/A	P	26
AAAAI/ACAAI Measure: Assessment of Asthma Symptoms Prior to Administration of Allergen Immunotherapy Injection(s)	N/A	P	34
PQRS Measure #238 (NQF 0022, e-CQM CMS 156v4) Use of High-Risk Medications in the Elderly	Yes	P	86
PQRS Measure #130 (NQF 0419, e-CQM CMS 68v5): Documentation of Current Medications in the Medical Record	Yes	P	60
<b>Person and Caregiver-Centered Experience and Outcomes</b>			
AAAAI Measure: Asthma Control: Minimal Important Difference Improvement	N/A	O	17
BTE Measure: Patient Self-Management and Action Plan	N/A	P	24
AAAAI/ACAAI Measure: Documentation of the Consent Process for Subcutaneous Allergen Immunotherapy in the Medical Record	N/A	P	36

## **About the AAAAI QCDR**

### **Background**

In 2014, the Centers for Medicare and Medicaid Services (CMS) established the qualified clinical data registry (QCDR) as a new individual eligible professional reporting mechanism for the Physician Quality Reporting System (PQRS). According to CMS, a QCDR is a CMS-approved entity that collects medical and/or clinical data for the purpose of patient and disease tracking to foster improvement in the quality of care provided to patients. The AAAAI Allergy Asthma and Immunology Quality Clinical Data Registry was developed in collaboration with CECity, a leading provider of cloud-based registry platforms, in 2014 and has been updated to include additional measures for the 2016 reporting year. In order to be considered as a QCDR, the American Academy of Allergy Asthma and Immunology (AAAAI) submitted a self-nomination to CMS and successfully completed the qualification process.

### **Requirements**

As finalized in the 2016 Medicare Physician Fee Schedule (MPFS), successful reporting through a QCDR in 2016 for the purposes of avoiding the 2018 payment adjustment of 2% requires the following:

- Report on at least nine (9) measures covering at least three (3) of the National Quality Strategy (NQS) domains
- Of these measures, report at least two (2) outcomes measures
- Report each measure for 50% of the eligible professional's patients that apply to the measure across all payers (ie: not limited to Medicare patients)

*In addition, as of 2016 and subsequent years, CMS will allow both individual EPs **and** group practices participating in the GPRO to report quality measures via a QCDR. Please note that, a group practice is required to register with CMS to participate in the PQRS GPRO.*

Please refer to page 3 for a listing of each measure by its NQS domain. The six NQS domains include:

- Communication and Care Coordination
- Community Population Health
- Effective Clinical Care
- Efficiency and Cost Reduction
- Patient Safety
- Person and Caregiver-Centered Experience and Outcomes

### **Measures**

A qualified clinical data registry differs from a qualified registry in reporting requirements and is the only PQRS reporting method that hosts non-PQRS measures approved by CMS for the purposes of PQRS reporting. Non-PQRS measures are measures that are not contained in the PQRS measures set released by CMS for the applicable reporting period. These can be "homegrown" measures developed by entities such as the Joint Task Force on Quality and Performance Measurement (a joint task force of the AAAAI and the American College of Allergy Asthma and Immunology) or PQRS measures that have substantive differences in the manner reported by the QCDR.

PQRS measure #398: Optimal Asthma Control is used in the AAAAI QCDR *without* the upper age limit of 50 with the permission of the measure steward, Minnesota Community Measurement, and is therefore considered a non-PQRS measure. Other non-PQRS measures in the AAAAI QCDR include measures from the Bridges to Excellence® Asthma Care Recognition Program, owned and developed by Health Care Incentives Improvement Institute, Inc and former PQRS measure #64: Asthma: Assessment of Asthma Control. The measure is used without the upper age limit of 64 with permission of the measure steward, the American Medical Association-convened Physician's Consortium on Practice Improvement. Additionally, the AAAAI QCDR hosts 9 PQRS measures.

### **Registration**

In order to register for the AAAAI QCDR, go to [www.medconcert.com/AAAAIQIR](http://www.medconcert.com/AAAAIQIR).

**Measure #53 (NQF 0047): Asthma: Pharmacologic Therapy for Persistent Asthma – Ambulatory Care Setting – National Quality Strategy Domain: Effective Clinical Care**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:  
REGISTRY ONLY**

**DESCRIPTION:**

Percentage of patients aged 5 years and older with a diagnosis of persistent asthma who were prescribed long-term control medication

**INSTRUCTIONS:**

This measure is to be reported a minimum of **once per reporting period** for all patients with a diagnosis of persistent asthma seen during the reporting period. 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 denominator coding.

**This measure will be calculated with 3 performance rates:**

- 1) Patients prescribed inhaled corticosteroids (ICS) as their long-term control medication
- 2) Patients prescribed alternative long-term control medications (non-ICS)
- 3) Total patients prescribed long-term control medication

**Measure Reporting via Registry:**

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

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

All patients aged 5 years and older with a diagnosis of persistent asthma

**Denominator Instructions:** Documentation of persistent asthma must be present. One method of identifying persistent asthma is, at a minimum, daily use of short-acting bronchodilators

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 5$  years on date of encounter

**AND**

**Diagnosis for asthma (ICD-10-CM):** 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**

**Patient encounter during the reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

**AND**

Persistent Asthma (mild, moderate or severe) **(1038F)**

**NUMERATOR:**

Patients who were prescribed long-term control medication

**Definition:**

**Long-Term Control Medication Includes:**

Patients prescribed inhaled corticosteroids (the preferred long-term control medication at any step of asthma pharmacological therapy)

**OR**

Patients prescribed alternative long-term control medications (inhaled steroid combinations, anti-asthmatic combinations, antibody inhibitor, leukotriene modifiers, mast cell stabilizers, methylxanthines) OR an acceptable alternative long-term control medication at one or more visits in the 12-month period OR patient already taking inhaled corticosteroid OR an acceptable alternative long-term control medication as documented in current medication list

**Numerator Options:**

- OR** ***Performance Met:*** Inhaled corticosteroids prescribed **(4140F)**
- OR** ***Performance Met:*** Alternative long-term control medication prescribed **(4144F)**
- OR** ***Patient Performance Exclusion:*** Documentation of patient reason(s) for not prescribing inhaled corticosteroids or alternative long-term control medication (eg, patient declined, other patient reason) **(4140F with 2P)**
- OR** ***Performance Not Met:*** Inhaled corticosteroids or alternative long-term control medication **not** prescribed, reason not otherwise specified **(4140F with 8P)**

**RATIONALE:**

The following statement is quoted verbatim from the NHLBI/NAEPP guideline (NHLBI, 2007):

“The broad action of ICS on the inflammatory process may account for their efficacy as preventive therapy. Their clinical effects include reduction in severity of symptoms; improvement in asthma control and quality of life; improvement in PEF and spirometry; diminished airway hyper-responsiveness; prevention of exacerbations; reduction in systemic corticosteroid courses; emergency department (ED) care; hospitalizations, and deaths due to asthma; and possibly the attenuation of loss of lung function in adults”. (Rafferty P 1985; Haahtela T 1991; Jeffery PK 1992; Van Essesn-Zandvliet EE 1992; Barnes NC 1993; Fabbri L 1993; Gustafsson P 1993; Kamada AK 1996; Suissa S 2000; Pauwels RA 2003; Barnes PJ October 1992)

**CLINICAL RECOMMENDATION STATEMENTS:**

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

The Expert Panel recommends that long-term control medications be taken daily on a long-term basis to achieve and maintain control of persistent asthma. The most effective long-term control medications are those that attenuate the underlying inflammation characteristic of asthma. (Evidence A) (NHLBI, 2007)

The Expert Panel concludes that ICS is the most potent and clinically effective long-term control medication for asthma. (Evidence A) (NHLBI, 2007)

The Expert Panel concludes that ICS is the most effective long-term therapy available for patients who have persistent asthma, and, in general, ICS is well tolerated and safe at the recommended dosages. (Evidence A) (NHLBI, 2007)

---

The American Academy of Allergy Asthma and Immunology (AAAAI) and PCPI owned and developed measure, Asthma: Pharmacologic Therapy for Persistent Asthma – Ambulatory Care Setting, specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Process



**Measure #398: Optimal Asthma Control – Minnesota Community Measurement (MNCM) –  
National Quality Strategy Domain: Effective Clinical Care**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:  
REGISTRY ONLY**

**DESCRIPTION:**

Composite measure of the percentage of pediatric and adult patients whose asthma is well-controlled as demonstrated by one of three age appropriate patient reported outcome tools and not at risk for exacerbation

**INSTRUCTIONS:**

This measure is to be reported a minimum of **once per reporting period** for all patients with a diagnosis of asthma seen during the reporting period. This measure may be reported by clinicians who perform the quality actions described in the measure for the primary management of patients with asthma based on the services provided and the measure-specific denominator coding.

**Measure Reporting via Registry:**

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

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**This measure will be calculated with 7 performance rates:**

1. Overall Percentage for patients (aged 5 years and older) with well-controlled asthma, without elevated risk of exacerbation.
2. Percentage of pediatric patients (aged 5-17 years) with well-controlled asthma, without elevated risk of exacerbation.
3. Percentage of adult patients (aged 18 years and older) with well-controlled asthma, without elevated risk of exacerbation.
4. Asthma well-controlled (take the most recent ACT) for patients 5 to 17 with Asthma
5. Asthma well-controlled (take the most recent ACT) for patients 18 years or older with Asthma
6. Patient not at elevated risk of exacerbation for patients 5 to 17 with Asthma
7. Patient not at elevated risk of exacerbation for patients 18 years or older with Asthma

**DENOMINATOR:**

**DENOMINATOR (REPORTING CRITERIA 1):**

Patients ages 5 to 17 with asthma

**Denominator Criteria (Eligible Cases) 1:**

Patients aged 5-17 years

**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**

**Patient encounter during the reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215

**AND**

**At least two visits for asthma over the last two years with at least one visit for any reason in the last 12 months**

**AND NOT**

**Diagnosis for chronic obstructive pulmonary disease (COPD), emphysema, cystic fibrosis, or acute respiratory failure (ICD-10-CM):** E84.0, E84.11, E84.19, E84.8, E84.9, J43.0, J43.1, J43.2, J43.8, J43.9, J44.0, J44.1, J44.9, J68.4, J96.00, J96.01, J96.02, J96.20, J96.21, J96.22, J98.2, J98.3

**AND NOT**

**Patient Died Prior to the End of the Measurement Period**

**OR**

**Patient was a Permanent Nursing Home Resident**

**OR**

**Patient was in Hospice or Receiving Palliative Care Services at any time During the Measurement Period**

**NUMERATOR (All or Nothing):**

The number of asthma patients who meet ALL of the following targets

**Numerator Options:**

**Each component should be reported in order to determine the reporting and performance rate for the overall percentage of patients that meet ALL targets represented as the numerator.**

**COMPONENT 1:**

Asthma well-controlled (take the most recent asthma control tool available during the measurement period)

- Asthma Control Test™ (ACT) score of 20 or above - ages 12 and older
- Childhood Asthma Control Test (C-ACT) score of 20 or above - ages 11 and younger
- Asthma Control Questionnaire (ACQ) score of 0.75 or lower - ages 17 and older
- Asthma Therapy Assessment Questionnaire (ATAQ) score of 0 – Pediatric (ages 5 – 17) or Adult (ages 18 and older)

**Component Options:**

**Performance Met:**

Asthma well-controlled based on the ACT, C-ACT, ACQ, or ATAQ score and results documented (**G9432**)

**OR**

**Performance Not Met:**

Asthma not well-controlled based on the ACT, C-ACT, ACQ, or ATAQ score, OR specified asthma control tool not used, reason not given (**G9434**)

**AND**

**COMPONENT 2:**

Patient not at elevated risk of exacerbation

***NUMERATOR NOTE:*** To meet performance for this component, documentation of the sum of the patients reported values for the following questions must be less than two:

- Number of emergency department visits not resulting in a hospitalization due to asthma in last 12 months
- Number of inpatient hospitalizations requiring an overnight stay due to asthma in last 12 months.

**Component Options:**

**Performance Met:**

Total number of emergency department visits and inpatient hospitalizations less than two in the past 12 months (**G9521**)

**OR**

**Performance Not Met:**

Total number of emergency department visits and inpatient hospitalizations equal to or greater

than two in the past 12 months OR patient not screened, reason not given (**G9522**)

**DENOMINATOR (REPORTING CRITERIA 2):**

Patients ages 18 years or older with asthma

**Denominator Criteria (Eligible Cases) 2:**

Patients aged 18 years or older

**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**

**Patient encounter during the reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215

**AND**

**At least two visits for asthma over the last two years with at least one visit for any reason in the last 12 months**

**AND NOT**

**Diagnosis for chronic obstructive pulmonary disease (COPD), emphysema, cystic fibrosis, or acute respiratory failure (ICD-10-CM):** E84.0, E84.11, E84.19, E84.8, E84.9, J43.0, J43.1, J43.2, J43.8, J43.9, J44.0, J44.1, J44.9, J68.4, J96.00, J96.01, J96.02, J96.20, J96.21, J96.22, J98.2, J98.3

**AND NOT**

**Patient Died Prior to the End of the Measurement Period**

**OR**

**Patient was a Permanent Nursing Home Resident**

**OR**

**Patient was in Hospice or Receiving Palliative Care Services at any time During the Measurement Period**

**NUMERATOR (All or Nothing):**

The number of asthma patients who meet ALL of the following targets

**Numerator Options:**

**Each component should be reported in order to determine the reporting and performance rate for the overall percentage of patients that meet ALL targets represented as the numerator.**

**COMPONENT 1:**

Asthma well-controlled (take the most recent asthma control tool available during the measurement period)

- Asthma Control Test™ (ACT) score of 20 or above - ages 12 and older
- Asthma Control Questionnaire (ACQ) score of 0.75 or lower - ages 17 and older
- Asthma Therapy Assessment Questionnaire (ATAQ) score of 0 – Pediatric (ages 5 – 17) or Adult (ages 18 and older)

**Component Options:**

***Performance Met:***

Asthma well-controlled based on the ACT, C-ACT, ACQ, or ATAQ score and results documented (**G9432**)

**OR**

***Performance Not Met:***

Asthma not well-controlled based on the ACT, C-ACT, ACQ, or ATAQ score, OR specified asthma control tool not used, reason not given (**G9434**)

**AND**

**COMPONENT 2:**

Patient not at elevated risk of exacerbation

**NUMERATOR NOTE:** To meet performance for this component, documentation of the sum of the patients reported values for the following questions must be less than two:

- Number of emergency department visits not resulting in a hospitalization due to asthma in last 12 months
- Number of inpatient hospitalizations requiring an overnight stay due to asthma in last 12 months

**Component Options:**

**Performance Met:**

Total number of emergency department visits and inpatient hospitalizations less than two in the past 12 months **(G9521)**

**OR**

**Performance Not Met:**

Total number of emergency department visits and inpatient hospitalizations equal to or greater than two in the past 12 months OR patient not screened, reason not given **(G9522)**

**RATIONALE:**

Roughly 7% of adults and children in Minnesota are currently living with asthma. Asthma is a chronic disease associated with familial, infectious, allergenic, socioeconomic, psychosocial and environmental factors. It is not curable but is treatable. Despite improvements in diagnosis and management, and an increased understanding of the epidemiology, immunology, and biology of the disease, asthma prevalence has progressively increased over the past 15 years.

**CLINICAL RECOMMENDATION STATEMENTS:**

From the National Quality Forum's 2013 report, Patient Reported Outcomes (PROs) in Performance Measurement:

Patient and family engagement is increasingly acknowledged as a key component of a comprehensive strategy, (along with performance improvement and accountability), to achieve a high quality, affordable health system. Emerging evidence affirms that patients who are engaged in their care tend to experience better outcomes and choose less costly but effective interventions.

Historically, with the exception of collecting feedback on satisfaction or experience with care, patients remain an untapped resource in assessing the quality of healthcare and of long-term support services. Patients are a valuable and, arguably, the authoritative source of information on outcomes beyond experience with care. These include health-related quality of life, functional status, symptom and symptom burden, and health behaviors.

Patient Reported Outcome Measures (PROMs) are standardized instruments that capture patients' self-assessment of their health and can provide timely information on patient health status, function and symptoms over time that can be used to improve patient-centered care and inform clinical decision-making.

The Asthma Control Test™ (ACT) is a validated self-administered survey utilizing 5 questions to assess asthma control on a scale from 0 (poor control) to 5 (total control) in individuals 12 years and older. © 2002 by QualityMetric Incorporated. Asthma Control Test is a trademark of QualityMetric Incorporated.

The Childhood Asthma Control Test (C-ACT) is a caregiver-assisted, child-completed tool that can be used with or without lung function assessment to assess pediatric asthma control at home or in clinical practice for children ages 4-11 years. It consists of 7 questions of which 4 are child-reported and 3 are caregiver-reported questions. ©2011 The GlaxoSmithKline Group of Companies.

The Asthma Control Questionnaire (ACQ) is a validated, self-administered survey available in various formats from the developer, Elizabeth F. Juniper, MCSP, MSc. <http://www.qoltech.co.uk/acq.html>

The Asthma Therapy Assessment Questionnaire (ATAQ) is available in a version for adults (18 and over) and a version for children and adolescents (5 – 17). © 2011 Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc.

**COPYRIGHT:**

© MN Community Measurement, 2015. All rights reserved.

---

The Minnesota Community Measurement owned and developed Optimal Asthma Care measure is used in the Allergy, Asthma and Immunotherapy Quality Clinical Data Registry with permission granted by Minnesota Community Measurement for denominator modification from patients aged 5 - 50 years to patients aged 5 years and older.

This measure is equivalent to PQRS measure #398 with the exception of the modification to the upper age limit and is copied from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Outcome

**Asthma: Assessment of Asthma Control – Ambulatory Care Setting –  
National Quality Strategy Domain: Effective Clinical Care**

**DESCRIPTION:**

Percentage of patients aged 5 years and older with a diagnosis of asthma who were evaluated at least once during the measurement period for asthma control (comprising asthma impairment and asthma risk)

**INSTRUCTIONS:**

This measure is to be reported a minimum of **once per reporting period** for patients with asthma seen during the reporting period. 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 denominator coding.

**Data Source:**

**Measure Reporting via Registry:**

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

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data. There are no allowable performance exclusions for this measure.

**DENOMINATOR:**

All patients aged 5 years and older with a diagnosis of asthma

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 5$  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**

**Patient encounter during the reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

**NUMERATOR:**

Patients who were evaluated at least once during the measurement period for asthma control

**Numerator Instructions:** Completion of a validated questionnaire will also meet the numerator requirement for this component of the measure. Validated questionnaires for asthma assessment include, but are not limited to, the Asthma Therapy Assessment Questionnaire [ATAQ], the Asthma Control Questionnaire [ACQ], or the Asthma Control Test [ACT].

The specifications of this numerator enable documentation for the impairment and risk components separately to facilitate quality improvement. Evaluation of asthma impairment and asthma risk must occur during the same medical encounter.

**Definition:**

**Evaluation of Asthma Control** - Documentation of an evaluation of asthma impairment which must include: daytime symptoms AND nighttime awakenings AND interference with normal activity AND short-acting beta2-agonist use for symptom control AND documentation of asthma risk which must include the number of asthma exacerbations requiring oral systemic corticosteroids in the prior 12 months.

**Numerator Quality-Data Coding Options for Reporting Satisfactorily:**

	<b>Performance Met:</b>	Asthma impairment assessed ( <b>CPT II 2015F</b> )
	<b>AND</b>	
	<b>Performance Met:</b>	Asthma risk assessed ( <b>CPT II 2016F</b> )
<b>OR</b>	<b>Performance Not Met:</b>	Asthma impairment <b>not</b> assessed, reason not otherwise specified ( <b>2015F with 8P</b> )
	<b>OR</b>	
	<b>Performance Not Met:</b>	Asthma risk <b>not</b> assessed, reason not otherwise specified ( <b>2016F with 8P</b> )

**RATIONALE:**

The goal of asthma therapy is to achieve asthma control. The level of asthma control serves as a basis for treatment modification (ie, whether or not a patient needs a step up or step down in therapy). Patients with poorly controlled asthma can experience significant asthma burden (Fuhlbrigge AL, 2002), decreased quality of life (Schatz M, 2005), and increased health utilization. (Vollmer WM, 2002; Schatz M, 2005) A large international study found that guideline-defined asthma control can be achieved. In their trial, 30% of the patients achieved total control (defined as absence of asthma symptoms) and 60% achieve well-controlled asthma (defined as low-level of symptoms or rescue medication use. (Bateman ED, 2004) A follow-up to this study found that this control can be maintained, which can lead to a decrease in the use of unscheduled health care visits. (Bateman ED, 2008)

**CLINICAL RECOMMENDATION STATEMENTS:**

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

The Expert Panel recommends that asthma control be defined as follows: (Evidence A) (NHLBI, 2007)

- Reduce Impairment
- Prevent chronic and troublesome symptoms (eg, coughing or breathlessness in the daytime, night, or after exertion)
- Require infrequent use ( $\leq 2$  days a week) of SABA for quick relief of symptoms
- Maintain (near) “normal” pulmonary function
- Maintain normal activity levels (including exercise and other physical activity and attendance at work or school)
- Meet patients’ and families’ expectations of satisfaction with asthma care
- Reduce risk
- Prevent recurrent exacerbations of asthma and minimize the need for ED visits or hospitalizations
- Prevent progressive loss of lung function; for children, prevent reduced lung growth
- Provide optimal pharmacotherapy with minimal or no adverse effects

The Expert Panel recommends that ongoing monitoring of asthma control be performed to determine whether all the goals of therapy are met—that is reducing both impairment and risk. (Evidence B) (NHLBI, 2007)

The Expert Panel recommends that the frequency of visits to a clinician for a review of asthma control is a matter of clinical judgment; in general, patients who have intermittent or mild persistent asthma that has been under control for at least 3 months should be seen by a physician about every 6 months, and patients who have uncontrolled and/or severe persistent asthma and those who need additional supervision to help them follow their treatment plan need to be seen more often. (NHLBI, 2007)

The Expert Panel recommends that symptoms and clinical signs of asthma should be assessed at each health care visit through physical examination and appropriate questions. (EPR-2, 1997) (NHLBI/NAEPP, 2007)

---

The AMA-convened Physician Consortium for Performance Improvement (PCPI) owned and developed Asthma: Assessment of Asthma Control – Ambulatory Care Setting measure is used with modification to the age range of 5-64 years to 5 years and older with permission from the measure owner.

This measure is equivalent to former PQRS measure #64 with the exception of the modification to the upper age limit.

**Measure Type:** Process



**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

---

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

## Asthma Assessment and Classification – National Quality Strategy Domain: Effective Clinical Care

### **DESCRIPTION:**

Percentage of patients aged 5 years and older with asthma and documentation of an asthma assessment and classification

### **FREQUENCY:**

Most recent documentation over the last 12 months from last day of the reporting period

### **Data source:**

Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patients with asthma for the denominator, and medical record data for the assessment and classification information for the numerator.

### **DENOMINATOR:**

Patients aged 5 years and older with a documented diagnosis of asthma

#### **Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 5$  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**

**Patient encounter during the reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

### **NUMERATOR:**

Patients aged 5 years and older with a diagnosis of asthma and documentation of an asthma assessment and classification

#### **Medical Record Collection:**

The patient is numerator compliant if he or she has at a minimum, a note indicating the date and frequency (numeric) of daytime and nocturnal asthma symptoms. The measure may also be met by clinician documentation or patient completion of a validated asthma assessment tool/survey/questionnaire. In either case the document completion date must fall within the reporting period. Numerator compliant asthma assessment tools include but are not limited to the following:

1. Quality Metric Asthma Control Test
2. NAEPP Asthma Symptoms and Peak Flow Diary.

The following is not acceptable documentation for asthma assessment or classification:

1. Patient self---reporting

### **RATIONALE:**

The National Asthma Education and Prevention Program Expert Panel Report 3 (NAEPP-EPR-3) guidelines recommend monitoring signs and symptoms (daytime; nocturnal awakening) of asthma to determine whether goals of asthma therapy (i.e. reduction of impairment and risk) are being met. It is anticipated that clinicians who provide services for the primary management of asthma will submit this measure.

---

Health Care Incentives Improvement Institute, Inc. owned and developed Bridges to Excellence® Asthma Care Recognition Program Clinician Assessment Measure, Asthma Assessment and Classification, is used with modification to the upper age limits; from 5 through 75 years to 5 years and older in the Allergy, Asthma and Immunotherapy Qualified Clinical Data Registry (QCDR) with permission from the measure owner. Additional denominator coding as used in the AAAAI QCDR is also included.

**Measure Type:** Process

**Lung Function/Spirometry Evaluation – National Quality Strategy Domain: Effective Clinical Care**

**DESCRIPTION:**

Percentage of patients aged 5 years and older with asthma and documentation of a spirometry evaluation

**FREQUENCY:**

Most recent documentation over the last 12 months from last day of the reporting period

**Data Source:**

Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patients with asthma for the denominator, and claims/encounter data or medical record data for spirometry information for the numerator.

**DENOMINATOR:**

Patients aged 5 years and older with a documented diagnosis of asthma

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 5$  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**

**Patient encounter during the reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**NUMERATOR:**

Patients aged 5 years and older with a diagnosis of asthma and documentation of a spirometry evaluation, unless a physical inability exists. Two methods are provided to identify patients documented spirometry evaluation and/or physical inability:

**Electronic Collection:**

The patient is numerator compliant if he or she has documentation of spirometry evaluation during the reporting period, as evidenced through claims data. Below is a list of codes to identify spirometry evaluation. CPT-I codes: 94010, 94014, 94015, 94016, 94060, 94070, 94620

**Medical Record Collection:**

The patient is numerator compliant if he or she has documentation in the medical record of spirometry results OR a physical inability to perform spirometry. This includes those patients with asthma who had one of the following:

1. Documentation indicating the date and spirometry results (FEV1 and FEV1/FVC) during the reporting period.
2. Documentation of spirometry evaluation and results from another treating clinician during the reporting period.
3. Documentation of a physical inability to perform spirometry. The following is not acceptable documentation for spirometry evaluation and results:
  1. Patient self-reporting

**RATIONALE:**

The National Asthma Education and Prevention Program Expert Panel Report 3 (NAEPP- EPR-3) guidelines recommend monitoring pulmonary function (spirometry; peak flow monitoring) to determine whether goals of asthma therapy are being met. It is anticipated that clinicians who provide services for the primary management of asthma will submit this measure.

---

Health Care Incentives Improvement Institute, Inc. owned and developed Bridges to Excellence® Asthma Care Recognition Program Clinician Assessment Measure, Lung Function/Spirometry Evaluation, is used with modification to the upper age limit; from 5 through 75 years to 5 years and older in the Allergy, Asthma and Immunotherapy Qualified Clinical Data Registry (QCDR) with permission from the measure owner. Additional denominator coding as used in the AAAAI QCDR is also included.

**Measure Type:** Process

**Patient Self-Management and Action Plan – National Quality Strategy Domain: Person and Caregiver-Centered Experience and Outcomes**

**DESCRIPTION:**

Percentage of patients aged 5 years and older with asthma and documentation of an asthma self-management plan

**FREQUENCY:**

Most recent documentation over the last 12 months from last day of the reporting period.

**Data source:**

Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patients with asthma for the denominator, and medical record data for patient self-management plan information for the numerator.

**DENOMINATOR:**

Patients aged 5 years and older with a documented diagnosis of asthma

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 5$  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**

**Patient encounter during the reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**NUMERATOR:**

Patients aged 5 years and older with a diagnosis of asthma and documentation of an asthma self-management plan. The patient self-management plan is recommended to include the following:

1. Written instructions specifying under which conditions the patient should contact his or her treating clinician or go to the emergency room.
2. Instructions on when to change medications in response to a change in patient symptoms.

**Medical Record Collection:**

The patient is numerator compliant if he or she has:

1. A dated copy of an asthma management plan on record during the reporting period.

**AND**

2. A dated note documenting having given the patient written asthma instructions during the reporting period.

**OR**

Documentation of the patient having received written asthma instructions from another treating clinician during the reporting period. The following is not acceptable documentation for self-management plan:

1. Patient self-reporting

**RATIONALE:**

The National Asthma Education and Prevention Program Expert Panel Report 3 (NAEPP-EPR-3) guidelines for the management of patients with asthma recommend that the patient or patient caregiver receive a written asthma management plan, which includes specific written instructions under which conditions the patient should contact his or her treating clinician or go to the emergency room. They also



stress the importance of integrating asthma self-management education into all aspects of asthma care. It is anticipated that clinicians who provide services for the primary management of asthma will submit this measure.

---

Health Care Incentives Improvement Institute, Inc. owned and developed Bridges to Excellence® Asthma Care Recognition Program Clinician Assessment Measure, Lung Function/Spirometry Evaluation, is used with modification to the upper age limits; from 5 through 75 years to 5 years and older in the Allergy, Asthma and Immunotherapy Qualified Clinical Data Registry (QCDR) with permission from the measure owner. Additional denominator coding as used in the AAAAI QCDR is also included.

**Measure Type:** Process

**Allergen Immunotherapy Treatment: Allergen Specific Immunoglobulin E (IgE) Sensitivity Assessed and Documented Prior to Treatment – National Quality Strategy Domain: Patient Safety**

**DESCRIPTION:**

Percentage of patients aged 5 years and older who were assessed for IgE sensitivity to allergens prior to initiating allergen immunotherapy AND results documented in the medical record.

**INSTRUCTIONS:**

This measure is to be reported a minimum of **once per reporting period** for all patients who initiated allergen immunotherapy during the reporting period. This measure is intended to reflect the quality of services provided for patients undergoing allergen immunotherapy. There is a wide consensus that shows confirming the results of IgE sensitivity testing is a necessary step in evaluating and appropriately selecting patients to begin allergen immunotherapy. There is no diagnosis associated with this measure. A patient will be considered denominator eligible if they had an office visit for their initial allergen immunotherapy treatment during the reporting period AND professional services for allergen immunotherapy were billed during the reporting period. Professional services for allergen immunotherapy CPT coding is used to identify patient on allergen immunotherapy but do not have to be billed on the same date as the patient encounter during which IgE sensitivity to allergens was reviewed and documented in the medical record. 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 denominator coding.

**Measure Reporting via Qualified Clinical Data Registry:**

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:**

Patients aged 5 years and older who initiated allergen immunotherapy during the reporting period

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 5$  years on the date of the encounter

**AND**

**Professional Services for Allergen Immunotherapy (CPT):** 95165, 95115, 95117, 95120, 95125, 95130, 95131, 95132, 95133, 95134, 95144, 95145, 95146, 95147, 95148, 95149, 95170

**AND**

**Patient Encounter during the Reporting Period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**AND**

Patient's initial allergen immunotherapy treatment takes place during the reporting period

**NUMERATOR:**

Patients who were **assessed** and had **documentation** of IgE sensitivity to allergens in the allergen immunotherapy prescription prior to initiating allergen immunotherapy

**Numerator Instructions:** This measure requires documentation of IgE sensitivity to allergens in the medical record. Documentation of serum specific IgE laboratory testing (CPT 82785, 86003) OR skin prick testing (CPT 95004, 95017, 95018) OR intradermal testing (CPT 95024, 95027, 95028) OR written documentation in the medical record will meet the numerator requirement for this component of the measure. Review of test results from a referring physician's office will meet the numerator requirement if results are documented in the medical record.

**Numerator Options:**

***Performance Met:***

IgE sensitivity to allergens in the allergen immunotherapy prescription was assessed and documented in the medical record prior to initiating allergen immunotherapy

**OR**

***Performance Not Met:***

IgE sensitivity to allergens in the allergen immunotherapy prescription was **not** assessed and/or documented in the medical record prior to initiating allergen immunotherapy

**CLINICAL RECOMMENDATIONS, TREATMENT GOALS:**

Summary Statement 7: Allergen immunotherapy should be considered for patients who have demonstrable evidence of specific IgE antibodies to clinically relevant allergens. The decision to begin allergen immunotherapy might depend on a number of factors, including but not limited to patient's preference, acceptability, adherence, medication requirements, response to avoidance measures, and the adverse effects of medications.<sup>1</sup>

<sup>1</sup>Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. *J Allergen immunotherapy: a practice parameter third update*. Allergy Clin Immunol. 2011 Jan;127(1 Suppl):S1-55.

---

The Allergen Immunotherapy Treatment: Allergen Specific Immunoglobulin E (IgE) Sensitivity Assessed and Documented Prior to Treatment measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma and Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). 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:** Process

**Documentation of Clinical Response to Allergen Immunotherapy within One Year – National Quality Strategy Domain: Communication and Care Coordination**

**DESCRIPTION:**

Percentage of patients aged 5 years and older who were evaluated for clinical improvement and efficacy within one year after initiating allergen immunotherapy AND assessment documented in the medical record.

**INSTRUCTIONS:**

This measure is to be reported **once per reporting period** for patients receiving allergen immunotherapy who initiated allergen immunotherapy one year prior to the date of encounter. On the date of service, the patient should be evaluated for clinical improvement and efficacy. Further, assessment results should be documented in the medical record or there should be written documentation that the patient was evaluated for clinical improvement and efficacy at least once within 12 months of being placed on allergen immunotherapy. There is no diagnosis associated with this measure. This measure is intended to reflect the quality of services provided for patients undergoing allergen immunotherapy. 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 denominator coding.

**Measure Reporting via Qualified Clinical Data Registry:**

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 5 years and older who initiated allergen immunotherapy within one year prior to the date of encounter

**Denominator Criteria (Eligible cases):**

Patients aged 5 years and older on the date of the encounter.

**AND**

**Professional Services for Allergen Immunotherapy (CPT):** 95165, 95115, 95117, 95120, 95125, 95130, 95131, 95132, 95133, 95134, 95144, 95145, 95146, 95147, 95148, 95149, 95170

**AND**

**Patient Encounter during the Reporting Period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**AND**

Patients who initiated allergen immunotherapy within one year prior to the date of encounter

**AND NOT**

Patients who discontinued allergen immunotherapy regimen

**NUMERATOR:**

Patients who were evaluated for clinical improvement and efficacy at least once within the first year of treatment with assessment documented in the medical record

**Numerator Options:**

***Performance Met:***

The patient was assessed for clinical improvement and efficacy at least once within 12 months of initiating allergen immunotherapy treatment and assessment was documented in medical record

**OR**

***Performance Not Met:***

The patient **was not** assessed for clinical improvement and efficacy at least once within 12 months of initiating allergen immunotherapy treatment and/or assessment was **not** documented in medical record

**CLINICAL RECOMMENDATIONS, TREATMENT GOALS:**

Summary Statement 23: Patients should be evaluated at least every 6 to 12 months while they receive immunotherapy in order to assess efficacy, implement and reinforce its safe administration, monitor adverse reactions, assess the patient's compliance with treatment, determine whether immunotherapy can be discontinued and to determine whether adjustments in the immunotherapy to dosing schedule or allergen content are necessary.<sup>1</sup>

<sup>1</sup>Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. *J Allergen immunotherapy: a practice parameter third update.* Allergy Clin Immunol. 2011 Jan;127(1 Suppl):S1-55.

---

The Documentation of Clinical Response to Allergen Immunotherapy within One Year measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma and Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). 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<sup>®</sup> contained in the measure specification is copyright 2004-2014 American Medical Association.

**Measure Type:** Process

**Documented Rationale to Support Long-Term Aeroallergen Immunotherapy Beyond Five Years, as Indicated – National Quality Strategy Domain: Efficiency and Cost Reduction**

**DESCRIPTION:**

Percentage of patients aged 5 years and older who were assessed for clinical rationale prior to continuation of aeroallergen immunotherapy beyond 5 years AND rationale documented in the medical record.

**INSTRUCTIONS:**

This measure is to be reported **once per reporting period** for patients who have been on aeroallergen immunotherapy for more than 5 years seen during the reporting period. After a patient has received immunotherapy for 5 years, a risk-benefit assessment should be performed that favors continued inhalant immunotherapy with rationale for continuation of therapy documented within the medical record. This should also take place every subsequent year thereafter. There is no diagnosis associated with this measure. This measure is intended to reflect the quality of services provided for patients undergoing aeroallergen immunotherapy. 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 denominator coding.

**Measure Reporting via Registry:**

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 5 years and older receiving aeroallergen immunotherapy beyond 5 years

**Denominator Criteria (Eligible cases):**

Patients aged 5 years and older on the date of the encounter.

**AND**

**Professional Services for Allergen Immunotherapy (CPT):** 95165, 95115, 95117, 95120, 95125, 95144

**AND**

**Patient Encounter during the Reporting Period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**AND**

Patients receiving aeroallergen immunotherapy beyond 5 years

**NUMERATOR:**

Patients who were assessed for clinical rationale prior to continuation of aeroallergen immunotherapy with documentation of rationale for continuation of treatment in the medical record

**Numerator Options:**

***Performance Met:***

Rationale for continuation of allergen immunotherapy beyond 5 years was documented within the past 12 months

**OR**

***Performance Not Met:***

Rationale for continuation of allergen immunotherapy beyond 5 years **was not** documented within the past 12 months

**CLINICAL RECOMMENDATION STATEMENTS:**

Duration of treatment: Summary Statement 24: The patient's response to immunotherapy should be evaluated on a regular basis. A decision about continuation of effective immunotherapy should generally be made after the initial period of 3 to 5 years of treatment. Some patients might experience sustained clinical remission of their allergic disease after discontinuing immunotherapy, but others might relapse.

The severity of disease, benefits sustained from treatment, and convenience of treatment are all factors that should be considered in determining whether to continue or stop immunotherapy for any individual patient.<sup>1</sup>

<sup>1</sup>Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. *J Allergen immunotherapy: a practice parameter third update*. *Allergy Clin Immunol*. 2011 Jan;127(1 Suppl):S1-55.

---

The Documented Rationale to Support Long-Term Aeroallergen Immunotherapy Beyond Five Years, as Indicated measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma and Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). 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:** Process

**Achievement of Projected Effective Dose of Standardized Allergens for Patient Treated With Allergen Immunotherapy for at Least One Year – National Quality Strategy Domain: Effective Clinical Care**

**DESCRIPTION:**

Proportion of patients receiving subcutaneous allergen immunotherapy that contains at least one standardized extract (mite, ragweed, grass, and/or cat) who achieved the projected effective dose for all included standardized allergen extract(s) after at least one year of treatment.

**INSTRUCTIONS:**

This outcomes measure is to be reported **once per reporting period** when a patient seen during the reporting period receiving subcutaneous allergen immunotherapy for at least one standardized extract achieves the projected effective dose after one year of treatment. This measure is intended to reflect the quality of services provided for patients undergoing allergen immunotherapy. 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 denominator coding.

**Measure Reporting via Registry:**

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 5 years and older who received subcutaneous allergen immunotherapy for at least one year containing at least one standardized antigen

**Denominator Criteria (Eligible Cases):**

Patients aged 5 years and older on the date of the encounter

**AND**

**Professional Services for Allergen Immunotherapy (CPT):** 95115, 95117, 95120, 95125, 95144, 95165

**AND**

**Patient Encounter during the Reporting Period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**AND**

Patients receiving subcutaneous allergen immunotherapy containing at least one standardized extract (cat, dust mite, grass, bermuda, or short ragweed) for 1 year

**NUMERATOR:**

Patients who achieved the projected effective dose for all standardized extracts included in the prescription

**Definitions:**

**Projected Effective Dose** – The allergen dose projected to provide therapeutic efficacy. Not all patients will tolerate the projected effective dose, and some patients experience therapeutic efficacy at lower doses.

**Numerator Instructions:**

The following doses can be used to determine if the patient achieved the projected effective dose for all standardized extracts included in the prescription:

Cat	1000 BAU per injection
Dust mite (Dp,Df)	500 AU per injection (or 7mcg Der p 1)
Grass (100,000 BAU/ml)	1000 BAU per injection
Bermuda (10,000 BAU/ml)	300 BAU



Short ragweed

1000 AU or 6mcg Amb a 1

**Numerator Options:**

***Performance Met:***

Projected effective dose of all applicable standardized extracts was achieved

**OR**

***Medical Performance Exclusion:***

Documentation of medical reasons for not achieving the projected effective dose such as local or systemic reactions, interruptions in therapy due to co-morbid conditions (e.g. pregnancy) or patient intolerance to the projected effective dose

***Patient Performance Exclusion:***

Documentation of patient reason(s) for not achieving the projected effective dose such as interruptions in therapy due to noncompliance

***Other Performance Exclusion:***

Patients who are receiving allergen immunotherapy prescribed and prepared by eligible professional by an outside entity (providing supervision only)

**OR**

***Performance Not Met:***

Projected effective dose of all applicable standardized extracts **was not** achieved, reason not otherwise specified

**CLINICAL RECOMMENDATION STATEMENTS:**

Summary Statement 80: The efficacy of immunotherapy depends on achieving an optimal therapeutic dose of each of the constituents in the allergen immunotherapy extract.<sup>1</sup>

Summary Statement 81: The maintenance concentrate should be formulated to deliver a dose considered to be therapeutically effective for each of its constituent components. The maintenance concentrate vial is the highest concentration allergy immunotherapy vial (eg, 1:1 vol/vol vial). The projected effective dose is called the maintenance goal. Some subjects unable to tolerate the projected effective dose will experience clinical benefits at a lower dose. The maintenance dose is the dose that provides therapeutic efficacy without significant adverse local or systemic reactions and might not always reach the initially calculated projected effective dose. This reinforces that allergy immunotherapy must be individualized.<sup>1</sup>

<sup>1</sup>Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. *J Allergen immunotherapy: a practice parameter third update*. Allergy Clin Immunol. 2011 Jan;127(1 Suppl):S1-55.

---

The Achievement of Projected Effective Dose of Standardized Allergens for Patient Treated With Allergen Immunotherapy for at Least One Year measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma and Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). 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

**Assessment of Asthma Symptoms Prior to Administration of Allergen Immunotherapy Injection(s) – National Quality Strategy Domain: Patient Safety**

**DESCRIPTION:**

Percentage of patients aged 5 years and older with a diagnosis of asthma who are receiving subcutaneous allergen immunotherapy with a documented assessment of asthma symptoms prior to administration of allergen immunotherapy injections.

**INSTRUCTIONS:**

This measure is to be reported **once per reporting period** for all patients with a diagnosis of asthma seen for allergen immunotherapy injections during the reporting period. Prior to administration of allergen immunotherapy injections, an assessment of asthma symptoms should be performed. This measure is intended to reflect the quality of services provided for patients undergoing allergen immunotherapy. 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 denominator coding.

**Measure Reporting via Registry:**

ICD-10-CM diagnosis codes, CPT codes, and patient demographics 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 5 years and older with a diagnosis of asthma AND who are receiving subcutaneous allergen immunotherapy

**Denominator Criteria (Eligible Cases):**

Patients aged 5 years and older on the date of the encounter

**AND**

**Diagnosis of 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**

**Professional Services for Allergen Immunotherapy (CPT):** 95165, 95115, 95117, 95120, 95125, 95130, 95131, 95132, 95133, 95134, 95144, 95145, 95146, 95147, 95148, 95149, 95170

**AND**

**Patient Encounter during the Reporting Period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**NUMERATOR:**

Patients with documentation of an asthma symptom assessment prior to administration of allergen immunotherapy injection(s)

**Numerator Instructions:**

The patient must be evaluated for the presence of asthma symptoms prior to administration of allergen immunotherapy injection(s). This assessment should be documented in the medical record in order to meet the numerator requirement for this measure. Prior to subcutaneous allergen immunotherapy injection(s), assess/inquire about one of the following:

- Increased daytime symptoms
- Increased nighttime awakenings
- Interference with normal activity
- Increased short acting beta agonist use for symptom control
- Increased number of asthma exacerbations
- Evaluation of peak flow meter results
- Evaluation of spirometry results

**Numerator Options:**  
***Performance Met:***

Documentation of an asthma symptom assessment prior to administration of allergen immunotherapy injection(s)

**OR**

***Performance Not Met:***

**No** documentation of an asthma symptom assessment prior to administration of allergen immunotherapy injection(s)

**CLINICAL RECOMMENDATION STATEMENTS:**

An assessment of the patient's current health status should be made before administration of the allergy immunotherapy injection to determine whether there were any health changes that might require modifying or withholding that patient's immunotherapy treatment.<sup>1</sup> Before the administration of the allergy injection, the patient should be evaluated for the presence of asthma symptoms.<sup>1</sup>

<sup>1</sup>Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. J *Allergen immunotherapy: a practice parameter third update*. Allergy Clin Immunol. 2011 Jan;127(1 Suppl):S1-55.

---

The Assessment of Asthma Symptoms Prior to Administration of Allergen Immunotherapy Injection(s) measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma and Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). 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:** Process

**Documentation of the Consent Process for Subcutaneous Allergen Immunotherapy in the  
Medical Record – National Quality Strategy Domain:  
Person and Caregiver-Centered Experience and Outcomes**

**DESCRIPTION:**

Percentage of patients aged 5 years and older initiating subcutaneous allergen immunotherapy injections documented to have received education (or their primary caregiver) about possible adverse reactions

**INSTRUCTIONS:**

This measure is to be reported **once per reporting period** for each patient that is initiating allergen immunotherapy injections during the reporting period. The patient or their legal guardian/primary caregiver should be educated about the possible adverse reactions with immunotherapy injections including life threatening anaphylaxis, immediate reactions and severe delayed reactions which could occur after leaving the clinic. Informed consent should be obtained. This measure is intended to reflect the quality of services provided for patients undergoing allergen immunotherapy. 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 denominator coding.

**Measure Reporting via Registry:**

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. There are no allowable performance exclusions for this measure.

**DENOMINATOR:**

All patients aged 5 years and older who initiated subcutaneous allergen immunotherapy during the reporting period

**Denominator Criteria (Eligible cases):**

Patients aged 5 years and older on the date of the encounter

**AND**

**Professional Services for Allergen Immunotherapy (CPT):** 95165, 95115, 95117, 95120, 95125, 95130, 95131, 95132, 95133, 95134, 95144, 95145, 95146, 95147, 95148, 95149, 95170

**AND**

**Patient Encounter during the Reporting Period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**AND**

Patients who initiated allergen immunotherapy during the reporting period

**NUMERATOR:**

Patients with documentation in the medical record of discussion and education about the potential risk of adverse reactions of subcutaneous allergen immunotherapy

**Numerator Instructions:**

Patients with documentation in the medical record of education about the potential risk of local allergic reactions following injections, including redness, pruritus, and swelling at the injection site which occur after leaving the clinic. Reported encounter should be for the initial allergen immunotherapy treatment or at a prior office visit.

Patients with documentation in the medical record of education about the potential risk of systemic allergic reactions following injections, including life threatening anaphylaxis and severe delayed reactions which occur after leaving the clinic.

Informed consent should include a discussion of the potential immunotherapy induced adverse reactions during an office visit and this discussion should be documented in the medical record.

If the patient is less than 18 years old, a parent or legal guardian must receive informed consent as described above.

**Numerator Options:**

***Performance Met:***

The patient (or their primary caregiver) received education about the risks and benefits of allergen immunotherapy prior to initiating allergen immunotherapy treatment

**OR**

***Performance Not Met:***

The patient (or their primary caregiver) **did not** received education about the risks and benefits of allergen immunotherapy prior to initiating allergen immunotherapy treatment

**CLINICAL RECOMMENDATION STATEMENTS:**

Informed consent should include a discussion of the potential immunotherapy-induced adverse reactions, and this discussion should be documented in the patient's medical record.<sup>1</sup>

<sup>1</sup>Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. *J Allergen immunotherapy: a practice parameter third update.* Allergy Clin Immunol. 2011 Jan;127(1 Suppl):S1-55.

---

The Documentation of the Consent Process for Subcutaneous Allergen Immunotherapy in the Medical Record measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma and Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). 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<sup>®</sup> contained in the measure specification is copyright 2004-2014 American Medical Association.

**Measure Type:** Process

**Penicillin Allergy: Appropriate Removal or Confirmation – National Quality Strategy Domain:  
Communication and Care Coordination**

**DESCRIPTION:**

Percentage of patients, regardless of age, with a primary diagnosis of penicillin or ampicillin/amoxicillin allergy, who underwent elective skin testing or antibiotic challenge that resulted in the removal of the penicillin or ampicillin/amoxicillin allergy label from the medical record if negative or confirmation of the penicillin or ampicillin/amoxicillin allergy label if positive.

**INSTRUCTIONS:**

This outcomes measure is to be reported **once per reporting period** for all patients with a penicillin or ampicillin/amoxicillin allergy label in the medical record who are seen during the reporting period. Patients with a history of penicillin allergy without preceding skin testing, in vitro testing or antibiotic challenge will qualify for the measure denominator. For the purposes of this measure, a “penicillin allergy” will only include natural penicillins or aminopenicillins, ampicillin and amoxicillin. A discussion regarding the risks and benefits of elective skin testing or penicillin challenge should take place with the patient or their caregiver/guardian. If the patient has previously declined skin testing or antibiotic challenge, they can be exempt from the measure numerator. In order to meet the numerator of this measure, skin testing or antibiotic challenge results should be reviewed and documented in the medical record. Further, the penicillin allergy label should be removed if results are negative or confirmed if positive. 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.

**Measure Reporting via Registry:**

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, regardless of age, with a diagnosis of primary penicillin or ampicillin/amoxicillin allergy seen during the reporting period

**Definition:**

**Penicillin Allergy** – For the purposes of this measure, a “penicillin allergy” will only include a history of allergy to natural penicillins (penicillin G and penicillin V) OR aminopenicillins (ampicillin and amoxicillin).

**Denominator Criteria (Eligible Cases):**

All patients regardless of age

**AND**

**Adverse effect of penicillins (ICD-10-CM):** T36.0X5A, T36.0X5D, T36.0X5S

**Allergy status to penicillin (ICD-10-CM):** Z88.0

**AND**

**Patient encounter during the reporting period:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245

**AND NOT**

**Diagnosis for Steven-Johnson Syndrome (ICD-10):** L51.1

**Diagnosis for Serum-Sickness (ICD-10):** T80.61XA, T80.61XD, T80.61XS

**NUMERATOR:**

Patients who underwent elective skin testing or penicillin challenge AND who had the penicillin or ampicillin/amoxicillin allergy label removed from the medical record if results were negative or confirmed in the medical record if results were positive.

**NUMERATOR NOTE:** A positive result consists of either a positive skin test or positive challenge after a negative skin test.

**Numerator Options**

***Performance Met:***

Patient underwent elective skin testing or penicillin challenge AND had the penicillin or ampicillin/amoxicillin allergy label removed from the medical record if results were negative or confirmed in the medical record if results were positive

**OR**

***Medical Performance Exclusion:***

Medical reason(s) for not documenting and reviewing (eg, previous positive penicillin skin test, patients with severe anaphylaxis to penicillin within the past 5 years, patients with penicillin reaction histories consistent with severe non-IgE-mediated reactions, significant comorbid disease and patients unable to discontinue medications with antihistaminic effects or beta-blockers)

**OR**

***Patient Performance Exclusion:***

Patient reason(s) for not documenting and reviewing results (eg, patients who decline or are non-adherent with skin testing/challenge recommendations)

**OR**

***Performance Not Met:***

Patient did **NOT** undergo elective skin testing/penicillin challenge and did not have the penicillin or ampicillin/amoxicillin allergy label removed or confirmed on the medical record, reason not otherwise specified

**RATIONALE:**

Most patients with a diagnosis of penicillin allergy are not allergic to penicillin. The avoidance of penicillin and related beta-lactam antibiotics may result in use of antibiotics that are less effective, more costly or more toxic. Additionally, rapid penicillin desensitization may be pursued unnecessarily, which also results in higher costs.

In regards to exclusions, testing for penicillin requires the ability to test without concomitant use of a medicine with antihistaminic effects. Severe non-IgE-mediated penicillin reactions cannot be diagnosed via penicillin skin testing. Patients with significant comorbid diseases may be at higher risk of reaction due to skin testing and challenge. Also, should the patient be on a beta-blocker and unable to withhold before challenge this could be exclusion.

**CLINICAL RECOMMENDATION STATEMENTS:**

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

Summary Statement 54: The most useful test for detecting IgE-mediated drug reactions caused by penicillin and many large-molecular-weight biologicals is immediate hypersensitivity skin testing. (B)

Summary Statement 71: Approximately 10% of patients report a history of penicillin allergy, but after complete evaluation, up to 90% of these individuals are able to tolerate penicillins. (B)

Summary Statement 72: Treatment of patients assumed to be penicillin allergic with alternate broad-spectrum antibiotics may compromise optimal medical care by leading to multiple drug-resistant organisms, higher costs, and increased toxic effects. (C)

Summary Statement 73: Evaluation of patients with penicillin allergy by skin testing leads to reduction in the use of broad-spectrum antibiotics and may decrease costs. (B)

Joint Task Force on Practice Parameters; American Academy of Allergy, Asthma and Immunology; American College of Allergy, Asthma and Immunology; Joint Council of Allergy, Asthma and Immunology: Drug allergy: an updated practice parameter. *Ann Allergy Asthma Immunol* 2010,105:259–273.

---

The Penicillin Allergy: Appropriate Removal or Confirmation 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



**Adult Sinusitis: Antibiotic Prescribed for Acute Sinusitis (Appropriate Use) – National Quality Strategy Domain: Efficiency and Cost Reduction**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:**  
**REGISTRY ONLY**

**DESCRIPTION:**

Percentage of patients, aged 18 years and older, with a diagnosis of acute sinusitis who were prescribed an antibiotic within 10 days after onset of symptoms

**INSTRUCTIONS:**

This measure is to be reported once for **each occurrence** for patients with acute sinusitis during the reporting period. 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 denominator coding.

**Measure Reporting via Registry:**

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

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

All patients aged 18 years and older with a diagnosis of acute sinusitis

**Definitions:**

**Acute Sinusitis/Rhinosinusitis-** Up to 4 weeks of purulent nasal drainage (anterior, posterior, or both) accompanied by nasal obstruction, facial pain-pressure-fullness, or both:

Purulent nasal discharge is cloudy or colored, in contrast to the clear secretions that typically accompany viral upper respiratory infection, and may be reported by the patient or observed on physical examination. Nasal obstruction may be reported by the patient as nasal obstruction, congestion, blockage, or stuffiness, or may be diagnosed by physical examination

Facial pain-pressure-fullness may involve the anterior face, periorbital region, or manifest with headache that is localized or diffuse

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq$  18 years on date of encounter

**AND**

**Diagnosis for acute sinusitis (ICD-10-CM):** J01.00, J01.01, J01.10, J01.11, J01.20, J01.21, J01.30, J01.31, J01.40, J01.41, J01.80, J01.90

**AND**

**Patient encounter during reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99281, 99282, 99283, 99284, 99285, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

**NUMERATOR:**

Patients prescribed any antibiotic within 10 days after onset of symptoms

**Numerator Instructions:**

**INVERSE MEASURE** - A lower calculated performance rate for this measure indicates better clinical care or control. The "Performance Not Met" numerator option for this measure is the representation of the better clinical quality or control. Reporting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures a rate of

100% means all of the denominator eligible patients did not receive the appropriate care or were not in proper control, and therefore an inverse measure at 100% does not qualify for reporting purposes, however any reporting rate less than 100% does qualify.

**Numerator Options:**

***Performance Met:*** Antibiotic regimen prescribed within 10 days after onset of symptoms (**G9286**)

**OR**

***Other Performance Exclusion:*** Antibiotic regimen prescribed within 10 days after onset of symptoms for documented medical reason (**G9505**)

**OR**

***Performance Not Met:*** Antibiotic regimen **not** prescribed within 10 after onset of symptoms (**G9287**)

**RATIONALE:**

Antibiotic treatment for sinusitis is indicated for some patients, but overtreatment of acute sinusitis with antibiotics is common and often not indicated. Further, treatment with antibiotics may increase patient harm and can lead to antibiotic resistance.

A 2012 Cochrane systematic review was undertaken to assess the effect of antibiotics in adults with clinically diagnosed rhinosinusitis in primary care settings. Acute rhinosinusitis is a common condition that involves blockage of the nose passage and mucus in the sinuses. It is often caused by a viral upper respiratory tract infection of which only 0.5% to 2% of cases are estimated to be complicated by a bacterial rhinosinusitis. Nevertheless, antibiotics (used to treat bacterial infections) are often prescribed. Unnecessary prescribing contributes to antimicrobial resistance in the community. The authors concluded that given the lack of clear benefit in terms of rapid recovery and the increase in side effects in participants treated with antibiotics, antibiotics are not recommended as first line treatment in adults with clinically diagnosed acute rhinosinusitis.

**CLINICAL RECOMMENDATION STATEMENTS:**

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

AAO-HNS Sinusitis Guideline (2015)

Clinicians should distinguish presumed acute bacterial rhinosinusitis (ABRS) from acute rhinosinusitis caused by viral upper respiratory infections and non-infectious conditions. A clinician should diagnose ABRS when (a) symptoms or signs of acute rhinosinusitis (purulent nasal drainage accompanied by nasal obstruction, facial pain-pressure-fullness, or both) persist without evidence of improvement for at least 10 days beyond the onset of upper respiratory symptoms, or (b) symptoms or signs of acute rhinosinusitis worsen within 10 days after an initial improvement (double worsening).

*Strong recommendation based on diagnostic studies with minor limitations and a preponderance of benefit over harm.*

The purpose of this statement is to emphasize the importance of differentiating acute bacterial rhinosinusitis (ABRS) from acute rhinosinusitis (ARS) caused by viral upper respiratory infections to prevent unnecessary treatment with antibiotics. Distinguishing presumed bacterial vs. viral infection is important because antibiotic therapy is inappropriate for the latter.

A quality improvement opportunity addressed by this guideline key action statement is the avoidance of inappropriate use of antibiotics for presumed viral infections. More than one in five antibiotics prescribed in adults are for sinusitis, making it the fifth most common diagnosis responsible for antibiotic therapy.

**COPYRIGHT:**

The Measures are not clinical guidelines, do not establish a standard of medical care, and have not been tested for all potential applications.

The Measures, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, eg, use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain.

Commercial uses of the Measures require a license agreement between the user and the American Medical Association (AMA), [on behalf of the Physician Consortium for Performance Improvement® (PCPI®)] or American Academy of Otolaryngology – Head and Neck Surgery Foundation (AAO-HNSF). Neither the AMA, AAO-HNSF, PCPI, nor its members shall be responsible for any use of the Measures.

**The AMA’s and PCPI’s significant past efforts and contributions to the development and updating of the Measures is acknowledged. AAO-HNSF is solely responsible for the review and enhancement (“Maintenance”) of the Measures as of August 14, 2014.**

AAO-HNSF encourages use of the Measures by other health care professionals, where appropriate.  
**THE MEASURES AND SPECIFICATIONS ARE PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND.**

© 2015 American Medical Association and American Academy of Otolaryngology – Head and Neck Surgery Foundation. All Rights Reserved. Applicable FARS/DFARS Restrictions Apply to Government Use.

Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The AMA, AAO-HNSF, the PCPI and its members disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications.

CPT® contained in the Measures specifications is copyright 2004-2015 American Medical Association. LOINC® copyright 2004-2015 Regenstrief Institute, Inc. SNOMED CLINICAL TERMS (SNOMED CT®) copyright 2004-2015 College of American Pathologists. All Rights Reserved.

---

The American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS) owned measure, Adult Sinusitis: Antibiotic Prescribed for Acute Sinusitis (Appropriate Use), is copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Process

**Adult Sinusitis: Appropriate Choice of Antibiotic: Amoxicillin Prescribed for Patients with Acute Bacterial Sinusitis (Appropriate Use) – National Quality Strategy Domain: Efficiency and Cost Reduction**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:  
REGISTRY ONLY**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of acute bacterial sinusitis that were prescribed amoxicillin, with or without clavulanate, as a first line antibiotic at the time of diagnosis

**INSTRUCTIONS:**

This measure is to be reported a minimum of **once per reporting period** for patients with acute bacterial sinusitis during the reporting period. 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 denominator coding.

**Measure Reporting via Registry**

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

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

All patients aged 18 years and older with a diagnosis of acute bacterial sinusitis who are prescribed an antibiotic.

**Definitions:**

**Acute Bacterial Rhinosinusitis (ABRS)** - Acute rhinosinusitis that is caused by, or is presumed to be caused by, bacterial infection. A clinician should diagnose ABRS when: (a) symptoms or signs of acute rhinosinusitis are present 10 days or more beyond the onset of upper respiratory symptoms, or (b) symptoms or signs of acute rhinosinusitis worsen within 10 days after an initial improvement (double worsening)

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 18$  years on date of encounter

**AND**

**Diagnosis for acute sinusitis (ICD-10-CM):** J01.00, J01.01, J01.10, J01.11, J01.20, J01.21, J01.30, J01.31, J01.40, J01.41, J01.80, J01.90

**AND**

**Patient encounter during reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99281, 99282, 99283, 99284, 99285, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

**AND**

**Sinusitis caused by, or presumed to be caused by, bacterial infection:** G9364

**AND**

**Antibiotic regimen prescribed:** G9498

**NUMERATOR:**

Patients who were prescribed amoxicillin, with or without clavulanate, as a first line antibiotic at the time of diagnosis

**Numerator Options:**

***Performance Met:***

Amoxicillin, with or without clavulanate, prescribed as a first line antibiotic at the time of diagnosis (**G9315**)

**OR**

***Other Performance Exclusion:***

Amoxicillin, with or without clavulanate, not prescribed as first line antibiotic at the time of diagnosis for documented reason (eg, cystic fibrosis, immotile cilia disorders, ciliary dyskinesia, immune deficiency, prior history of sinus surgery within the past 12 months, and anatomic abnormalities, such as deviated nasal septum, resistant organisms, allergy to medication, recurrent sinusitis, chronic sinusitis, or other reasons) (**G9313**)

**OR**

***Performance Not Met:***

Amoxicillin, with or without clavulanate, **not** prescribed as first line antibiotic at the time of diagnosis, reason not given (**G9314**)

**RATIONALE:**

The rationale for antibiotic therapy of ABRS is to eradicate bacterial infection from the sinuses, hasten resolution of symptoms, and enhance disease-specific quality of life. Antibiotic therapy should be efficacious, cost-effective, and result in minimal side effects.

The justification for amoxicillin as first-line therapy for most patients with ABRS relates to its safety, efficacy, low cost, and narrow microbiologic spectrum. Consideration to prescribing amoxicillin-clavulanate for adults with ABRS is given to those at a high risk of being infected by an organism resistant to amoxicillin. Factors that would prompt clinicians to consider prescribing amoxicillin-clavulanate instead of amoxicillin include:

- Situations in which bacterial resistance is likely (e.g. antibiotic use in the past month; close contact with treated individuals, health care providers, or a health care environment; failure of prior antibiotic therapy; breakthrough infection despite prophylaxis; close contact with a child in a daycare facility; smoker or smoker in the family; high prevalence of resistant bacteria in community)
- Presence of moderate to severe infection (e.g. moderate to severe symptoms of ABRS; protracted symptoms of ABRS; frontal or sphenoidal sinusitis, history of recurrent ABRS)
- Presence of comorbidity or extremes of life (e.g. comorbid conditions including diabetes; chronic cardiac, hepatic, or renal disease; immunocompromised patient; age greater than 65 years)

The use of high-dose amoxicillin with clavulanate is recommended for adults with ABRS who are at a high risk of being infected with an amoxicillin-resistant organism. High-dose amoxicillin is preferred over standard-dose amoxicillin primarily to cover penicillin non susceptible (PNS) *S. pneumoniae*. This risk exists in those from geographic regions with high endemic rates (>10%) of invasive PNS *S. pneumoniae*, those with severe infection (e.g., evidence of systemic toxicity with fever of 39C (102F) or higher, and threat of supportive complications), age >65 years, recent hospitalization, antibiotic use within the past month, or those who are immunocompromised.

**CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines: AAO-HNS Sinusitis Guideline (2015)

If a decision is made to treat ABRS with an antibiotic agent, the clinician should prescribe amoxicillin with or without clavulanate as first-line therapy for most adults.

*Recommendation based on randomized controlled trials with heterogeneity and non-inferiority design with a preponderance of benefit over harm.*

The purpose of this statement is to promote prescribing of antibiotics with known efficacy and safety for ABRS and to reduce prescribing of antibiotics with potentially inferior efficacy because of more limited coverage of the usual pathogens that cause ABRS in adults. A secondary goal is to promote cost-effective antibiotic therapy for ABRS. A quality improvement opportunity addressed by this guideline key action statement is discouraging initial prescribing of antibiotics other than amoxicillin, with or without clavulanate, that may have low efficacy or have comparable efficacy but more adverse events.

IDSA Clinical Practice Guideline for Acute Bacterial Rhinosinusitis in Children and Adults (2012)  
Amoxicillin-clavulanate rather than amoxicillin alone is recommended as empiric antimicrobial therapy for ABRS in adults (weak, low).

Evidence for at least 1 critical outcome from observational studies, from RCTs with serious flaws or indirect evidence.

---

The American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS) owned Adult Sinusitis: Appropriate Choice of Antibiotic: Amoxicillin Prescribed for Patients with Acute Bacterial Sinusitis (Appropriate Use) measure specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Process

**Measure #333: Adult Sinusitis: Computerized Tomography (CT) for Acute Sinusitis (Overuse) – National Quality Strategy Domain: Efficiency and Cost Reduction**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:**  
**REGISTRY ONLY**

**DESCRIPTION:**

Percentage of patients aged 18 years and older, with a diagnosis of acute sinusitis who had a computerized tomography (CT) scan of the paranasal sinuses ordered at the time of diagnosis or received within 28 days after date of diagnosis

**INSTRUCTIONS:**

This measure is to be reported once for **each occurrence** for patients with acute sinusitis during the reporting period. 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 denominator coding.

**Measure Reporting via Registry**

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

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

All patients aged 18 years and older with a diagnosis of acute sinusitis

**Definitions:**

**Acute Sinusitis/Rhinosinusitis:** Up to 4 weeks of purulent nasal drainage (anterior, posterior, or both) accompanied by nasal obstruction, facial pain-pressure-fullness, or both:

Purulent nasal discharge is cloudy or colored, in contrast to the clear secretions that typically accompany viral upper respiratory infection, and may be reported by the patient or observed on physical examination. Nasal obstruction may be reported by the patient as nasal obstruction, congestion, blockage, or stuffiness, or may be diagnosed by physical examination.

Facial pain-pressure-fullness may involve the anterior face, periorbital region, or manifest with headache that is localized or diffuse.

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 18$  years on date of encounter

**AND**

**Diagnosis for acute sinusitis (ICD-10-CM):** J01.00, J01.01, J01.10, J01.11, J01.20, J01.21, J01.30, J01.31, J01.40, J01.41, J01.80, J01.90

**AND**

**Patient encounter during reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99281, 99282, 99283, 99284, 99285, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

**NUMERATOR:**

Patients who had a computerized tomography (CT) scan of the paranasal sinuses ordered at the time of diagnosis or received within 28 days after date of diagnosis.

**INVERSE MEASURE-** A lower calculated performance rate for this measure indicates better clinical care or control. The "Performance Not Met" numerator option for this measure is the representation of the better clinical quality or control. Reporting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures a rate of 100% means all of the

denominator eligible patients did not receive the appropriate care or were not in proper control, and therefore an inverse measure at 100% does not qualify for reporting purposes, however any reporting rate less than 100% does qualify.

**Numerator Options:**

***Performance Met:***

CT scan of the paranasal sinuses ordered at the time of diagnosis or received within 28 days after date of diagnosis **(G9349)**

**OR**

***Other Performance Exclusion:***

CT scan of the paranasal sinuses ordered at the time of diagnosis for documented reasons (eg, persons with sinusitis symptoms lasting at least 7 to 10 days, antibiotic resistance, immunocompromised, recurrent sinusitis, acute frontal sinusitis, acute sphenoid sinusitis, periorbital cellulitis, or other medical) **(G9348)**

**OR**

***Performance Not Met:***

CT scan of the paranasal sinuses not ordered at the time of diagnosis or received within 28 days after date of diagnosis **(G9350)**

**RATIONALE:**

Most cases of uncomplicated acute and subacute sinusitis are diagnosed clinically and should not require any imaging procedure. Sinus CT scanning is of limited value in the routine evaluation of sinusitis due to the high prevalence of abnormal imaging findings. Forty percent of asymptomatic patients and 87 percent of patients with community-acquired colds have sinus abnormalities on sinus CT. Additionally, sinus CT imaging has a high sensitivity but a low specificity for demonstrating acute sinusitis. Furthermore, CT imaging is not recommended for the diagnosis of uncomplicated sinusitis because it is not cost-effective and exposes patients to unnecessary radiation.

Sinusitis cannot be diagnosed on the basis of imaging findings alone. Findings on CT scans should be interpreted in conjunction with clinical and endoscopic findings. Up to 40% of asymptomatic adults have abnormalities on sinus CT scans, as do more than 80% of those with minor upper respiratory tract infections.

**CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines: AAO-HNS Sinusitis Guideline (2015)

Clinicians should not obtain radiographic imaging for patients who meet diagnostic criteria for acute rhinosinusitis, unless a complication or alternative diagnosis is suspected.

Recommendation (against imaging) based on diagnostic studies with minor limitations and a preponderance of benefit over harm for not obtaining imaging.

The purpose of this statement is to emphasize that clinicians should not obtain radiographic imaging for patients presenting with uncomplicated acute rhinosinusitis (ARS) to distinguish ABRS from VRS, unless a complication or alternative diagnosis is suspected.

Radiographic imaging of the paranasal sinuses is unnecessary for diagnosis in patients who already meet clinical diagnostic criteria (Table 4) for ABRS. Sinus involvement is common in documented viral URIs, making it impossible to distinguish ABRS from VRS based solely on imaging studies. Moreover, clinical criteria may have a comparable diagnostic accuracy to sinus radiography, and radiography is not cost-effective regardless of baseline sinusitis prevalence.

When a complication of ABRS or an alternative diagnosis is suspected, imaging studies may be obtained. Complications of ABRS include orbital, intracranial, or soft tissue involvement. Alternative diagnoses include malignancy and other non-infectious causes of facial pain. Radiographic imaging may also be



obtained when the patient has modifying factors or comorbidities that predispose to complications, including diabetes, immune compromised state, or a past history of facial trauma or surgery.

A quality improvement opportunity addressed by this guideline key action statement is avoiding costly diagnostic tests that do not improve diagnostic accuracy yet expose the patient to unnecessary radiation.

American College of Radiology ACR Appropriateness Criteria® For Sinonasal Disease (ACR, 2012)

Clinical Condition: Sinonasal Disease

Variation 1: Acute (<4 weeks) or subacute (4-12 weeks) uncomplicated rhinosinusitis.

Radiologic Procedure: CT paranasal sinuses without contrast

Rating: 5

Comments: Most episodes are managed without imaging, as this is primarily a clinical diagnosis. Imaging may be indicated if acute frontal sphenoid sinusitis is suspected, or if there are atypical symptoms, or if the diagnosis is uncertain.

RRL\*: 0.1-1 mSv

Radiologic Procedure: MRI head and paranasal sinuses without contrast

Rating: 4

Comments: May be useful as part of a general workup for headache.

RRL\*: 0 mSv

Radiologic Procedure: MRI head and paranasal sinuses without and with contrast

Rating: 2

Comments: May be useful as part of a general workup for headache.

RRL\*: 0 mSv

Radiologic Procedure: CT paranasal sinuses with contrast

Rating: 2

RRL\*: 0.1-1 mSv

Radiologic Procedure: CT paranasal sinuses without and with contrast

Rating: 1

RRL\*: 1-10 mSv

Radiologic Procedure: X-ray paranasal sinuses

Rating: 1

RRL\*: <0.1 mSv

Rating Scale: 1, 2, 3 Usually not appropriate; 4, 5, 6 May be appropriate; 7, 8, 9 Usually appropriate

\*Relative

Radiation Level

---

The American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS) owned Adult Sinusitis: Computerized Tomography (CT) for Acute Sinusitis (Overuse) measure specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Process

**Measure #334: Adult Sinusitis: More than One Computerized Tomography (CT) Scan Within 90 Days for Chronic Sinusitis (Overuse) – National Quality Strategy Domain: Efficiency and Cost Reduction**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:  
REGISTRY ONLY**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of chronic sinusitis who had more than one CT scan of the paranasal sinuses ordered or received within 90 days after date of diagnosis

**INSTRUCTIONS:**

This measure is to be reported at **each visit** for patients with chronic sinusitis during the reporting period. 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 denominator coding.

**Measure Reporting via Registry**

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

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

All patients aged 18 years and older with a diagnosis of chronic sinusitis

**Definition:**

**Chronic Sinusitis/Rhinosinusitis** - is defined as twelve (12) weeks or longer of two or more of the following signs and symptoms: mucopurulent drainage (anterior, posterior, or both), nasal obstruction (congestion), facial pain-pressure-fullness, or decreased sense of smell AND inflammation is documented by one or more of the following findings: purulent (not clear) mucus or edema in the middle meatus or ethmoid region, polyps in nasal cavity or the middle meatus, and/or radiographic imaging showing inflammation of the paranasal sinuses..

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 18$  years on date of encounter

**AND**

**Diagnosis for chronic sinusitis (ICD-10-CM):** J32.0, J32.1, J32.2, J32.3, J32.4, J32.8, J32.9

**AND**

**Patient encounter during reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

**NUMERATOR:**

Patients who had more than one CT scan of the paranasal sinuses ordered or received within 90 days after date of diagnosis

**Numerator Instructions:**

**INVERSE MEASURE** - A lower calculated performance rate for this measure indicates better clinical care or control. The "Performance Not Met" numerator option for this measure is the representation of the better clinical quality or control. Reporting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures a rate of 100% means all of the denominator eligible patients did not receive the appropriate care or were

not in proper control, and therefore an inverse measure at 100% does not qualify for reporting purposes, however any reporting rate less than 100% does qualify.

**Numerator Options:**

***Performance Met:***

More than one CT scan of the paranasal sinuses ordered or received within 90 days after the date of diagnosis, reason not given (**G9352**)

**OR**

***Other Performance Exclusion:***

More than one CT scan of the paranasal sinuses ordered or received within 90 days after the date of diagnosis for documented reasons (eg, patients with complications, second CT obtained prior to surgery, other medical reasons) (**G9353**)

**OR**

***Performance Not Met:***

One CT scan or no CT scan of the paranasal sinuses ordered within 90 days after the date of diagnosis (**G9354**)

**RATIONALE:**

Computerized tomography scanning is expensive, exposes the patient to ionizing radiation and offers no additional information that would improve initial management. Multiple CT scans within 90 days may be appropriate in patients with complicated sinusitis or where an alternative diagnosis is suspected.

**CLINICAL RECOMMENDATION STATEMENTS:**

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

AAO-HNS Sinusitis Guideline (2015)

The clinician should confirm a clinical diagnosis of CRS with objective documentation of sinonasal inflammation, which may be accomplished using anterior rhinoscopy, nasal endoscopy, or computed tomography.

Strong recommendation based on cross-sectional studies with a preponderance of benefit over harm.

The purpose of this statement is to strongly emphasize that a diagnosis of CRS cannot be based on signs and symptoms alone, but also requires objective evidence of sinonasal inflammation. Objective confirmation of sinonasal inflammation may be made by direct visualization or by computed tomography (CT) scanning. Nasal endoscopy and CT scanning both have a much higher diagnostic accuracy, but CT scanning includes the small associated risk of radiation exposure, while nasal endoscopy includes an added cost.

CT scanning can help quantify the extent of inflammatory disease based upon opacification of the paranasal sinuses, and improves diagnostic accuracy because CT imaging findings correlate with the presence or absence of CRS in patients with suggestive clinical symptoms. An important role of CT imaging in CRS with or without polyps is to exclude aggressive infections or neoplastic disease that might mimic CRS or ARS.

American College of Radiology ACR Appropriateness Criteria®: Sinonasal Disease (ACR, 2012):

Recurrent acute or chronic rhinosinusitis (possible surgical candidate)

Radiologic Procedure: CT paranasal sinuses without contrast

Rating: 9

Comments: Consider using as a surgical planning protocol.

RRL\*: 0.1-1 mSv

Radiologic Procedure: CT paranasal sinuses with contrast

Rating: 4

RRL\*: 0.1-1 mSv

Radiologic Procedure: CT paranasal sinuses without and with contrast  
Rating: 3  
RRL\*: 1-10mSv  
Radiologic Procedure: MRI head and paranasal sinuses without and with contrast  
Rating: 3  
RRL\*: 0 mSv  
Radiologic Procedure: MRI head and paranasal sinuses without contrast  
Rating: 2  
RRL\*: 0 mSv  
Radiologic Procedure: X-ray paranasal sinuses  
Rating: 1  
Comments: May be indicated for planning frontal sinus obliteration.  
RRL\*: <0.1 mSv  
Radiologic Procedure: SPECT paranasal sinuses  
Rating: 1  
RRL\*: 1-10 mSv  
Rating Scale: 1, 2, 3 Usually not appropriate; 4, 5, 6 May be appropriate; 7, 8, 9 Usually appropriate  
\*Relative  
Radiation Level

---

The American Academy of Otolaryngology – Head and Neck Surgery owned Adult Sinusitis: More than One Computerized Tomography (CT) Scan within 90 Days for Chronic Sinusitis (Overuse) measure specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Efficiency

**Measure #226 (NQF 0028, e-CQM CMS 138v4): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention – National Quality Strategy Domain: Community / Population Health**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:**  
**CLAIMS, REGISTRY**

**DESCRIPTION:**

Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months **AND** who received cessation counseling intervention if identified as a tobacco user

**INSTRUCTIONS:**

This measure is to be reported **once per reporting period** for patients seen during the reporting period. This measure is intended to reflect the quality of services provided for preventive screening for tobacco use.

**Measure Reporting via Claims:**

CPT or HCPCS codes, and patient demographics are used to identify patients who are included in the measure's denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the appropriate CPT or HCPCS codes, and the appropriate CPT Category II code **OR** the CPT Category II code **with** the modifier. The modifiers allowed for this measure are: 1P- medical reasons, 8P- reason not otherwise specified. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

**Measure Reporting via Registry:**

CPT or HCPCS codes and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

All patients aged 18 years and older

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 18$  years on date of encounter

**AND**

**Patient encounter during the reporting period (CPT or HCPCS):** 90791, 90792, 90832, 90834, 90837, 90845, 92002, 92004, 92012, 92014, 92521, 92522, 92523, 92524, 92540, 92557, 92625, 96150, 96151, 96152, 97003, 97004, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99406, 99407, G0438, G0439

**NUMERATOR:**

Patients who were screened for tobacco use at least once within 24 months **AND** who received tobacco cessation counseling intervention if identified as a tobacco user

**Definitions:**

**Tobacco Use** – Includes use of any type of tobacco.

**Cessation Counseling Intervention** – Includes brief counseling (3 minutes or less), and/or pharmacotherapy.

**NUMERATOR NOTE:** *In the event that a patient is screened for tobacco use and identified as a user but did not receive tobacco cessation counseling report **4004F with 8P**.*

**Numerator Quality-Data Coding Options for Reporting Satisfactorily:**

**Patient Screened for Tobacco Use, Identified as a User and Received Intervention**

**Performance Met: CPT II 4004F:** Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user

**OR**

**Patient Screened for Tobacco Use and Identified as a Non-User of Tobacco**

**Performance Met: CPT II 1036F:** Current tobacco non-user

**OR**

**Tobacco Screening not Performed for Medical Reasons**

Append a modifier (**1P**) to CPT Category II code **4004F** to report documented circumstances that appropriately exclude patients from the denominator

**Medical Performance Exclusion: 4004F with 1P:** Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons)

**OR**

**Tobacco Screening OR Tobacco Cessation Intervention not Performed, Reason Not Otherwise Specified**

Append a reporting modifier (**8P**) to CPT Category II code **4004F** to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified.

**Performance Not Met: 4004F with 8P:** Tobacco screening OR tobacco cessation intervention not performed, reason not otherwise specified

**RATIONALE:**

This measure is intended to promote adult tobacco screening and tobacco cessation interventions for those who use tobacco products. There is good evidence that tobacco screening and brief cessation intervention (including counseling and/or pharmacotherapy) is successful in helping tobacco users quit. Tobacco users who are able to stop smoking lower their risk for heart disease, lung disease, and stroke.

**CLINICAL RECOMMENDATION STATEMENTS:**

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

All patients should be asked if they use tobacco and should have their tobacco use status documented on a regular basis. Evidence has shown that clinic screening systems, such as expanding the vital signs to include tobacco use status or the use of other reminder systems such as chart stickers or computer prompts, significantly increase rates of clinician intervention. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

All physicians should strongly advise every patient who smokes to quit because evidence shows that physician advice to quit smoking increases abstinence rates. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

Minimal interventions lasting less than 3 minutes increase overall tobacco abstinence rates. Every tobacco user should be offered at least a minimal intervention, whether or not he or she is referred to an intensive intervention. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

The combination of counseling and medication is more effective for smoking cessation than either medication or counseling alone. Therefore, whenever feasible and appropriate, both counseling and medication should be provided to patients trying to quit smoking. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

Clinicians should encourage all patients attempting to quit to use effective medications for tobacco dependence treatment, except where contraindicated or for specific populations for which there is insufficient evidence of effectiveness (ie, pregnant women, smokeless tobacco users, light smokers, and adolescents). (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

The USPSTF recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products. (A Recommendation) (U.S. Preventive Services Task Force, 2009)

---

The American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI®) owned and developed Screening: Tobacco Use: Screening and Cessation Intervention measure specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Process

**Measure #402: Tobacco Use and Help with Quitting Among Adolescents – National Quality Strategy Domain: Community / Population Health**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:**  
**REGISTRY**

**DESCRIPTION:**

The percentage of adolescents 12 to 20 years of age with a primary care visit during the measurement year for whom tobacco use status was documented and received help with quitting if identified as a tobacco user

**INSTRUCTIONS:**

This measure is to be reported **once per reporting period** for patients seen during the reporting period. This measure is intended to reflect the quality of services provided for preventive screening for tobacco use.

**Measure Reporting via Registry:**

CPT or HCPCS codes and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

All patients aged 12-20 years with a visit during the measurement period.

**Denominator Criteria (Eligible Cases):**

Patients aged 12-20 years on date of encounter

**AND**

**Patient encounter during the reporting period (CPT):** 90791, 90792, 90832, 90834, 90837, 90839, 90845, 92002, 92004, 92012, 92014, 96150, 96151, 96152, 97003, 97004, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99406, 99407, G0438, G0439

**NUMERATOR:**

Patients who were screened for tobacco use at least once within 18 months (during the measurement period or the six months prior to the measurement period) **AND** who received tobacco cessation counseling intervention if identified as a tobacco user

**Definitions:**

**Tobacco Use Status** – Any documentation of smoking or tobacco use status, including 'never' or 'non-use'.

**Tobacco User** – Any documentation of active or current use of tobacco products, including smoking.

**NUMERATOR NOTE:** *In the event that a patient is screened for tobacco use and identified as a user but did not receive tobacco cessation counseling report **G9460**.*

**Numerator Options:**

**Performance Met:**

Patient documented as tobacco user AND received tobacco cessation intervention (must include at least one of the following: advice given to quit smoking or tobacco use, counseling on the benefits of quitting smoking or tobacco use, assistance with or referral to external smoking or tobacco cessation support programs, or



**OR**

**Performance Met:**

current enrollment in smoking or tobacco use cessation program) if identified as a tobacco user **(G9458)**

Currently a tobacco non-user **(G9459)**

**OR**

**Performance Not Met:**

Tobacco assessment OR tobacco cessation intervention **not** performed, reason not otherwise specified **(G9460)**

**RATIONALE:**

This measure is intended to promote adolescent tobacco screening and tobacco cessation interventions for those who use tobacco products. There is good evidence that tobacco screening and brief cessation intervention (including counseling and/or pharmacotherapy) is successful in helping tobacco users quit. Tobacco users who are able to stop smoking lower their risk for heart disease, lung disease, and stroke.

**CLINICAL RECOMMENDATION STATEMENTS:**

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

The U.S. Preventive Services Task Force recommends that primary care clinicians provide interventions, including education or brief counseling, to prevent initiation of tobacco use in school-aged children and adolescents. (Strength of Recommendation = B) (U.S. Preventive Services Task Force, 2013)

All patients should be asked if they use tobacco and should have their tobacco use status documented on a regular basis. Evidence has shown that clinic screening systems, such as expanding the vital signs to include tobacco use status or the use of other reminder systems such as chart stickers or computer prompts, significantly increase rates of clinician intervention. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

All physicians should strongly advise every patient who smokes to quit because evidence shows that physician advice to quit smoking increases abstinence rates. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

Minimal interventions lasting less than 3 minutes increase overall tobacco abstinence rates. Every tobacco user should be offered at least a minimal intervention, whether or not he or she is referred to an intensive intervention. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

The combination of counseling and medication is more effective for smoking cessation than either medication or counseling alone. Therefore, whenever feasible and appropriate, both counseling and medication should be provided to patients trying to quit smoking. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

---

The National Committee for Quality Assurance (NCQA) owned and developed Tobacco Use and Help with Quitting Among Adolescents measure specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Process

**Measure #111 (NQF 0043, e-CQM CMS 127v4): Pneumonia Vaccination Status for Older Adults – National Quality Strategy Domain: Community/Population Health**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:**  
**CLAIMS, REGISTRY**

**DESCRIPTION:**

Percentage of patients 65 years of age and older who have ever received a pneumococcal vaccine

**INSTRUCTIONS:**

This measure is to be reported a minimum of **once per reporting period** for patients seen during the reporting period. There is no diagnosis associated with this measure. Performance for this measure is not limited to the reporting period. This measure may be reported by clinicians who perform the quality actions described in the measure based on services provided and the measure-specific denominator coding.

**Measure Reporting via Claims:**

CPT or HCPCS codes and patient demographics are used to identify patients who are included in the measure's denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed CPT or HCPCS codes, and the appropriate CPT Category II code **OR** the CPT Category II code with the modifier. The modifier allowed for this measure is: 8P- reason not otherwise specified. There are no allowable performance exclusions for this measure. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

**Measure Reporting via Registry:**

CPT or HCPCS codes and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data. There are no allowable performance exclusions for this measure.

**DENOMINATOR:**

Patients 65 years of age and older with a visit during the measurement period

***DENOMINATOR NOTE:** Pneumococcal vaccination is expected once ever for patients 65 years of age or older.*

**Denominator Criteria (Eligible Cases):**

Patients aged ≥ 65 years on date of encounter

**AND**

**Patient encounter during the reporting period (CPT or HCPCS):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, G0402, G0438, G0439

**NUMERATOR:**

Patients who have **ever** received a pneumococcal vaccination

***NUMERATOR NOTE:** While the measure provides credit for adults 65 years of age and older who have ever received either the PCV13 or PPSV23 vaccine (or both), according to ACIP recommendations, patients should receive both vaccines. The order and timing of the vaccinations depends on certain patient characteristics, and are described in more detail in the ACIP recommendations.*

**Numerator Quality-Data Coding Options for Reporting Satisfactorily:  
Pneumococcal Vaccination Administered or Previously Received**

***Performance Met:***

**CPT II 4040F:** Pneumococcal vaccine administered or previously received

**OR**

**Pneumococcal Vaccination not Administered or Previously Received, Reason not Otherwise Specified**

Append a reporting modifier (**8P**) to CPT Category II code **4040F** to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified.

***Performance Not Met:***

**4040F with 8P:** Pneumococcal vaccine was **not** administered or previously received, reason not otherwise specified

**RATIONALE:**

Pneumonia is a common cause of illness and death in the elderly and persons with certain underlying conditions such as heart failure, diabetes, cystic fibrosis, asthma, sickle cell anemia, or chronic obstructive pulmonary disease (NHLBI, 2011). In 1998, an estimated 3,400 adults aged > 65 years died as a result of invasive pneumococcal disease (IPD) (CDC, 2003).

Among the 91.5 million US adults aged > 50 years, 29,500 cases of IPD, 502,600 cases of nonbacteremic pneumococcal pneumonia and 25,400 pneumococcal-related deaths are estimated to occur yearly; annual direct and indirect costs are estimated to total \$3.7 billion and \$1.8 billion, respectively. Pneumococcal disease remains a substantial burden among older US adults, despite increased coverage with 23-valent pneumococcal polysaccharide vaccine, (PPV23) and indirect benefits afforded by PCV7 vaccination of young children (Weycker, et al., 2011).

Vaccination has been found to be effective against bacteremic cases (OR: 0.34; 95% CI: 0.27–0.66) as well as nonbacteremic cases (OR: 0.58; 95% CI: 0.39–0.86). Vaccine effectiveness was highest against bacteremic infections caused by vaccine types (OR: 0.24; 95% CI: 0.09–0.66) (Vila-Corcoles, et al., 2009).

**CLINICAL RECOMMENDATION STATEMENTS:**

The Advisory Committee on Immunization Practices' (ACIP) released recommendations in September, 2014, describing the use of 13-valent pneumococcal conjugate vaccine (PCV13) and 23-valent pneumococcal polysaccharide vaccine (PPSV23) among adults aged ≥65 Years. According to the ACIP, both the PCV13 and PPSV23 should be administered routinely in series to all adults aged ≥65 years. Adults aged ≥65 years with no previous history or an unknown history of pneumococcal vaccination should receive PCV13 before PPSV23. Adults aged ≥65 years with a history of PPSV23 should receive PCV13, after which a second dose of PPSV23 may be administered for those adults with an indication for two doses of PPSV23.

---

The National Committee for Quality Assurance owned and developed Pneumonia Vaccination Status for Older Adults measure specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Process

**Measure #130 (NQF 0419, e-CQM CMS 68v5): Documentation of Current Medications in the Medical Record – National Quality Strategy Domain: Patient Safety**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:**  
**CLAIMS, REGISTRY**

**DESCRIPTION:**

Percentage of visits for patients aged 18 years and older for which the eligible professional attests to documenting a list of current medications using all immediate resources available on the date of the encounter. This list **must** include ALL known prescriptions, over-the-counters, herbals, and vitamin/mineral/dietary (nutritional) supplements AND **must** contain the medications' name, dosage, frequency and route of administration

**INSTRUCTIONS:**

This measure is to be reported **each visit** during the 12 month reporting period. Eligible professionals meet the intent of this measure by making their best effort to document a current, complete and accurate medication list during each encounter. There is no diagnosis associated with this measure. This measure may be reported by eligible professionals who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

**Measure Reporting via Claims:**

CPT or HCPCS codes and patient demographics are used to identify visits that are included in the measure's denominator. Quality-data codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the CPT or HCPCS codes, and the appropriate numerator quality-data code. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

**Measure Reporting via Registry:**

CPT or HCPCS codes and patient demographics are used to identify visits that are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

All visits for patients aged 18 years and older

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq$  18 years on date of encounter

**AND**

**Patient encounter during the reporting period (CPT or HCPCS):** 90791, 90792, 90832, 90834, 90837, 90839, 90957, 90958, 90959, 90960, 90962, 90965, 90966, 92002, 92004, 92012, 92014, 92507, 92508, 92526, 92541, 92542, 92544, 92545, 92547, 92548, 92557, 92567, 92568, 92570, 92585, 92588, 92626, 96116, 96150, 96151, 96152, 97001, 97002, 97003, 97004, 97532, 97802, 97803, 97804, 98960, 98961, 98962, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99495, 99496, G0101, G0108, G0270, G0402, G0438, G0439

**NUMERATOR:**

Eligible professional attests to documenting, updating or reviewing a patient's current medications using all immediate resources available on the date of encounter. This list **must** include ALL known

prescriptions, over-the counters, herbals, and vitamin/mineral/dietary (nutritional) supplements AND **must** contain the medications' name, dosages, frequency and route of administration

**Definitions:**

**Current Medications** – Medications the patient is presently taking including all prescriptions, over-the-counters, herbals and vitamin/mineral/dietary (nutritional) supplements with each medication's name, dosage, frequency and administered route.

**Route** – Documentation of the way the medication enters the body (some examples include but are not limited to: oral, sublingual, subcutaneous injections, and/or topical)

**Not Eligible** – A patient is not eligible if the following reason is documented:

- Patient is in an urgent or emergent medical situation where time is of the essence and to delay treatment would jeopardize the patient's health status

**NUMERATOR NOTE:** *The eligible professional must document in the medical record they obtained, updated, or reviewed a medication list on the date of the encounter. Eligible professionals reporting this measure may document medication information received from the patient, authorized representative(s), caregiver(s) or other available healthcare resources. G8427 should be reported if the eligible professional documented that the patient is not currently taking any medications*

**Numerator Quality-Data Coding Options for Reporting Satisfactorily:**

**Current Medications Documented**

**Performance Met: G8427:**

Eligible professional attests to documenting in the medical record they obtained, updated, or reviewed the patient's current medications

**OR**

**Current Medications not Documented, Patient not Eligible**

**Other Performance Exclusion: G8430:**

Eligible professional attests to documenting in the medical record the patient is not eligible for a current list of medications being obtained, updated, or reviewed by the eligible professional

**OR**

**Current Medications with Name, Dosage, Frequency, or Route not Documented, Reason not Given**

**Performance Not Met: G8428:**

Current list of medications **not** documented as obtained, updated, or reviewed by the eligible professional, reason not given

**RATIONALE:**

In the American Medical Association's (AMA) Physician's Role in Medication Reconciliation (2007), critical patient information, including medical and medication histories, current medications the patient is receiving and taking, and sources of medications, is essential to the delivery of safe medical care. However, interruptions in the continuity of care and information gaps in patient health records are common and significantly affect patient outcomes. Consequently, clinical judgments may be based on incomplete, inaccurate, poorly documented or unavailable information about the patient and his or her medication.

As identified by The Agency for Healthcare Research and Quality in the National Healthcare Disparities report (2013), "different providers may prescribe medications for the same patient. Patients are responsible for keeping track of all their medications, but medication information can be confusing, especially for patients on multiple medications. When care is not well coordinated and some providers do not know about all of a patient's medications, patients are at greater risk for adverse events related to drug interactions, overdosing, or underdosing."

In addition, providers need to periodically review all of a patient's medications to ensure that they are taking what is needed and only what is needed. Medication reconciliation has been shown to reduce both medication errors and adverse drug events (Whittington & Cohen, 2004).

Medication safety efforts have primarily focused on hospitals; however, the majority of health care services are provided in the outpatient setting where two-thirds of physician visits result in writing at least one prescription (Stock et al., 2009). Chronically ill patients are increasingly being treated as outpatients, many of whom take multiple medications requiring close monitoring (Nassaralla et al., 2007).

Adverse drug events (ADEs) prove to be more fatal in outpatient settings (1 of 131 outpatient deaths) than in hospitals (1 of 854 inpatient deaths) (Nassaralla et al., 2007). According to the first study to utilize nationally-representative data to examine annual rates of ADEs in the ambulatory care setting "Adverse Drug events in U.S. Adult Ambulatory Medical Care," ADE rates increase with age, adults 25-44 years old had a rate of 1.3 per 10,000 person per year, those 45-64 had a rate of 2.2 per 10,000 per year, and those 65 years and older had the highest rate, at 3.8 ADEs per 10,000 persons per year. This study estimates that 13.5 million ADE related visits occurred between 2005-2007, estimating that approximately 4.5 million ambulatory ADE visits occur each year. These 4.5 million visits are associated with approximately 400,000 hospitalizations annually. According to the Institute of Medicine (IOM), in the US, as many as 98,000 deaths per year are attributable to preventable adverse events that occur in the hospitals setting with annual costs of between \$17 billion and \$29 billion. (Sarkar et al., 2011)

Additionally, findings of The Commonwealth Fund (2010) studies identified 11% to 28% of the 4.3 million visit related ADEs (VADE) in 2001 might have been prevented with improved systems of care and better patient education, yielding an estimate of 473,000 to 1.2 million potentially preventable VADEs annually and potential cost-savings of \$946 million to \$2.4 billion.

According to the AMA's published report, *The Physician's Role in Medication Reconciliation*, the rate of medication errors during hospitalization was estimated to be 52 per 100 admissions, or 70 per 1,000 patient days in 2005. Emerging research suggests the scope of medication-related errors in ambulatory settings is as extensive as or more extensive than during hospitalization. Ambulatory visits result in a prescription for medication 50 to 70% of the time. One study estimated the rate of ADEs in the ambulatory setting to be 27 per 100 patients. It is estimated that between 2004 and 2005, in the United States 701,547 patients were treated for ADEs in emergency departments and 117,318 patients were hospitalized for injuries caused by an ADE. Individuals aged 65 years and older are more likely than any other population group to require treatment in the emergency department for ADEs. (AMA, 2007).

A Systematic Review on —Prevalence of Adverse Drug Events in Ambulatory Care finds that "In the ambulatory care setting, adverse drug events (ADEs) have been reported to occur at a rate of 25%. Approximately 39% of these ADEs were preventable. Since many ADEs are associated with medication errors, and thus potentially preventable, understanding the nature of medication errors in ambulatory care settings can direct attention toward improvement of medication safety in ambulatory care." Data extracted and synthesized across studies indicated the median preventable ADE rates in ambulatory care-based studies were 16.5%. (Tache et al., 2011).

The Agency for Healthcare Research and Quality's (AHRQ) *The National Healthcare Disparities Report* (2011) identified the rate of adverse drug events (ADE) among Medicare beneficiaries in ambulatory settings as 50 per 1,000 person-years. In 2005, AHRQ reported data on adults age 65 and over who received potentially inappropriate prescription medicines in the calendar year, by race, ethnicity, income, education, insurance status, and gender. The disparities were identified as follows: older Asians were more likely than older whites to have inappropriate drug use (20.3% compared with 17.3%); older Hispanics were less likely than older non-Hispanic Whites to have inappropriate drug use (13.5% compared with 17.6%); older women were more likely than older men to have inappropriate drug use (20.2% compared with 14.3%); there were no statistically significant differences by income or education. Weeks et al. (2010) noted that fragmented medication records across the health care continuum, inaccurate reporting of medication regimens by patients, and provider failure to acquire all of the necessary elements of medication information from the patient or record, present significant obstacles to obtaining an accurate medication list in the ambulatory care setting. Because these obstacles require

solutions demonstrating improvements in access to information and communication, the Institute of Medicine and others have encouraged the incorporation of IT solutions in the medication reconciliation process. In a survey administered to office-based physicians with high rates of EMR use, Weeks, et al found there is an opportunity for universal medication lists utilizing health IT.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The Joint Commission's 2015 Ambulatory Care National Patient Safety Goals guide providers to maintain and communicate accurate patient medication information. Specifically, the section "Use Medicines Safely NPSG.03.06.01" states the following: "Maintain and communicate accurate patient medication information. The types of information that clinicians use to reconcile medications include (among others) medication name, dose, frequency, route, and purpose. Organizations should identify the information that needs to be collected to reconcile current and newly ordered medications and to safely prescribe medications in the future." (Joint Commission, 2015, retrieved at: National Patient Safety Goals Effective January 1, 2015).

The National Quality Forum's 2010 update of the Safe Practices for Better Healthcare, states healthcare organizations must develop, reconcile, and communicate an accurate patient medication list throughout the continuum of care. Improving the safety of healthcare delivery saves lives, helps avoid unnecessary complications, and increases the confidence that receiving medical care actually makes patients better, not worse. Every healthcare stakeholder group should insist that provider organizations demonstrate their commitment to reducing healthcare error and improving safety by putting into place evidence-based safe practices.

The AMA's published report, *The Physician's Role in Medication Reconciliation*, identified the best practice medication reconciliation team as one that is multidisciplinary and—in all settings of care—will include physicians, pharmacists, nurses, ancillary health care professionals and clerical staff. The team's variable requisite knowledge, skills, experiences, and perspectives are needed to make medication reconciliation work as safely and smoothly as possible. Team members may have access to vital information or data needed to optimize medication safety. Because physicians are ultimately responsible for the medication reconciliation process and subsequently accountable for medication management, physician leadership and involvement in all phases of developing and initiating a medication reconciliation process or model is important to its success.

#### **COPYRIGHT:**

These measures were developed by Quality Insights of Pennsylvania as a special project under the Quality Insights' Medicare Quality Improvement Organization (QIO) contract HHSM-500-2005-PA001C with the Centers for Medicare & Medicaid Services. These measures are in the public domain.

Limited proprietary coding is contained in the measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. Quality Insights of Pennsylvania disclaims all liability for use or accuracy of any Current Procedural Terminology (CPT [R]) or other coding contained in the specifications. CPT® contained in the Measures specifications is copyright 2004- 2015 American Medical Association. All Rights Reserved. These performance measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.

#### **THE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.**

---

The American Medical Association and American Society of Hematology owned and developed measure, Documentation of Current Medications in the Medical Record, is copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Process

**Measure #128 (NQF 0421, e-CQM CMS 69v4): Body Mass Index – National Quality Strategy  
Domain: Community/Population Health**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:  
CLAIMS, REGISTRY**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a BMI documented during the current encounter or during the previous six months AND with a BMI outside of normal parameters, a follow-up plan is documented during the encounter or during the previous six months of the current encounter

**Normal Parameters:** Age 65 years and older BMI  $\geq 23$  and  $< 30$  kg/m<sup>2</sup>  
Age 18 – 64 years BMI  $\geq 18.5$  and  $< 25$  kg/m<sup>2</sup>

**INSTRUCTIONS:**

There is no diagnosis associated with this measure. This measure is to be reported a minimum of **once per reporting period** for patients seen during the reporting period. This measure may be reported by eligible professionals who perform the quality actions described in the measure based on the services provided at the time of the qualifying visit and the measure-specific denominator coding. The BMI may be documented in the medical record of the provider or in outside medical records obtained by the provider. If the most recent documented BMI is outside of normal parameters, then a follow-up plan must be documented during the encounter or during the previous six months of the current encounter. The documented follow-up plan must be based on the most recent document BMI outside of normal parameters, example: "Patient referred to nutrition counseling for BMI above normal parameters" (See Definitions for examples of a follow-up plan treatments). *If more than one BMI is reported during the measure period, the most recent BMI will be used to determine if the performance has been met.*

**Measure Reporting via Claims:**

CPT or HCPCS codes and patient demographics are used to identify patients who are included in the measure's denominator. Quality-data codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed CPT or HCPCS codes, and the appropriate numerator quality-data code. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

**Measure Reporting via Registry:**

CPT codes or HCPCS codes, and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

Patients aged 18 years and older

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 18$  years on date of encounter

**AND**

**Patient encounter during the reporting period (CPT or HCPCS):** 90791, 90792, 90832, 90834, 90837, 90839, 96150, 96151, 96152, 97001, 97003, 97802, 97803, 98960, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, D7140, D7210, G0101, G0108, G0270, G0271, G0402, G0438, G0439, G0447



## **NUMERATOR:**

Patients with a documented BMI during the encounter or during the previous six months, AND when the BMI is outside of normal parameters, a follow-up plan is documented during the encounter or during the previous six months of the current encounter.

### **Numerator Instructions:**

- **Height and Weight** - An eligible professional or their staff is required to measure both height and weight. Both height and weight must be measured within six months of the current encounter and may be obtained from separate encounters. Self-reported values cannot be used.
- **Follow-Up Plan** – If the most recent documented BMI is outside of normal parameters, then a follow-up plan is documented during the encounter or during the previous six months of the current encounter. The documented follow-up plan must be based on the most recent documented BMI, outside of normal parameters, example: “Patient referred to nutrition counseling for BMI above normal parameters”. (See Definitions for examples of a follow-up plan treatments).
- **Performance Met for G8417 & G8418**
  - If the provider documents a BMI and a follow-up plan at the current visit **OR**
  - If the patient has a documented BMI within the previous six months of the current encounter, the provider documents a follow-up plan at the current visit **OR**
  - If the patient has a documented BMI within the previous six months of the current encounter **AND** the patient has a documented follow-up plan for a BMI outside normal parameters within the previous six months of the current visit

### **Definitions:**

**BMI** – Body mass index (BMI), is a number calculated using the Quetelet index: weight divided by height squared (W/H<sup>2</sup>) and is commonly used to classify weight categories. BMI can be calculated using:

Metric Units:  $BMI = \text{Weight (kg)} / (\text{Height (m)} \times \text{Height (m)})$

**OR**

English Units:  $BMI = \text{Weight (lbs)} / (\text{Height (in)} \times \text{Height (in)}) \times 703$

**Follow-Up Plan** – Proposed outline of treatment to be conducted as a result of a BMI out of normal parameters. A follow-up plan may include, but is not limited to:

- Documentation of education
- Referral (for example a registered dietitian, nutritionist, occupational therapist, physical therapist, primary care provider, exercise physiologist, mental health professional, or surgeon)
- Pharmacological interventions
- Dietary supplements
- Exercise counseling
- Nutrition counseling

**Not Eligible for BMI Calculation or Follow-Up Plan** – A patient is not eligible if one or more of the following reasons are documented:

- Patient is receiving palliative care
- Patient is pregnant
- Patient refuses BMI measurement (refuses height and/or weight)
- Any other reason documented in the medical record by the provider why BMI measurement was not appropriate

- Patient is in an urgent or emergent medical situation where time is of the essence, and to delay treatment would jeopardize the patient's health status

**Numerator Quality-Data Coding Options for Reporting Satisfactorily:**

**BMI Documented as Normal, No Follow-Up Plan Required**

(One quality-data code [G8417, G8418 or G8420] is required on the claim form to submit this numerator option)

**Performance Met: G8420:** BMI is documented within normal parameters and no follow-up plan is required

**OR**

**BMI Documented as Above Normal Parameters, AND Follow-Up Documented**

**Performance Met: G8417:** BMI is documented above normal parameters and a follow-up plan is documented

**OR**

**BMI Documented as Below Normal Parameters, AND Follow-Up Documented**

**Performance Met: G8418:** BMI is documented below normal parameters and a follow-up plan is documented

**OR**

**BMI not Documented, Patient not Eligible**

(One quality-data code [G8422 or G8938] is required on the claim form to submit this numerator option)

**Other Performance Exclusion: G8422:** BMI not documented, documentation the patient is not eligible for BMI calculation

**OR**

**BMI Documented Outside of Normal Limits, Follow-up Plan not Documented, Patient not Eligible**

**Other Performance Exclusion: G8938:** BMI is documented as being outside of normal limits, follow-up plan is not documented, documentation the patient is not eligible

**OR**

**BMI not Documented, Reason not Given**

(One quality-data code [G8419 or G8421] is required on the claim form to submit this numerator option)

**Performance Not Met: G8421:** BMI not documented and no reason is given

**OR**

**BMI Documented Outside of Normal Parameters, Follow-Up Plan not Documented, Reason not Given**

**Performance Not Met: G8419:** BMI documented outside normal parameters, no follow-up plan documented, no reason given

**RATIONALE:**

**Normal Parameters for Age 65 Years and Older**

Winter et al. (2014) performed a meta-analysis looking at the relationship between BMI and all-cause mortality among adults 65 and older. They identified a higher risk of mortality among those with a BMI <23 kg/m<sup>2</sup> and recommended monitoring weight status in this group to address any modifiable causes of weight loss promptly with due consideration of individual comorbidities. Dahl et al. (2013) reported that old persons (70-79) who were overweight had a lower mortality risk than old persons who were of normal weight, even after controlling for weight change and multimorbidity. The study also shows that persons who increased or decreased in BMI had a greater mortality risk than those who had a stable BMI, particularly those aged 70 to 79. Their results provide support to the belief that the World Health Organization guidelines for BMI are overly restrictive in old age.

**BMI Above Upper Parameters**

Obesity continues to be a costly public health concern in the United States. The Centers for Disease Control and Prevention (CDC, 2010) reported in 2009, no state met the Healthy People 2010 obesity target of 15 percent and the self-reported overall prevalence of obesity among adults had increased 1.1

percentage points in 2007 to 26.7 percent (2010). Ogden, Carroll, Kit and Flegal (2013) reported the prevalence of BMI-defined obesity in adults is high and continues to exceed 30% in most sex-age groups (34.9% overall). They also stated the overall prevalence of obesity did not differ between men and women in 2011–2012; however, among non-Hispanic black adults, 56.6% of women were obese compared with 37.1% of men. In addition to the continued high prevalence rate for adults in general, Flegal, Carroll & Kit (2012) report a significant increase for men and for non-Hispanic black and Mexican American women over the 12-year period from 1999 through 2010 (2012). Moyer (2012) reported: Obesity is associated with such health problems as an increased risk for coronary artery disease, type 2 diabetes, various types of cancer, gallstones and disability. These comorbid medical conditions are associated with higher use of health care services and costs among obese patients (p. 373).

Obesity is also associated with an increased risk of death, particularly in adults younger than age 65 years and has been shown to reduce life expectancy by 6 to 20 years depending on age and race (LeBlanc et al., 2011). Masters, et al. (2013) also showed mortality due to obesity varied by race and gender. They estimated adult deaths between 1986 and 2006 associated with overweight and obesity was 5.0% and 15.6% for Black and White men, and 26.8% and 21.7% for Black and White women, respectively. They also found a stronger association than previous research demonstrated between obesity and mortality risk at older ages.

Finkelstein, Trogon, Cohen and Dietz (2009) found that in 2006, across all payers, per capita medical spending for the obese is \$1,429 higher per year, (42 percent) than for someone of normal weight. Using 2008 dollars, this was estimated to be equivalent to \$147 billion dollars in medical care costs related to obesity.

Padula, Allen and Nair (2014) examined data from a commercial claims and encounters database to estimate the cost for obesity and associated comorbidities among working-age adults who had a claim with a primary or secondary diagnosis of obesity in 2006-2007. The mean net expenditure for inpatient and outpatient claims was \$1,907 per patient per visit. The increases in cost for comorbidities ranged from \$527 for obesity with CHF to \$15,733 for the combination of obesity, diabetes mellitus, hypertension and depression.

In addition to a high prevalence rate of obesity, less than 50% of obese adults in 2010 received advice to exercise or perform physical activity (Barnes & Schoenborn, 2012).

### **BMI Below Normal Parameters**

In the National Center for Health Statistics (NCHS) Health E-Stat, Fryer and Ogden (2012) reported that poor nutrition or underlying health conditions can result in underweight. Results from the 2007-2010 National Health and Nutrition Examination Survey (NHANES), using measured heights and weights, indicate an estimated 1.7% of U.S. adults are underweight with women more likely to be underweight than men (2012).

In a cohort study conducted by Borrell and Lalitha (2014), data from NHANES III (1988-1994) was linked to the National Death Index mortality file with follow-up to 2006, and showed that when compared to their normal weight counterparts (BMI 18.5-25 kg/m<sup>2</sup>), underweight (BMI <18.5 kg/m<sup>2</sup>) had significantly higher death rates (Hazard Ratio= 2.27; 95% confidence interval (CI) = 1.78, 2.90).

Ranhoff, Gjoen and Mowe (2005) recommended using BMI < 23 kg/m<sup>2</sup> for the elderly to identify positive results with malnutrition screens and poor nutritional status.

### **CLINICAL RECOMMENDATION STATEMENTS:**

Although multiple clinical recommendations addressing obesity have been developed by professional organizations, societies and associations, two recommendations have been identified which exemplify the intent of the measure and address the numerator and denominator.

The US Preventive Health Services Task Force (USPSTF) recommends screening all adults (aged 18 years and older) for obesity. Clinicians should offer or refer patients with a BMI of 30 or higher to intensive, multicomponent behavioral interventions. This is a B recommendation (Moyer, 2012).

As cited in Wilkinson et al. (2013), Institute for Clinical Systems Improvement (ICSI) Preventive Services for Adults, Obesity Screening (Level II) Recommendation provides the following guidance:

- Record height, weight and calculate body mass index at least annually
  - Clinicians should consider waist circumference measurement to estimate disease risk for patients who have BMI scores indicative of overweight or obesity class I. For adult patients with a BMI of 25 to 34.9 kg/m<sup>2</sup>, sex-specific waist circumference cutoffs should be used in conjunction with BMI to identify increased disease risk.
  - A BMI greater or equal to 30 is defined as obese
  - A BMI of 25-29 is defined as overweight
  - Intensive intervention for obese individuals, based on BMI, is recommended by the U.S. Preventive Services to help control weight.

Similarly, the 2013 joint report/guideline from the American Heart Association, American College of Cardiology and The Obesity Society also recommend measuring height and weight and calculating BMI at annual visits or more frequently, using the current cutpoints for overweight (BMI>25.0-29.9 kg/m<sup>2</sup>) and obesity (BMI ≥30 kg/m<sup>2</sup>) to identify adults who may be at elevated risk of CVD and the current cutpoints for obesity to identify adults who may be at elevated risk of mortality from all causes. They also recommend counseling overweight and obese individuals on their increased risk for CVD, type 2 diabetes, all-cause mortality and need for lifestyle changes.

**COPYRIGHT:**

These measures were developed by Quality Insights of Pennsylvania as a special project under the Quality Insights' Medicare Quality Improvement Organization (QIO) contract HHSM-500-2005-PA001C with the Centers for Medicare & Medicaid Services. These measures are in the public domain. Limited proprietary coding is contained in the measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. Quality Insights of Pennsylvania disclaims all liability for use or accuracy of any Current Procedural Terminology (CPT [R]) or other coding contained in the specifications. CPT® contained in the Measures specifications is copyright 2004-2015 American Medical Association. All Rights Reserved. These performance measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.

**THE MEASURES AND SPECIFICATIONS ARE PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND.**

---

Quality Insights of Pennsylvania in contract with Centers for Medicare & Medicaid Services (CMS) developed measure, Body Mass Index. Specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Process

**Measure #110 (NQF 0041, e-CQM CMS 147v5): Influenza Immunization – National Quality Strategy Domain: Community/Population Health**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:  
CLAIMS, REGISTRY**

**DESCRIPTION:**

Percentage of patients aged 6 months and older seen for a visit between October 1 and March 31 who received an influenza immunization OR who reported previous receipt of an influenza immunization

**INSTRUCTIONS:**

This measure is to be reported a minimum of once for visits for patients seen between January and March for the 2015-2016 influenza season AND a minimum of once for visits for patients seen between October and December for the 2016-2017 influenza season. This measure is intended to determine whether or not all patients aged 6 months and older received (either from the reporting physician or from an alternate care provider) the influenza immunization during the flu season. There is no diagnosis associated with this measure. 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 denominator coding.

If reporting this measure between January 1, 2016 and March 31, 2016, quality-data code G8482 should be reported when the influenza immunization is administered to the patient during the months of August, September, October, November, and December of 2015 or January, February, and March of 2016 for the flu season ending March 31, 2016.

- If reporting this measure between October 1, 2016 and December 31, 2016, quality-data code **G8482** should be reported when the influenza immunization is administered to the patient during the months of August, September, October, November, and December of 2016 for the flu season ending March 31, 2017.
- Influenza immunizations administered during the month of August or September of a given flu season (either 2015-2016 flu season OR 2016-2017 flu season) can be reported when a visit occurs during the flu season (October 1 - March 31). In these cases, **G8482** should be reported.

**Measure Reporting via Claims:**

CPT or HCPCS codes and patient demographics are used to identify patients who are included in the measure's denominator. Quality-data codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed CPT or HCPCS codes, and the appropriate numerator quality-data code. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

**Measure Reporting via Registry:**

CPT or HCPCS codes and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

All patients aged 6 months and older seen for a visit between October 1 and March 31

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 6$  months seen for a visit between October 1 and March 31

**AND**

**Patient encounter during the reporting period (CPT or HCPCS):** 90945, 90947, 90951, 90952, 90953, 90954, 90955, 90956, 90957, 90958, 90959, 90960, 90961, 90962, 90963,

90964, 90965, 90966, 90967, 90968, 90969, 90970, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, G0438, G0439

**NUMERATOR:**

Patients who received an influenza immunization OR who reported previous receipt of an influenza immunization

**Numerator Instructions:**

The numerator for this measure can be met by reporting either administration of an influenza vaccination or that the patient reported previous receipt of the current season's influenza immunization. If the performance of the numerator is not met, a clinician can report a valid performance exclusion for having not administered an influenza vaccination. For clinicians reporting a performance exclusion for this measure, there should be a clear rationale and documented reason for not administering an influenza immunization if the patient did not indicate previous receipt, which could include a medical reason (e.g., patient allergy), patient reason (e.g., patient declined), or system reason (e.g., vaccination not available). The system reason should be indicated only for cases of disruption or shortage of influenza vaccination supply.

**Definition:**

**Previous Receipt** – Receipt of the current season's influenza immunization from another provider OR from same provider prior to the visit to which the measure is applied (typically, prior vaccination would include influenza vaccine given since August 1st).

**Numerator Quality-Data Coding Options for Reporting Satisfactorily:**

**Influenza Immunization Administered**

**Performance Met: G8482:**

Influenza immunization administered or previously received

OR

**Influenza Immunization not Administered for Documented Reasons**

**Other Performance Exclusion: G8483:**

Influenza immunization was not administered for reasons documented by clinician (e.g., patient allergy or other medical reasons, patient declined or other patient reasons, vaccine not available or other system reasons)

OR

**Influenza Immunization not Administered, Reason not Given**

**Performance Not Met: G8484:**

Influenza immunization as not administered, reason not given

**RATIONALE:**

Annual influenza vaccination is the most effective method for preventing influenza virus infection and its complications. Influenza vaccine is recommended for all persons aged  $\geq 6$  months who do not have contraindications to vaccination.

**CLINICAL RECOMMENDATION STATEMENTS:**

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

Routine annual influenza vaccination is recommended for all persons aged  $\geq 6$  months who do not have contraindications. Vaccination optimally should occur before onset of influenza activity in the community. Health care providers should offer vaccination soon after vaccine becomes available (by October, if possible). Vaccination should be offered as long as influenza viruses are circulating. (CDC/ACIP, 2014)

**COPYRIGHT:**

Physician Performance Measures (Measures) and related data specifications, developed by the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI®), are intended to facilitate quality improvement activities by physicians.

These Measures are intended to assist physicians in enhancing quality of care. Measures are designed for use by any physician who manages the care of a patient for a specific condition or for prevention. These performance Measures are not clinical guidelines and do not establish a standard of medical care. The PCPI has not tested its Measures for all potential applications. The PCPI encourages the testing and evaluation of its Measures.

Measures are subject to review and may be revised or rescinded at any time by the PCPI. The Measures may not be altered without the prior written approval of the PCPI. Measures developed by the PCPI, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, eg, use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial uses of the Measures require a license agreement between the user and American Medical Association, on behalf of the PCPI. Neither the PCPI nor its members shall be responsible for any use of these Measures.

**THE MEASURES ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.**

© 2007 American Medical Association. All Rights Reserved.

Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The AMA, the PCPI and its members disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications.

**THE SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.**

CPT® contained in the Measures specifications is copyright 2004-2015 American Medical Association.

LOINC® copyright 2004-2015 Regenstrief Institute, Inc. SNOMED CLINICAL TERMS (SNOMED CT®) copyright 2004-2015 International Health Terminology Standards Development Organization. All Rights Reserved. Use of SNOMED CT® is only authorized within the United States.

---

The AMA-convened Physician Consortium for Performance Improvement (PCPI) owned and developed measure, Influenza Immunization. Specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures](#).

**Measure Type:** Process

**Measure #65 (NQF 0069, e-CQM CMS 154v4): Appropriate Treatment for Children with Upper Respiratory Infection (URI) – National Quality Strategy Domain: Efficiency and Cost Reduction**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:  
REGISTRY ONLY**

**DESCRIPTION:**

Percentage of children 3 months through 18 years of age who were diagnosed with upper respiratory infection (URI) and were not dispensed an antibiotic prescription on or three days after the episode

**INSTRUCTIONS:**

This measure is to be reported once for each occurrence of upper respiratory infection during the reporting period.

Claims data will be analyzed to determine unique occurrences. 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 denominator coding.

**Measure Reporting via Registry:**

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

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

Children 3 months through 18 years of age who had an outpatient or emergency department (ED) visit with only a diagnosis of upper respiratory infection (URI) during the measurement period

**Denominator Instructions:** To determine eligibility, look for any of the listed antibiotic drugs below in the 30 days prior to the visit with the URI diagnosis. As long as there are no prescriptions for the listed antibiotics during this time period, the patient is eligible for denominator inclusion.

**Denominator Criteria (Eligible Cases):**

Patients aged 3 months through 18 years on date of encounter

**AND**

**Diagnosis for URI (ICD-10-CM):** J00, J06.0, J06.9

**AND**

**Patient encounter during the reporting period (CPT or HCPCS):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99281, 99282, 99283, 99284, 99285, G0402

**NUMERATOR:**

Patients who were not prescribed or dispensed a prescription for antibiotic medication on or within 3 days after the URI Episode date

**Numerator Instructions:** For performance, the measure will be calculated as the number of patient's encounter(s) where antibiotics were neither prescribed nor dispensed on or within three days of the episode for URI over the total number of encounters in the denominator (patients aged 3 months through 18 years with an outpatient or ED visit for URI. A higher score indicates appropriate treatment of patients with URI (e.g., the proportion for whom antibiotics were not prescribed or dispensed following the episode).

Table 1 - Antibiotic Medications Description Prescription



Description	Prescription
Aminopenicillins	<ul style="list-style-type: none"> <li>Amoxicillin</li> <li>Ampicillin</li> </ul>
Beta-lactamase inhibitors	<ul style="list-style-type: none"> <li>Amoxicillin-clavulanate</li> </ul>
First generation cephalosporins	<ul style="list-style-type: none"> <li>Cefadroxil</li> <li>Cephalexin</li> <li>Cefazolin</li> </ul>
Folate antagonist	<ul style="list-style-type: none"> <li>Trimethoprim</li> </ul>
Lincomycin derivatives	<ul style="list-style-type: none"> <li>Clindamycin</li> </ul>
Macrolides	<ul style="list-style-type: none"> <li>Azithromycin</li> <li>Erythromycin ethylsuccinate</li> <li>Clarithromycin</li> <li>Erythromycin lactobionate</li> <li>Erythromycin</li> <li>Erythromycin stearate</li> </ul>
Miscellaneous antibiotics	<ul style="list-style-type: none"> <li>Erythromycin-sulfisoxazole</li> </ul>
Natural penicillins	<ul style="list-style-type: none"> <li>Penicillin G potassium</li> <li>Penicillin V potassium</li> <li>Penicillin G sodium</li> </ul>
Penicillinase-resistant penicillins	<ul style="list-style-type: none"> <li>Dicloxacillin</li> </ul>
Quinolones	<ul style="list-style-type: none"> <li>Ciprofloxacin</li> <li>Moxifloxacin</li> <li>Levofloxacin</li> <li>Ofloxacin</li> </ul>
Second generation cephalosporins	<ul style="list-style-type: none"> <li>Cefaclor</li> <li>Cefuroxime</li> <li>Cefprozil</li> </ul>
Sulfonamides	<ul style="list-style-type: none"> <li>Sulfamethoxazole-trimethoprim</li> <li>Sulfisoxazole</li> </ul>
Tetracyclines	<ul style="list-style-type: none"> <li>Doxycycline</li> <li>Tetracycline</li> <li>Minocycline</li> </ul>
Third generation cephalosporins	<ul style="list-style-type: none"> <li>Cefdinir</li> <li>Ceftibuten</li> <li>Cefixime</li> <li>Cefditoren</li> <li>Cefpodoxime</li> <li>Ceftriaxone</li> </ul>

- Numerator Options:**
- Performance Met:** Patient not prescribed or dispensed antibiotic (**G8708**)
- OR**
- Medical Performance Exclusion:** Patient prescribed or dispensed antibiotic for documented medical reason(s) (e.g., intestinal infection, pertussis, bacterial infection, Lyme disease, otitis media, acute sinusitis, acute pharyngitis, acute tonsillitis, chronic sinusitis, infection of the pharynx/larynx/tonsils/adenoids, prostatitis, cellulitis, mastoiditis, or bone infections, acute lymphadenitis, impetigo, skin staph infections, pneumonia/gonococcal infections, venereal disease (syphilis, chlamydia, inflammatory diseases [female reproductive organs]), infections of the kidney, cystitis or UTI, and acne (**G8709**))
- OR**

**Performance Not Met:**

Patient prescribed or dispensed antibiotic (**G8710**)

**RATIONALE:**

In 1998, 25 million patients (adults and children) sought care for non-specific upper respiratory infections (URI, also known as the common cold) and 30 percent received antibiotics (Gonzales 2001).

Inappropriate antibiotic prescriptions for URI, pharyngitis and bronchitis are estimated to amount to 55 percent (22.6 million) of all antibiotics prescribed for acute respiratory infections, costing \$726 million in 1998 (Gonzales 2001).

Using antibiotics inappropriately can lead to antibiotic resistance, which can result in increased morbidity and mortality (Feikin 2000). The resulting increased effort to treat drug-resistant pathogens can also lead to more repeated health care visits, greater risk of disease complications and increased health care costs (Feikin 2000; Dagan 2000; Watanabe 2000).

**CLINICAL RECOMMENDATION STATEMENTS:**

American Family Physician (Wong, Blumberg, and Lowe 2006)

- A diagnosis of acute bacterial rhinosinusitis should be considered in patients with symptoms of a viral upper respiratory infection that have not improved after 10 days or that worsen after five to seven days. (C)
- Treatment of sinus infection with antibiotics in the first week of symptoms is not recommended. (C)
- Telling patients not to fill an antibiotic prescription unless symptoms worsen or fail to improve after several days can reduce the inappropriate use of antibiotics. (B)

**COPYRIGHT:**

These performance measures were developed and are owned by the National Committee for Quality Assurance ("NCQA"). These performance measures are not clinical guidelines and do not establish a standard of medical care. NCQA makes no representations, warranties, or endorsement about the quality of any organization or physician that uses or reports performance measures and NCQA has no liability to anyone who relies on such measures. NCQA holds a copyright in this measure and can rescind or alter this measure at any time. Users of the measure shall not have the right to alter, enhance, or otherwise modify the measure and shall not disassemble, recompile, or reverse engineer the source code or object code relating to the measure. Anyone desiring to use or reproduce the measure without modification for a noncommercial purpose may do so without obtaining any approval from NCQA. All commercial uses must be approved by NCQA and are subject to a license at the discretion of NCQA. Use by health care providers in connection with their own practices is not commercial use. A "commercial use" refers to any sale, license, or distribution of a measure for commercial gain, or incorporation of a measure into any product or service that is sold, licensed, or distributed for commercial gain, even if there is no actual charge for inclusion of the measure. ©2004-2016 National Committee for Quality Assurance, all rights reserved.

Performance measures developed by NCQA for CMS may look different from the measures solely created and owned by NCQA.

CPT® contained in the Measures specifications is copyright 2004-2015 American Medical Association.

---

Specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Web-Based Tool](#).

**Measure Type:** Process

**Measure #374 (e-CQM CMS 50v4) Closing the Referral Loop: Receipt of Specialist Report –  
National Quality Strategy Domain: Communication and Care Coordination**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:**  
**EHR ONLY**

**DESCRIPTION:**

Percentage of patients with referrals, regardless of age, for which the referring provider receives a report from the provider to whom the patient was referred.

**DENOMINATOR:**

Number of patients, regardless of age, who were referred by one provider to another provider, and who had a visit during the measurement period.

**NUMERATOR:**

Number of patients with a referral, for which the referring provider received a report from the provider to whom the patient was referred.

**RATIONALE:**

Problems in the outpatient referral and consultation process have been documented, including lack of timeliness of information and inadequate provision of information between the specialist and the requesting physician (Gandhi, 2000; Forrest, 2000; Stille, 2005). In a study of physician satisfaction with the outpatient referral process, Gandhi et al. (2000) found that 68% of specialists reported receiving no information from the primary care provider prior to referral visits, and 25% of primary care providers had still not received any information from specialists 4 weeks after referral visits. In another study of 963 referrals (Forrest, 2000), pediatricians scheduled appointments with specialists for only 39% and sent patient information to the specialists in only 51% of the time.

In a 2006 report to Congress, MedPAC found that care coordination programs improved quality of care for patients, reduced hospitalizations, and improved adherence to evidence-based care guidelines, especially among patients with diabetes and CHD. Associations with cost-savings were less clear; this was attributed to how well the intervention group was chosen and defined, as well as the intervention put in place. Additionally, cost-savings were usually calculated in the short-term, while some argue that the greatest cost-savings accrue over time (MedPAC, 2006).

Improved mechanisms for information exchange could facilitate communication between providers, whether for time-limited referrals or consultations, on-going co-management, or during care transitions. For example, a study by Branger et al. (1999) found that an electronic communication network that linked the computer-based patient records of physicians who had shared care of patients with diabetes significantly increased frequency of communications between physicians and availability of important clinical data. There was a 3-fold increase in the likelihood that the specialist provided written communication of results if the primary care physician scheduled appointments and sent patient information to the specialist (Forrest, 2000).

Care coordination is a focal point in the current health care reform and our nation's ambulatory health information technology (HIT) framework. The National Priorities Partnership recently highlighted care coordination as one of the most critical areas for development of quality measurement and improvement (NPP, 2008).

**COPYRIGHT:**

Limited proprietary coding is contained in the Measure specifications for user convenience. Users of proprietary code sets should obtain all necessary licenses from the owners of the code sets. NCQA disclaims all liability for use or accuracy of any CPT or other codes contained in the specifications.

CPT(R) contained in the Measure specifications is copyright 2004-2014 American Medical Association. LOINC(R) copyright 2004-2014 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms(R) (SNOMED CT[R]) copyright 2004-2014 International Health Terminology Standards Development Organization.

---

Specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Web-Based Tool](#).

**Measure Type:** Process

**Measure #317 (e-CQM CMS 22v4) Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented – National Quality Strategy Domain: Community / Population Health**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:**  
**CLAIMS, REGISTRY**

**DESCRIPTION:**

Percentage of patients aged 18 years and older seen during the reporting period who were screened for high blood pressure AND a recommended follow-up plan is documented based on the current blood pressure (BP) reading as indicated

**INSTRUCTIONS:**

This measure is to be reported a minimum of once per reporting period for patients seen during the reporting period. Eligible professionals who report the measure must perform the blood pressure screening at the time of a qualifying visit and may not obtain measurements from external sources.

This measure may be reported by eligible professionals who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding. The intent of this measure is to screen patients for high blood pressure and provide recommended follow-up as indicated. Both the systolic and diastolic blood pressure measurements are required for inclusion. If there are multiple blood pressures on the same date of service, use the most recent as the representative blood pressure. The documented follow-up plan must be related to the current BP reading as indicated, example: "Patient referred to primary care provider for BP management".

**Measure Reporting via Claims:**

CPT or HCPCS codes and patient demographics are used to identify patients who are included in the measure's denominator. Quality-data codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed CPT or HCPCS codes, and the appropriate quality-data code. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

**Measure Reporting via Registry:**

CPT or HCPCS codes and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

All patients aged 18 years and older

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq$  18 years

**AND**

**Patient encounter during the reporting period (CPT or HCPCS):** 90791, 90792, 90832, 90834, 90837, 90839, 90845, 90880, 92002, 92004, 92012, 92014, 96118, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99340, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, D7140, D7210, G0101, G0402, G0438, G0439

## **NUMERATOR:**

Patients who were screened for high blood pressure AND have a recommended follow-up plan documented, as indicated, if the blood pressure is pre-hypertensive or hypertensive

**NUMERATOR NOTE:** *Although the recommended screening interval for a normal BP reading is every 2 years, to meet the intent of this measure, BP screening and follow-up must be performed once per measurement period. For patients with Normal blood pressure a follow-up plan is not required.*

## **Definitions:**

**Blood Pressure (BP) Classification** - BP is defined by four (4) BP reading classifications: Normal, Pre-Hypertensive, First Hypertensive, and Second Hypertensive Readings.

**Recommended BP Follow-Up** - The Joint National Committee on the Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7) recommends BP screening intervals, lifestyle modifications and interventions based on the current BP reading as listed in the "Recommended Blood Pressure Follow-Up Interventions" listed below.

**Recommended Lifestyle Modifications** - The JNC 7 report outlines lifestyle modifications which must include one or more of the following as indicated:

- Weight Reduction
- Dietary Approaches to Stop Hypertension (DASH) Eating Plan
- Dietary Sodium Restriction
- Increased Physical Activity
- Moderation in alcohol (ETOH) Consumption

**Second Hypertensive Reading** - Requires a BP reading of Systolic BP  $\geq$  140 mmHg OR Diastolic BP  $\geq$  90 mmHg during the current encounter AND a most recent BP reading within the last 12 months Systolic BP  $\geq$  140 mmHg OR Diastolic BP  $\geq$  90 mmHg

**Second Hypertensive BP Reading Interventions** - The JNC 7 report outlines BP follow-up interventions for a second hypertensive BP reading and must include one or more of the following as indicated:

- Anti-Hypertensive Pharmacologic Therapy
- Laboratory Tests
- Electrocardiogram (ECG)

## **Recommended Blood Pressure Follow-up Interventions-**

- Normal BP: No follow-up required for Systolic BP  $<$ 120 mmHg AND Diastolic BP  $<$  80 mmHg
- Pre-Hypertensive BP: Follow-up with rescreen every year with systolic BP of 120 – 139 mmHg OR diastolic BP of 80 – 89 mmHg AND recommended lifestyle modifications OR referral to Alternate/Primary Care Provider
- First Hypertensive BP Reading: Patients with one elevated reading of systolic BP  $\geq$  140 mmHg OR diastolic BP  $\geq$  90 mmHg:
  - Follow-up with rescreen  $>$  1 day and  $<$  4 weeks AND recommend lifestyle modifications OR referral to Alternative/Primary Care Provider
- Second Hypertensive BP Reading: Patients with second elevated reading of systolic BP  $\geq$  140 mmHg OR diastolic BP  $\geq$  90 mmHg:
  - Follow-up with Recommended lifestyle modifications AND one or more of the Second Hypertensive Reading Interventions OR referral to Alternative/Primary Care Provider

## Recommended Blood Pressure Follow-Up Table

BP Classification	Systolic BP mmHg	Diastolic BP mmHg	Recommended Follow-Up (must include all indicated actions for each BP Classification)
<b>Normal BP Reading</b>	< 120	AND < 80	<ul style="list-style-type: none"> <li>No Follow-Up required</li> </ul>
<b>Pre-Hypertensive BP Reading</b>	≥ 120 AND ≤ 139	OR ≥ 80 AND ≤ 89	<ul style="list-style-type: none"> <li>Rescreen BP within a minimum of 1 year <b>AND</b> Recommend Lifestyle Modifications</li> <li><b>OR</b></li> <li>Referral to Alternative/Primary Care Provider</li> </ul>
<b>First Hypertensive BP Reading</b>	≥ 140	OR ≥ 90	<ul style="list-style-type: none"> <li>Rescreen BP within a minimum of &gt; 1 day and &lt; 4 weeks <b>AND</b> Recommend Lifestyle Modifications</li> <li><b>OR</b></li> <li>Referral to Alternative/Primary Care Provider</li> </ul>
<b>Second Hypertensive BP Reading</b>	≥ 140	OR ≥ 90	<ul style="list-style-type: none"> <li>Recommend Lifestyle Modifications <b>AND</b> 1 or more of the Second Hypertensive Reading Interventions (see definitions)</li> <li><b>OR</b></li> <li>Referral to Alternative/Primary Care Provider</li> </ul>

**Not Eligible** – A patient is not eligible if one or more of the following reason(s) are documented:

- Patient has an active diagnosis of hypertension
- Patient refuses to participate (either BP measurement or follow-up)
- Patient is in an urgent or emergent situation where time is of the essence and to delay treatment would jeopardize the patient’s health status. This may include but is not limited to severely elevated BP when immediate medical treatment is indicated

### **Numerator Quality-Data Coding Options for Reporting Satisfactorily:**

#### **Normal Blood Pressure Reading Documented, Follow-Up not Required**

**Performance Met: G8783:**

Normal blood pressure reading documented, follow-up not required

**OR**

**Pre-Hypertensive or Hypertensive Blood Pressure Reading Documented, AND Indicated Follow-Up Documented**  
**Performance Met: G8950:**

Pre-Hypertensive or Hypertensive blood pressure reading documented, AND the indicated follow-up is documented

**OR**

**Patient not Eligible for measure**

**Other Performance Exclusion: G8784:** Patient not eligible (e.g., documentation the patient is not eligible due to active diagnosis of hypertension, patient refuses, urgent or emergent situation, documentation the patient is not eligible)

**OR**

**Blood Pressure Reading not Documented, Reason not Given**

**Performance Not Met: G8785:** Blood pressure reading not documented, reason not given

**OR**

**Pre-Hypertensive or Hypertensive Blood Pressure Reading Documented, Indicated Follow-Up not Documented, Reason not Given**

**Performance Not Met: G8952:** Pre-Hypertensive or Hypertensive blood pressure reading documented, indicated follow-up not documented, reason not given

**RATIONALE:**

Hypertension is a prevalent condition that affects approximately 66.9 million people in the United States. It is estimated that about 20-40% of the adult population has hypertension; the majority of people over age 65 have a hypertension diagnosis (Appleton SL, et. al., 2012 and Luehr D, et. al., 2012). Winter (2013) noted that 1 in 3 American adults have hypertension and the lifetime risk of developing hypertension is 90% (Winter KH, et. al., 2013). The African American population or non-Hispanic Blacks, the elderly, diabetics and those with chronic kidney disease are at increased risk of stroke, myocardial infarction and renal disease. Non-Hispanic Blacks have the highest prevalence at 38.6% (Winter KH, et. al., 2013). Hypertension is a major risk factor for ischemic heart disease, left ventricular hypertrophy, renal failure, stroke and dementia (Luehr D, et. al., 2012).

Hypertension is the most common reason for adult office visits other than pregnancy. Garrison (2013) stated that in 2007, 42 million ambulatory visits were attributed to hypertension (Garrison GM and Oberhelman S, 2013). It also has the highest utilization of prescription drugs. Numerous resources and treatment options are available, yet only about 40-50% of the hypertensive patients have their blood pressure under control (<140/90) (Appleton SL, et. al., 2012, Luehr D, et. al., 2012). In addition to medication non-compliance, poor outcomes are also attributed to poor adherence to lifestyle changes such as a low-sodium diet, weight loss, increased exercise and limiting alcohol intake. Many adults find it difficult to continue medications and lifestyle changes when they are asymptomatic. Symptoms of elevated blood pressure usually do not occur until secondary problems arise such as with vascular diseases (myocardial infarction, stroke, heart failure and renal insufficiency) (Luehr D, et. al., 2012).

Appropriate follow-up after blood pressure measurement is a pivotal component in preventing the progression of hypertension and the development of heart disease. Detection of marginally or fully elevated blood pressure by a specialty clinician warrants referral to a provider familiar with the management of hypertension and prehypertension. The 2010 ACCF/AHA Guideline for the Assessment of Cardiovascular Risk in Asymptomatic Adults continues to support using a global risk score such as the Framingham Risk Score, to assess risk of coronary heart disease (CHD) in all asymptomatic adults (Greenland P, et. al., 2010). Lifestyle modifications have demonstrated effectiveness in lowering blood pressure (JNC 7, 2003). The synergistic effect of several lifestyle modifications results in greater benefits than a single modification alone. Baseline diagnostic/laboratory testing establishes if a co-existing underlying condition is the etiology of hypertension and evaluates if end organ damage from hypertension has already occurred. Landmark trials such as ALLHAT have repeatedly proven the efficacy of



pharmacologic therapy to control blood pressure and reduce the complications of hypertension. Follow-up intervals based on blood pressure control have been established by the JNC 7 and the USPSTF.

**CLINICAL RECOMMENDATION STATEMENTS:**

The U.S. Preventive Services Task Force (USPSTF) recommends screening for high blood pressure in adults age 18 years and older. This is a grade A recommendation.

**COPYRIGHT:**

These measures were developed by Quality Insights of Pennsylvania as a special project under the Quality Insights' Medicare Quality Improvement Organization (QIO) contract HHSM-500-2005-PA001C with the Centers for Medicare & Medicaid Services. These measures are in the public domain.

Limited proprietary coding is contained in the measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. Quality Insights of Pennsylvania disclaims all liability for use or accuracy of any Current Procedural Terminology (CPT [R]) or other coding contained in the specifications. CPT® contained in the Measures specifications is copyright 2004- 2015 American Medical Association. All Rights Reserved. These performance measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.

**THE MEASURES AND SPECIFICATIONS ARE PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND.**

---

Specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Web-Based Tool](#).

**Measure Type:** Process

**Measure #66 (NQF 0002, e-CQM CMS 146v4) Appropriate Testing for Children with Pharyngitis – National Quality Strategy Domain: Efficiency and Cost Reduction**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:  
REGISTRY ONLY**

**DESCRIPTION:**

Percentage of children 3-18 years of age who were diagnosed with pharyngitis, ordered an antibiotic and received a group A streptococcus (strep) test for the episode

**INSTRUCTIONS:**

This measure is to be reported once for each occurrence of pharyngitis during the reporting period. Claims data will be analyzed to determine unique occurrences. This measure is intended to reflect the quality of services provided for the primary management of patients with pharyngitis who were dispensed an antibiotic. 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 denominator coding.

**Measure Reporting via Registry:**

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

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data. There are no allowable performance exclusions for this measure.

**DENOMINATOR:**

Children 3 through 18 years of age who had an outpatient or emergency department (ED) visit with a diagnosis of pharyngitis during the measurement period and an antibiotic ordered on or three days after the visit

**Denominator Instructions:** To determine eligibility, look for any of the listed antibiotic drugs below in the 30 days prior to the visit with the pharyngitis diagnosis. As long as there are no prescriptions for the listed antibiotics during this time period, the patient is eligible for denominator inclusion.

**Denominator Criteria (Eligible Cases):**

Patients aged 3 through 18 years on date of encounter

**AND**

**Diagnosis for pharyngitis (ICD-10-CM):** J02.0, J02.9, J03.00, J03.01, J03.80, J03.81, J03.90, J03.91

**AND**

**Patient encounter during the reporting period (CPT or HCPCS):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99218, 99219, 99220, 99281, 99282, 99283, 99284, 99285, G0402

**AND**

**Prescribed or dispensed antibiotic:** G8711

**Table 1 - Antibiotic Medications**

Description	Prescription
Aminopenicillins	<ul style="list-style-type: none"> <li>• Amoxicillin</li> <li>• Ampicillin</li> </ul>
Beta-lactamase inhibitors	<ul style="list-style-type: none"> <li>• Amoxicillin-clavulanate</li> </ul>

Description	Prescription
First generation cephalosporins	<ul style="list-style-type: none"> <li>• Cefadroxil</li> <li>• Cephalexin</li> <li>• Cefazolin</li> </ul>
Folate antagonist	<ul style="list-style-type: none"> <li>• Trimethoprim</li> </ul>
Lincomycin derivatives	<ul style="list-style-type: none"> <li>• Clindamycin</li> </ul>
Macrolides	<ul style="list-style-type: none"> <li>• Azithromycin</li> <li>• Erythromycin ethylsuccinate</li> <li>• Clarithromycin</li> <li>• Erythromycin lactobionate</li> <li>• Erythromycin</li> <li>• Erythromycin stearate</li> </ul>
Miscellaneous antibiotics	<ul style="list-style-type: none"> <li>• Erythromycin-sulfisoxazole</li> </ul>
Natural penicillins	<ul style="list-style-type: none"> <li>• Penicillin G potassium</li> <li>• Penicillin V potassium</li> <li>• Penicillin G sodium</li> </ul>
Penicillinase-resistant penicillins	<ul style="list-style-type: none"> <li>• Dicloxacillin</li> </ul>
Quinolones	<ul style="list-style-type: none"> <li>• Ciprofloxacin</li> <li>• Moxifloxacin</li> <li>• Levofloxacin</li> <li>• Ofloxacin</li> </ul>
Second generation cephalosporins	<ul style="list-style-type: none"> <li>• Cefaclor</li> <li>• Cefuroxime</li> <li>• Cefprozil</li> </ul>
Sulfonamides	<ul style="list-style-type: none"> <li>• Sulfamethoxazole-trimethoprim</li> <li>• Sulfisoxazole</li> </ul>
Tetracyclines	<ul style="list-style-type: none"> <li>• Doxycycline</li> <li>• Tetracycline</li> <li>• Minocycline</li> </ul>
Third generation cephalosporins	<ul style="list-style-type: none"> <li>• Cefdinir</li> <li>• Cefbuten</li> <li>• Cefixime</li> <li>• Cefditoren</li> <li>• Cefpodoxime</li> <li>• Ceftriaxone</li> </ul>

**NUMERATOR:**

Children with a group A streptococcus test in the 7-day period from 3 days prior through 3 days after the pharyngitis episode date

**Numerator Instructions:** For performance, the measure will be calculated as the number of patient encounters where diagnosed with pharyngitis, dispensed an antibiotic and received a group A streptococcus (strep) test for the episode over the total number of encounters in the denominator (patients aged 3 through 18 years with an outpatient or ED visit and an antibiotic ordered on or three days after the visit). A higher score indicates appropriate treatment of children with pharyngitis (e.g., the proportion for whom antibiotics were prescribed with an accompanying step test).

**Numerator Options:**  
**Performance Met:**

Group A Strep Test Performed (3210F)

**OR**

**Performance Not Met:**

Group A Strep Test not Performed, reason not otherwise specified (**3210F with 8P**)

**RATIONALE:**

Group A streptococcal bacterial infections and other infections that cause pharyngitis (which are most often viral) often produce the same signs and symptoms (IDSA 2002). The American Academy of Pediatrics, the Centers for Disease Control and Prevention, and the Infectious Diseases Society of America all recommend a diagnostic test for Strep A to improve diagnostic accuracy and avoid unnecessary antibiotic treatment (Linder et al. 2005). A study on antibiotic treatment of children with sore throat found that although only 15 to 36 percent of children with sore throat have Strep A pharyngitis, physicians prescribed antibiotics to 53 percent of children with a chief complaint of sore throat between 1995 and 2003 (Linder et al., 2005).

**CLINICAL RECOMMENDATION STATEMENTS:**

Institute for Clinical Systems Improvement (ICSI) (2007)

Reduce unnecessary use of antibiotics. Antibiotic treatment should be reserved for a bacterial illness. Diagnosis of group A beta streptococcal Pharyngitis should be made by laboratory testing rather than clinically.

Infectious Disease Society of America (Bisno et al. 2002)

The signs and symptoms of group A streptococcal and other (most frequently viral) pharyngitides overlap broadly. Therefore, unless the physician is able with confidence to exclude the diagnosis of streptococcal pharyngitis on epidemiological and clinical grounds alone, a laboratory test should be done to determine whether group A streptococci are present in the pharynx.

With the exception of very rare infections by certain other pharyngeal bacterial pathogens (e.g., *Corynebacterium diphtheriae* and *Neisseria gonorrhoeae*), antimicrobial therapy is of no proven benefit as treatment for acute pharyngitis due to bacteria other than group A streptococci. Therefore, it is extremely important that physicians exclude the diagnosis of group A streptococcal pharyngitis to prevent inappropriate administration of antimicrobials.

Michigan Quality Improvement Consortium (2007)

Probability of group A beta hemolytic streptococci (GABHS): Low; Testing: None; Treatment: Symptomatic treatment only. Avoid antibiotics. Probability of GABHS: Intermediate or High; Testing: Throat Culture (TC) OR Rapid Screen; Treatment: If TC is positive, use antibiotics. If TC is negative, use symptomatic treatment only. Avoid antibiotics. If treatment is started and culture result is negative, stop antibiotics. If Rapid Screen is positive, use antibiotics. If Rapid Screen is negative, culture (Culture is optional for age 16 and over) and only use antibiotics if throat culture is positive. (Michigan, 2007)

**COPYRIGHT:**

These performance measures were developed and are owned by the National Committee for Quality Assurance ("NCQA"). These performance measures are not clinical guidelines and do not establish a standard of medical care. NCQA makes no representations, warranties, or endorsement about the quality of any organization or physician that uses or reports performance measures and NCQA has no liability to anyone who relies on such measures. NCQA holds a copyright in this measure and can rescind or alter this measure at any time. Users of the measure shall not have the right to alter, enhance, or otherwise modify the measure and shall not disassemble, recompile, or reverse engineer the source code or object code relating to the measure. Anyone desiring to use or reproduce the measure without modification for a noncommercial purpose may do so without obtaining any approval from NCQA. All commercial uses must be approved by NCQA and are subject to a license at the discretion of NCQA. Use by health care providers in connection with their own practices is not commercial use. A "commercial use" refers to any sale, license, or distribution of a measure for commercial gain, or incorporation of a measure into any product or service that is sold, licensed, or distributed for commercial gain, even if there is no actual

charge for inclusion of the measure. ©2004-2016 National Committee for Quality Assurance, all rights reserved.

Performance measures developed by NCQA for CMS may look different from the measures solely created and owned by NCQA.

CPT® contained in the Measures specifications is copyright 2004-2015 American Medical Association.

---

Specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Web-Based Tool](#).

**Measure Type:** Process

**Measure #238 (NQF 0022, e-CQM CMS 156v4) Appropriate Testing for  
Children with Pharyngitis – National Quality Strategy Domain: Patient Safety**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:  
REGISTRY ONLY**

**DESCRIPTION:**

Percentage of patients 66 years of age and older who were ordered high-risk medications. Two rates are reported.

1. Percentage of patients who were ordered at least one high-risk medication.
2. Percentage of patients who were ordered at least two different high-risk medications

**INSTRUCTIONS:**

This measure is to be reported a minimum of once per reporting period for patients seen during the reporting period. There is no diagnosis associated with this measure. This measure may be reported by eligible professionals who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

**This measure will be calculated with 2 performance rates:**

1. Percentage of patients who were ordered at least one high-risk medication
2. Percentage of patients who were ordered at least two different high-risk medications

Eligible professionals should continue to report the measure as specified, with no additional steps needed to account for multiple performance rates.

**Measure Reporting via Registry:**

CPT or HCPCS codes and patient demographics are used to identify visits that are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data. There are no allowable performance exclusions for this measure.

**THERE ARE TWO REPORTING CRITERIA FOR THIS MEASURE:**

- 1) **Percentage of patients who were ordered at least one high-risk medication**

**OR**

- 2) **Percentage of patients who were ordered at least two different high-risk medications**

**REPORTING CRITERIA 1: PERCENTAGE OF PATIENTS WHO WERE ORDERED AT LEAST ONE  
HIGH-RISK MEDICATION**

**DENOMINATOR (REPORTING CRITERIA 1):**

Patients 66 years and older who had a visit during the measurement period

**Denominator Criteria (Eligible Cases) 1:**

Patients aged  $\geq 66$  years on date of encounter

**AND**

**Patient encounter during reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, G0438, G0439

**NUMERATOR (REPORTING CRITERIA 1):**

Percentage of patients who were ordered at least one high-risk medication during the measurement period

**Numerator Instructions:**

**INVERSE MEASURE** - A lower calculated performance rate for this measure indicates better clinical care or control. The “Performance Not Met” numerator option for this measure is the representation of the better clinical quality or control. Reporting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures a rate of 100% means all of the denominator eligible patients did not receive the appropriate care or were not in proper control, and therefore an inverse measure at 100% does not qualify for reporting purposes, however any reporting rate less than 100% does qualify.

- A high-risk medication is identified by either of the following: A prescription for medications classified as high risk at any dose and for any duration listed in Table 1
- Prescriptions for medications classified as high risk at any dose with greater than a 90 day cumulative medication duration listed in Table 2

**Definitions:**

**Cumulative Medication Duration** - an individual’s total number of medication days over a specific period; the period counts multiple prescriptions with gaps in between, but does not count the gaps during which a medication was not dispensed.

To determine the cumulative medication duration, determine first the number of the Medication Days for each prescription in the period: the number of doses divided by the dose frequency per day. Then add the Medication Days for each prescription without counting any days between the prescriptions.

**Table 1 – High-Risk Medications at any dose or duration**

Description	Prescription
Anticholinergics (excludes TCAs), first-generation antihistamines	<ul style="list-style-type: none"> <li>• Brompheniramine</li> <li>• Carbinoxamine</li> <li>• Chlorpheniramine</li> <li>• Clemastine</li> <li>• Cyproheptadine</li> <li>• Dexbrompheniramine</li> <li>• Dexchlorpheniramine</li> <li>• Diphenhydramine (oral)</li> <li>• Doxylamine</li> <li>• Hydroxyzine</li> <li>• Promethazine</li> <li>• Triprolidine</li> </ul>
Anticholinergics (excludes TCAs), anti-Parkinson agents	<ul style="list-style-type: none"> <li>• Benztropine (oral)</li> <li>• Trihexyphenidyl</li> </ul>
Antithrombotics	<ul style="list-style-type: none"> <li>• Dipyridamole, oral short-acting (does not apply to the extended-release combination with aspirin)</li> <li>• Ticlopidine</li> </ul>
Cardiovascular, alpha agonists, central	<ul style="list-style-type: none"> <li>• Guanabenz</li> <li>• Guanfacine</li> <li>• Methyldopa</li> </ul>
Cardiovascular, other	<ul style="list-style-type: none"> <li>• Disopyramide</li> <li>• Nifedipine, immediate release</li> </ul>

<b>Description</b>	<b>Prescription</b>	
Central nervous system, tertiary TCAs	<ul style="list-style-type: none"> <li>• Amitriptyline</li> <li>• Clomipramine</li> </ul>	<ul style="list-style-type: none"> <li>• Imipramine</li> <li>• Trimipramine</li> </ul>
Central nervous system, barbiturates	<ul style="list-style-type: none"> <li>• Amobarbital</li> <li>• Butabarbital</li> <li>• Butalbital</li> <li>• Mephobarbital</li> </ul>	<ul style="list-style-type: none"> <li>• Pentobarbital</li> <li>• Phenobarbital</li> <li>• Secobarbital</li> </ul>
Central nervous system, vasodilators	<ul style="list-style-type: none"> <li>• Ergot mesylates</li> </ul>	<ul style="list-style-type: none"> <li>• Isoxsuprine</li> </ul>
Central nervous system, other	<ul style="list-style-type: none"> <li>• Thioridazine</li> <li>• Chloral Hydrate</li> </ul>	<ul style="list-style-type: none"> <li>• Meprobamate</li> </ul>
Endocrine system, estrogens with or without progestins; include only oral and topical patch products	<ul style="list-style-type: none"> <li>• Conjugated estrogen</li> <li>• Esterified estrogen</li> </ul>	<ul style="list-style-type: none"> <li>• Estradiol</li> <li>• Estropipate</li> </ul>
Endocrine system, sulfonylureas, long-duration	<ul style="list-style-type: none"> <li>• Chlorpropamide</li> </ul>	<ul style="list-style-type: none"> <li>• Glyburide</li> </ul>
Endocrine system, other	<ul style="list-style-type: none"> <li>• Desiccated thyroid</li> </ul>	<ul style="list-style-type: none"> <li>• Megestrol</li> </ul>
Gastrointestinal system, other	<ul style="list-style-type: none"> <li>• Trimethobenzamide</li> </ul>	
Pain medications, skeletal muscle relaxants	<ul style="list-style-type: none"> <li>• Carisoprodol</li> <li>• Chlorzoxazone</li> <li>• Cyclobenzaprine</li> </ul>	<ul style="list-style-type: none"> <li>• Metaxalone</li> <li>• Methocarbamol</li> <li>• Orphenadrine</li> </ul>
Pain medications, other	<ul style="list-style-type: none"> <li>• Indomethacin</li> <li>• Ketorolac, includes parenteral</li> </ul>	<ul style="list-style-type: none"> <li>• Meperidine</li> <li>• Pentazocine</li> </ul>

**Table 2 - High-Risk Medications With Days Supply Criteria**

<b>Description</b>	<b>Prescription</b>		<b>Days Supply Criteria</b>
Anti-Infectives, other	<ul style="list-style-type: none"> <li>• Nitrofurantoin</li> <li>• Nitrofurantoin macrocrystals</li> </ul>	<ul style="list-style-type: none"> <li>• Nitrofurantoin macrocrystals-monohydrate</li> </ul>	>90 days
Nonbenzodiazepine hypnotics	<ul style="list-style-type: none"> <li>• Eszopiclone</li> <li>• Zaleplon</li> </ul>	<ul style="list-style-type: none"> <li>• Zolpidem</li> </ul>	>90 days



**NUMERATOR NOTE:** Some high-risk medications are not included in this specific measure but should be avoided above a specified average daily dose. These medications are listed in table DAE-C. To calculate an average daily dose multiply the quantity of pills ordered by the dose of each pill and divide by the days' supply. For example, a prescription for a 30-day supply of digoxin containing 15 pills, 0.250 mg each pill, has an average daily dose of 0.125 mg.

**Table DAE-C: High-Risk Medications With Average Daily Dose Criteria**

Description	Prescription	Average Daily Dose Criteria
Alpha agonists, central	<ul style="list-style-type: none"> <li>Reserpine</li> </ul>	>0.1 mg/day
Cardiovascular, other	<ul style="list-style-type: none"> <li>Digoxin</li> </ul>	>0.125 mg/day
Tertiary TCAs (as single agent or as part of combination products)	<ul style="list-style-type: none"> <li>Doexpin</li> </ul>	>6 mg/day

**Numerator Options:**  
**Performance Met:** One high-risk medication ordered (G9365)  
OR  
**Performance Not Met:** One high-risk medication not ordered (G9366)

OR

**REPORTING CRITERIA 2: PERCENTAGE OF PATIENTS WHO WERE ORDERED AT LEAST TWO DIFFERENT HIGH-RISK MEDICATIONS**

**DENOMINATOR (REPORTING CRITERIA 2):**

Patients 66 years and older who had a visit during the measurement period

**Denominator Criteria (Eligible Cases) 2:**

Patients aged ≥ 66 years on date of encounter

**AND**

**Patient encounter during reporting period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, G0438, G0439

**NUMERATOR (REPORTING CRITERIA 2):**

Percentage of patients who were ordered at least two different high-risk medications during the measurement period

**Numerator Instructions:**

**INVERSE MEASURE** - A lower calculated performance rate for this measure indicates better clinical care or control. The "Performance Not Met" numerator option for this measure is the representation of the better clinical quality or control. Reporting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures a rate of 100% means all of the denominator eligible patients did not receive the appropriate care or were not in proper control, and therefore an inverse measure at 100% does not qualify for reporting purposes, however any reporting rate less than 100% does qualify

A high-risk medication is identified by either of the following:

- A prescription for medications classified as high risk at any dose and for any duration listed in Table 1
- Prescriptions for medications classified as high risk at any dose with greater than a 90 day cumulative medication duration listed in Table 2

**Definitions:**

Cumulative Medication Duration – an individual’s total number of medication days over a specific period; the period counts multiple prescriptions with gaps in between, but does not count the gaps during which a medication was not dispensed.

To determine the cumulative medication duration, determine first the number of the Medication Days for each prescription in the period: the number of doses divided by the dose frequency per day. Then add the Medication Days for each prescription without counting any days between the prescriptions.

**Table 1 - High-Risk Medications at any dose or duration**

Description	Prescription
Anticholinergics (excludes TCAs), first-generation antihistamines	<ul style="list-style-type: none"> <li>• Brompheniramine</li> <li>• Carbinoxamine</li> <li>• Chlorpheniramine</li> <li>• Clemastine</li> <li>• Cyproheptadine</li> <li>• Dexbrompheniramine</li> <li>• Dexchlorpheniramine</li> <li>• Diphenhydramine (oral)</li> <li>• Doxylamine</li> <li>• Hydroxyzine</li> <li>• Promethazine</li> <li>• Triprolidine</li> </ul>
Anticholinergics (excludes TCAs), anti-Parkinson agents	<ul style="list-style-type: none"> <li>• Benzotropine (oral)</li> <li>• Trihexyphenidyl</li> </ul>
Antithrombotics	<ul style="list-style-type: none"> <li>• Dipyridamole, oral short-acting (does not apply to the extended-release combination with aspirin)</li> <li>• Ticlopidine</li> </ul>
Cardiovascular, alpha agonists, central	<ul style="list-style-type: none"> <li>• Guanabenz</li> <li>• Guanfacine</li> <li>• Methyl dopa</li> </ul>
Cardiovascular, other	<ul style="list-style-type: none"> <li>• Disopyramide</li> <li>• Nifedipine, immediate release</li> </ul>
Central nervous system, tertiary TCAs	<ul style="list-style-type: none"> <li>• Amitriptyline</li> <li>• Clomipramine</li> <li>• Imipramine</li> <li>• Trimipramine</li> </ul>
Central nervous system, barbiturates	<ul style="list-style-type: none"> <li>• Amobarbital</li> <li>• Butabarbital</li> <li>• Butalbital</li> <li>• Mephobarbital</li> <li>• Pentobarbital</li> <li>• Phenobarbital</li> <li>• Secobarbital</li> </ul>
Central nervous system, vasodilators	<ul style="list-style-type: none"> <li>• Ergot mesylates</li> <li>• Isoxsuprine</li> </ul>
Central nervous system, other	<ul style="list-style-type: none"> <li>• Thioridazine</li> <li>• Chloral Hydrate</li> <li>• Meprobamate</li> </ul>
Endocrine system, estrogens with or without progestins; include only oral and topical patch products	<ul style="list-style-type: none"> <li>• Conjugated estrogen</li> <li>• Esterified estrogen</li> <li>• Estradiol</li> <li>• Estropipate</li> </ul>

Description	Prescription
Endocrine system, sulfonylureas, long-duration	<ul style="list-style-type: none"> <li>Chlorpropamide</li> <li>Glyburide</li> </ul>
Endocrine system, other	<ul style="list-style-type: none"> <li>Desiccated thyroid</li> <li>Megestrol</li> </ul>
Gastrointestinal system, other	<ul style="list-style-type: none"> <li>Trimethobenzamide</li> </ul>
Pain medications, skeletal muscle relaxants	<ul style="list-style-type: none"> <li>Carisoprodol</li> <li>Chlorzoxazone</li> <li>Cyclobenzaprine</li> <li>Metaxalone</li> <li>Methocarbamol</li> <li>Orphenadrine</li> </ul>
Pain medications, other	<ul style="list-style-type: none"> <li>Indomethacin</li> <li>Ketorolac, includes parenteral</li> <li>Meperidine</li> <li>Pentazocine</li> </ul>

**Table 2 - High-Risk Medications With Days Supply Criteria**

Description	Prescription	Days Supply Criteria
Anti-Infectives, other	<ul style="list-style-type: none"> <li>Nitrofurantoin</li> <li>Nitrofurantoin macrocrystals</li> <li>Nitrofurantoin macrocrystals-monohydrate</li> </ul>	>90 days
Nonbenzodiazepine hypnotics	<ul style="list-style-type: none"> <li>Eszopiclone</li> <li>Zaleplon</li> <li>Zolpidem</li> </ul>	>90 days

**NUMERATOR NOTE:** Some high-risk medications are not included in this specific measure but should be avoided above a specified average daily dose. These medications are listed in table DAE-C. To calculate an average daily dose multiply the quantity of pills ordered by the dose of each pill and divide by the days' supply. For example, a prescription for a 30-day supply of digoxin containing 15 pills, 0.250 mg each pill, has an average daily dose of 0.125 mg.

**Table DAE-C: High-Risk Medications With Average Daily Dose Criteria**

Description	Prescription	Average Daily Dose Criteria
Alpha agonists, central	<ul style="list-style-type: none"> <li>Reserpine</li> </ul>	>0.1 mg/day
Cardiovascular, other	<ul style="list-style-type: none"> <li>Digoxin</li> </ul>	>0.125 mg/day
Tertiary TCAs (as single agent or as part of combination products)	<ul style="list-style-type: none"> <li>Doxepin</li> </ul>	>6 mg/day

**Numerator Options:**

**Performance Met:** At least two different high-risk medications ordered (**G9367**)

**OR**

**Performance Not Met:** At least two different high-risk medications not ordered (**G9368**)

**RATIONALE:**

Seniors receiving inappropriate medications are more likely to report poorer health status at follow-up, compared to seniors who receive appropriate medications (Fu, Liu, and Christensen 2004). In 2005, rates of potentially inappropriate medication use in the elderly were as large as or larger than in a 1996 national

sample, highlighting the need for progress in this area (Simon et al. 2005). While some adverse drug events are not preventable, studies estimate that between 30 and 80 percent of adverse drug events in the elderly are preventable (MacKinnon and Hepler 2003).

Reducing the number of inappropriate prescriptions can lead to improved patient safety and significant cost savings. Conservative estimates of extra costs due to potentially inappropriate medications in the elderly average \$7.2 billion a year (Fu, Liu, and Christensen 2004). Medication use by older adults will likely increase further as the U.S. population ages, new drugs are developed, and new therapeutic and preventive uses for medications are discovered (Rothberg et al. 2008). By the year 2030, nearly one in five U.S. residents is expected to be aged 65 years or older; this age group is projected to more than double in number from 38.7 million in 2008 to more than 88.5 million in 2050. Likewise, the population aged 85 years or older is expected to increase almost four-fold, from 5.4 million to 19 million between 2008 and 2050. As the elderly population continues to grow, the number of older adults who present with multiple medical conditions for which several medications are prescribed continues to increase, resulting in polypharmacy (Gray and Gardner 2009).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The measure is based on the literature and key clinical expert consensus processes by Beers in 1997, Zahn in 2001 and an updated process by Fick in 2003, which identified drugs of concern in the elderly based on various high-risk criteria. NCQA's Medication Management expert panel selected a subset of drugs that should be used with caution in the elderly for inclusion in the proposed measure based upon these two lists. NCQA analyzed the prevalence of drugs prescribed according to the Beers and Zhan classifications and determined that drugs identified by Zhan that are classified as never or rarely appropriate would form the basis for the list (Fick 2003).

Certain medications (MacKinnon 2003) are associated with increased risk of harms from drug side-effects and drug toxicity and pose a concern for patient safety. There is clinical consensus that these drugs pose increased risks in the elderly (Kaufman 2005). Studies link prescription drug use by the elderly with adverse drug events that contribute to hospitalization, increased length of hospital stay, increased duration of illness, nursing home placement and falls and fractures that are further associated with physical, functional and social decline in the elderly (AHRQ 2009).

#### **COPYRIGHT:**

These performance measures were developed and are owned by the National Committee for Quality Assurance ("NCQA"). These performance measures are not clinical guidelines and do not establish a standard of medical care. NCQA makes no representations, warranties, or endorsement about the quality of any organization or physician that uses or reports performance measures and NCQA has no liability to anyone who relies on such measures. NCQA holds a copyright in this measure and can rescind or alter this measure at any time. Users of the measure shall not have the right to alter, enhance, or otherwise modify the measure and shall not disassemble, recompile, or reverse engineer the source code or object code relating to the measure. Anyone desiring to use or reproduce the measure without modification for a noncommercial purpose may do so without obtaining any approval from NCQA. All commercial uses must be approved by NCQA and are subject to a license at the discretion of NCQA. Use by health care providers in connection with their own practices is not commercial use. A "commercial use" refers to any sale, license, or distribution of a measure for commercial gain, or incorporation of a measure into any product or service that is sold, licensed, or distributed for commercial gain, even if there is no actual charge for inclusion of the measure. ©2004-2016 National Committee for Quality Assurance, all rights reserved.

Performance measures developed by NCQA for CMS may look different from the measures solely created and owned by NCQA.

CPT® contained in the Measures specifications is copyright 2004-2015 American Medical Association.

Specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Web-Based Tool](#).

**Measure Type:** Process

**Measure #240 (NQF 0038, e-CQM CMS 117v4) Childhood Immunization Status – National Quality Strategy Domain: Community / Population Health**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:  
REGISTRY ONLY**

**DESCRIPTION:**

Percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV), one measles, mumps and rubella (MMR); three H influenza type B (HiB); three hepatitis B (Hep B); one chicken pox (VZV); four pneumococcal conjugate (PCV); one hepatitis A (Hep A); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday.

**DENOMINATOR:**

Children who turn 2 years of age during the measurement period and who have a visit during the measurement period

**NUMERATOR:**

Children who have evidence showing they received recommended vaccines, had documented history of the illness, had a seropositive test result, or had an allergic reaction to the vaccine by their second birthday

**RATIONALE:**

Infants and toddlers are particularly vulnerable to infectious diseases because their immune systems have not built up the necessary defenses to fight infection (Centers for Disease Control and Prevention 2011). Most childhood vaccines are between 90 and 99 percent effective in preventing diseases (HealthyChildren 2011). Immunization is a critical aspect of preventive care for children. Lack of proper immunization leads to an increase in illness, doctor visits and hospitalizations, all of which translate into higher costs. (Tatzlandrew, Brown, and Halpern). Vaccination of each U.S. birth cohort with the current childhood immunization schedule prevents approximately 42,000 deaths and 20 million cases of disease, and saves nearly \$14 billion in direct costs and \$69 billion in societal costs each year (Zhou 2011; Centers for Disease Control and Prevention 2011b).

Immunizing a child not only protects that child's health but also the health of the community, especially for those who are not immunized or are unable to be immunized due to other health complications (Centers for Disease Control and Prevention 2009). When the majority of the community is immunized against a disease, other members of the community are also protected because herd immunity shields them. (National Institute of Allergy and Infectious Diseases 2010).

**CLINICAL RECOMMENDATION STATEMENT:**

Summary of Recommendations for Child/Teen Immunization (Ages birth through 18 years) (Immunization Action Coalition) based on recommendations of the Advisory Committee on Immunization Practices (ACIP, 2012)

**Hepatitis B (HepB)**

- Vaccinate all children age 0 through 18 years
- Vaccinate all newborns with monovalent vaccine prior to hospital discharge. Give dose #2 at age 1-2 months and the final dose at age 6-18 months (the last dose in the infant series should not be given earlier than age 24 weeks). After the birth dose, the series may be completed using 2 doses of single-antigen vaccine or up to 3 doses of Comvax(r) (ages 2 months, 4 months 12-15 months) or Pediarix(r) (ages 2 months, 4 months, 6 months), which may result in giving a total of 4 doses of hepatitis B vaccine.
- If mother is HBsAg-positive: give the newborn HBIG + dose #1 within 12 hours of birth; complete series at age 6 months or, if using Comvax(r), at age 12-15 months.
- If mother is HBsAg status is unknown: given the newborn dose #1 within 12 hours of birth. If low birth weight (less than 2000 grams), also give HBIG within 12 hours. For infants weighing 2000 grams or more

whose mother is subsequently found to be HBsAg positive, give the infant HBIG ASAP (no later than 7 days of birth) and follow HepB immunization schedule for infants born to HBsAg-positive mothers.

DTaP, DT vaccinations (4 Diphtheria, tetanus, acellular pertussis)

- Give to children at ages 2 months, 4 months, 6 months, 15-18 months, 4-6 years.- May give dose #1 as early as age 6 weeks.
- May give #4 as early as age 12 months if 6 months have elapsed since #3.
- Do not give DTaP/DT to children age 7 years and older.
- If possible, use the same DTaP product for all doses.

Hib (Haemophilus influenzae type b)

- ActHib(r) (PRP-T): give at age 2 months, 4 months, 6 months, 12-15 months (booster dose).
- PedvaxHIB(r) or Comvax(r) (containing PRP-OMP): give at age 2 months, 4 months, 12-15 months (booster dose).
- Dose #1 of Hib vaccine should not be given earlier than age 6 weeks.
- Give final dose (booster dose) no earlier than age 12 months and a minimum of 8 weeks after the previous dose.
- Hib vaccines are interchangeable; however, if different brands of Hib vaccines are administered for dose #1 and dose #2, a total of 3 doses is necessary to complete the primary series in infants.
- Any Hib vaccine may be used for the booster dose.
- Hib is not routinely given to children age 5 years and older.
- Hiberix(r) is approved ONLY for the booster dose at age 12 months through 4 years.

Polio (IPV)

- Give to children at ages 2 months, 4 months, 6-18 months, 4-6 years.
- May give dose #1 as early as age 6 weeks.
- Not routinely recommended for U.S. residents age 18 years and older (except certain travelers).

MMR (Measles, mumps, rubella)

- Give dose #1 at age 12-15 months.
- Give MMR at age 6 through 11 months if traveling internationally; then revaccinate at age 12 months (and at least 4 weeks from previous dose). The dose given at younger than 12 months does not count toward the 2-dose series.
- Give dose #2 at age 4-6 years. Dose #2 may be given earlier if at least 4 weeks since dose #1. For MMRV: dose #2 may be given earlier if at least 3 months since dose #1.
- Give a 2nd dose to all older children and teens with history of only 1 dose.

MMRV may be used in children age 12 months through 12 years. For the first dose of MMR and varicella given at age 12-47 months, either MMR and Varicella (Var) or MMRV may be used. Unless the parent or caregiver expresses a preference for MMRV, CDC recommends that MMR and Var should be given for the first dose in this age group.

Pneumococcal conjugate (PCV13)

- Give at ages 2 months, 4 months, 6 months, 12-15 months.
- Dose #1 may be given as early as age 6 weeks.
- When children are behind on PCV schedule, minimum interval for doses given to children younger than age 12 months is 4 weeks; for doses given at 12 months and older, it is 8 weeks.
- Give 1 dose to unvaccinated healthy children age 24-59 months.
- For high-risk children ages 24-71 months: give 2 doses at least 8 weeks apart if they previously received fewer than 3 doses; give 1 dose at least 8 weeks after the most recent dose if they previously received 3 doses. (High risk: those with sickle cell disease; anatomic or functional asplenia; chronic cardiac, pulmonary, or renal disease; diabetes; cerebrospinal fluid leaks; HIV infection; immunosuppression; diseases associated with immunosuppressive and/or radiation therapy; or who have or will have a cochlear implant.)
- PCV13 is not routinely given to healthy children age 5 years and older.

#### Varicella (Var) (Chickenpox)

- Give dose #1 at age 12-15 months.
- Give dose #2 at age 4-6 years. Dose #2 of Var or MMRV may be given earlier if at least 3 months since dose #1.
- Give a 2nd dose to all older children/teens with history of only 1 dose.
- MMRV may be used in children age 12 months through 12 years. For the first dose of MMR and varicella given at age 12-47 months, either MMR and Var or MMRV may be used. Unless the parent or caregiver expresses a preference for MMRV, CDC recommends that MMR and Var should be given for the first dose in this age group.

#### Hepatitis A (HepA)

- Give 2 doses spaced 6 to 18 months apart to all children at age 1 year (12-23 months).

#### Rotavirus (RV)

- Rotarix(r) (RV1): give at age 2 months, 4 months.
- RotaTeq(r) (RV5): give at age 2 months, 4 months, 6 months.
- May give dose #1 as early as age 6 weeks.
- Give final dose no later than age 8 months 0 days.

#### Influenza (trivalent inactivated influenza (TIV), live attenuated influenza vaccine (LAIV))

- Vaccinate all children and teens age 6 months through 18 years.
- LAIV may be given to healthy, non-pregnant people age 2-49 years.
- Give 2 doses, spaced 4 weeks apart, to children age 6 months through 8 years who 1) are first-time vaccines or 2) failed to receive at least 1 dose of the 2010-2011 vaccine.
- For TIV, give 0.25 mL dose to children age 6-35 months and 0.5 mL dose if age 3 years and older.
- If LAIV and either MMR, Var, and/or yellow fever vaccine are not given on the same day, space them at least 28 days apart.

Technical content reviewed by the Centers for Disease Control and Prevention, January 2012.

#### **COPYRIGHT:**

Physician Performance Measure (Measures) and related data specifications were developed by the National Committee for Quality Assurance (NCQA).

The Measures are copyrighted but can be reproduced and distributed, without modification, for noncommercial purposes (eg, use by healthcare providers in connection with their practices). Commercial use is defined as the sale, licensing, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial use of the Measures requires a license agreement between the user and NCQA. NCQA is not responsible for any use of the Measures.

(c) 2008-2015 National Committee for Quality Assurance. All Rights Reserved.

Limited proprietary coding is contained in the Measure specifications for user convenience. Users of proprietary code sets should obtain all necessary licenses from the owners of the code sets. NCQA disclaims all liability for use or accuracy of any CPT or other codes contained in the specifications.

CPT(R) contained in the Measure specifications is copyright 2004-2014 American Medical Association. LOINC(R) copyright 2004-2014 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms(R) (SNOMED CT[R]) copyright 2004-2014 International Health Terminology Standards Development Organization. ICD-10 copyright 2014 World Health Organization. All Rights Reserved.

These performance Measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.



**THE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.**

Due to technical limitations, registered trademarks are indicated by (R) or [R] and unregistered trademarks are indicated by (TM) or [TM].

---

Specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Web-Based Tool](#).

**Measure Type:** Process

**Measure #311 (NQF 0036, e-CQM CMS 126v4) Use of Appropriate Medications for Asthma – National Quality Strategy Domain: Effective Clinical Care**

**2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:  
REGISTRY ONLY**

**DESCRIPTION:**

Percentage of patients 5-64 years of age who were identified as having persistent asthma and were appropriately prescribed medication during the measurement period.

**DENOMINATOR:**

Patients 5-64 years of age with persistent asthma and a visit during the measurement period

**Exclusions:** Patients with emphysema, COPD, cystic fibrosis or acute respiratory failure during or prior to the measurement period

**NUMERATOR:**

Patients who were dispensed at least one prescription for a preferred therapy during the measurement period

**RATIONALE:**

Asthma is one of the most prevalent chronic diseases, becoming increasingly more commonplace over the past twenty years. Approximately 24.6 million Americans have asthma, and it is responsible for over 3,000 deaths in the U.S. annually (American Lung Association 2010). In 2006, 13.3 million clinical visits (hospital, outpatient, emergency department, and physician offices) were attributed to asthma (Centers for Disease Control and Prevention 2009). The incidence rate, and subsequently the number of asthma-related health visits, is expected to increase by an additional 100 million globally by 2025 (World Health Organization 2007).

Asthma accounts for over \$20 billion spent on health care in the United States. Direct costs, including prescriptions, make up \$15.6 billion of that total. Indirect costs, such as lost productivity, add an additional \$5.1 billion (Centers for Disease Control and Prevention 2009). Inpatient hospitalization accounts for over 50 percent of overall asthma-related costs (Bahadori et al. 2009). In addition to the direct financial burden, asthma is also a leading cause of absenteeism and productivity, accounting for an estimated 14.2 million missed workdays for adults and over 14 million missed school days for children (Akinbami et al. 2009). Studies have shown that the indirect costs of asthma are becoming a growing financial burden on patients, and resulting in significant additional costs (Bahadori et al. 2009).

Appropriate medication management could potentially prevent a significant proportion of asthma-related costs (hospitalizations, emergency room visits and missed work and school days) (Akinbami et al. 2009). The Asthma Regional Council supported this inference, stating that proper management could potentially save at least 25 percent of total asthma costs, or \$5 billion, nationally by reducing health care costs (American Lung Association 2009).

Another initiative, the Children's Health Fund's Childhood Asthma Initiative, examined patients enrolled in an asthma intervention program. Results illustrated that treatment that aligned with clinical guidelines reduced the severity of symptoms experienced, as well as asthma-related events (e.g., hospitalizations, emergency room visits, etc.) (Columbia University 2010). Additionally, subsequent savings attributed to improved clinical outcomes totaled to nearly \$4.2 million or \$4,525 per patient. This translated to a significant reduction in federally subsidized and private insurance-based costs for this population (Columbia University 2010).

**CLINICAL RECOMMENDATION STATEMENT:**

National Heart Lung and Blood Institute/National Asthma and Education Prevention Program (2007)

\* Long-term control medications (include inhaled corticosteroids (ICSs), inhaled long-acting bronchodilators, leukotriene modifiers, cromolyn, theophylline, and immunomodulators) are used daily to achieve and maintain control of persistent asthma. The most effective are those that attenuate the underlying inflammation characteristic of asthma. The Expert Panel defines anti-inflammatory medications as those that cause a reduction in the markers of airway inflammation in airway tissue or airway secretions (e.g., eosinophils, mast cells, activated lymphocytes, macrophages, and cytokines; or Eosinophil cationic protein (ECP) and tryptase; or extravascular leakage of albumin, fibrinogen, or other vascular protein).

\* Inhaled corticosteroids are the preferred treatment option for mild persistent asthma in adults and children. Leukotriene Receptor Antagonists (LTRAs) are an alternative, although not preferred, treatment.

\* Long-acting beta-2 agonists (LABAs) should only be used in combination with ICSs for long-term control and prevention of symptoms in moderate or severe persistent asthma (step 3 care or higher in children =5 years of age and adults). There is a strong recommendation against the use of LABAs as monotherapy. Of the adjunctive therapies available, long-acting beta-2 agonists is the preferred therapy to combine with ICS in youths =12 years of age and adults.

\* The beneficial effects of long-acting beta-2 agonists in combination therapy for the great majority of patients who require more therapy than low-dose ICS alone to control asthma (i.e., require step 3 care or higher) should be weighed against the increased risk of severe exacerbations, although uncommon, associated with the daily use of long-acting beta-2 agonists (see discussion in text).

\* The NHLBI/NAEPP guideline strongly recommends against the use of long-acting beta-2 agonists for the treatment of acute symptoms or exacerbations.

#### **COPYRIGHT:**

Physician Performance Measure (Measures) and related data specifications were developed by the National Committee for Quality Assurance (NCQA).

The Measures are copyrighted but can be reproduced and distributed, without modification, for noncommercial purposes (eg, use by healthcare providers in connection with their practices). Commercial use is defined as the sale, licensing, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial use of the Measures requires a license agreement between the user and NCQA. NCQA is not responsible for any use of the Measures.

(C) 2008-2015 National Committee for Quality Assurance. All Rights Reserved.

Limited proprietary coding is contained in the Measure specifications for user convenience. Users of proprietary code sets should obtain all necessary licenses from the owners of the code sets. NCQA disclaims all liability for use or accuracy of any CPT or other codes contained in the specifications.

CPT(R) contained in the Measure specifications is copyright 2004-2014 American Medical Association. LOINC(R) copyright 2004-2014 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms(R) (SNOMED CT[R]) copyright 2004-2014 International Health Terminology Standards Development Organisation. ICD-10 copyright 2014 World Health Organization. All Rights Reserved.

These performance Measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.

**THE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.**

Due to technical limitations, registered trademarks are indicated by (R) or [R] and unregistered trademarks are indicated by (TM) or [TM].

---

Specifications are copied verbatim from the [2016 Physician Quality Reporting System \(PQRS\) Web-Based Tool](#).

**Measure Type:** Process