

Asthma - Use of Appropriate Medications

Background:

Prescribing of inhaled corticosteroids (ICS) for asthma is not currently a HEDIS metric. However, the vast majority of asthma experts and clinicians use ICS as the treatment of choice for first line therapy in persistent asthma. Thus, the Asthma Action Team and BUMED have endorsed Asthmatics with Steroids as a Population Health Navigator (PHN) metric. Detailed information can be obtained from consulting with asthma experts or reviewing the NHLBI Asthma CPGs.

See Asthma Resource Toolbox, "Provider Training: Evidence Based Diagnosis & Management of Asthma (ppt) at <https://www.nmcphc.med.navy.mil/Bumed/Asthma/HTM1.html>

Measure Definition:

Percentage of enrollees in TRICARE Prime/Plus, with persistent asthma, who are prescribed, inhaled corticosteroids (ICS) as a first-line controller medication.

Benchmark:

DoD 50th-75th-90th percentiles: based on all DoD data on Asthmatics, 2008. Navy Average: 71.4%

Benchmark	DoD Percentiles (50-75-90)
Appropriate ICS Meds for Asthmatics	71.7% - 76.4% - 80.6%

Numerator:

Patients dispensed at least one prescription for a preferred asthma therapy medication (ICS) during the measurement year (e.g. past 12 months).

Denominator:

Number of MTF enrollees, enrolled for the last 12 months, who were identified as having asthma defined by meeting at least one of the criteria listed below during the last 12 months:

1. At least four outpatient asthma visits with asthma as one of the listed diagnoses and at least two asthma medications dispensing events.
2. At least one acute inpatient discharge with asthma as the principle diagnosis.
3. At least one Emergency Department (ED) visit with asthma as the principal diagnosis.
4. At least four medication dispensing events of medications listed in the table below.

5. Patients identified as having persistent asthma because of at least four medication dispensing events, where leukotriene modifiers were the sole medication dispensed in that year, must also have at least one diagnosis of asthma in any setting in the same year as the leukotriene modifier (measurement year or year prior to the measurement year).

Note: Patients with diagnosis codes for emphysema, chronic obstructive pulmonary disease (COPD), cystic fibrosis, or acute respiratory failure are excluded.

Inhaler/Injection dispensing events: Inhalers and injections count as one dispensing event. An inhaler with a 90 day supply is considered one dispensing event. Multiple inhalers or injections of the same medication (identified by Drug ID in the NDC list) filled on the same date of service count as one dispensing event. The dispensing events are attributed to the year in which the prescription is filled.

Data Sources:

- Defense Eligibility Enrollment Registration System (DEERS)
- Purchased Care Claims Data: (NETWORK) (M2)
- Standard Ambulatory Data Record (SADR) (M2)
- Standard Inpatient Data Record (SIDR) (M2)
- Pharmacy Data Transcription Service (PDTS) (Includes prescriptions received from MTF, network and mail order pharmacies)
- Composite Health Care System (CHCS) Managed Care Platform National Enrollment Database (NED) module

Methodology:

- Use DEERS to identify patients enrolled in TRICARE Prime/Plus
- Use M2 (SADR, SIDR, PDTS and Network) claims data to identify patients with persistent asthma
- Use PDTS to identify members with appropriate medication
- Use CHCS Managed Care Platform NED module ad hoc report to identify Primary Care Manager (PCM) in direct care

Data Sources & Codes:

Codes to identify asthma and Outpatient, ED, and inpatient asthma encounters:

Description	Current Procedural Technology (CPT) Codes	ICD-9-CM Codes
Acute Inpatient	M2 does not use five digit CPT Codes	493
ED Services	99281-99285	493
Outpatient Visits	99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99382-99386, 99392-99396, 99401-99404, 99411, 99412, 99420, 99429	493

Codes to *exclude* members with COPD and emphysema:

Description	ICD-9-CM Codes
Emphysema	492, 506.4, 518.1, 518.2
COPD	491.2, 493.2, 496, 506.4
Cystic Fibrosis	277.0
Acute Respiratory Failure	518.81

Asthma Medications

Descriptions	Prescriptions		
<i>Preferred Asthma Therapy</i>			
Antiasthmatic combinations	<ul style="list-style-type: none"> • dyphylline-guaifenesin 	<ul style="list-style-type: none"> • guaifenesin-theophylline 	<ul style="list-style-type: none"> • potassium iodide-theophylline
Antibody inhibitor	<ul style="list-style-type: none"> • omalizumab 		
Inhaled steroid combinations	<ul style="list-style-type: none"> • budesonide-formoterol 	<ul style="list-style-type: none"> • fluticasone-salmeterol 	
Inhaled corticosteroids	<ul style="list-style-type: none"> • beclomethasone • budesonide 	<ul style="list-style-type: none"> • flunisolide • fluticasone CFC free 	<ul style="list-style-type: none"> • mometasone • triamcinolone
Leukotriene modifiers	<ul style="list-style-type: none"> • montelukast 	<ul style="list-style-type: none"> • zafirlukast 	<ul style="list-style-type: none"> • zileuton
Mast cell stabilizers	<ul style="list-style-type: none"> • cromolyn 	<ul style="list-style-type: none"> • nedocromil 	
Methylxanthines	<ul style="list-style-type: none"> • aminophylline • dyphylline 	<ul style="list-style-type: none"> • oxtriphylline • theophylline 	

Action Report (displayed on the MHSPHP):

The Action Report contains patient information for enrollees who met the asthma criteria during the measurement year without regard to age, or continuous enrollment. The Action report also lists a column that indicates if a patient is persistent asthmatic. It displays the date and name of the last asthma numerator medication received within the past 12 months and lists the last ICS and date prescribed. It provides information on how the asthmatic was identified by displaying counts for asthma coded hospitalizations, ED visits, outpatient visits, and dispensing events.