

ASTHMA MEASURES GROUP OVERVIEW

2016 PQRS OPTIONS FOR MEASURES GROUPS:

2016 PQRS MEASURES IN ASTHMA MEASURES GROUP:

- #53 Asthma: Pharmacologic Therapy for Persistent Asthma – Ambulatory Care Setting
- #110 Preventive Care and Screening: Influenza Immunization
- #128 Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan
- #130 Documentation of Current Medications in the Medical Record
- #226 Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention
- #402 Tobacco Use and Help with Quitting Among Adolescents

INSTRUCTIONS FOR REPORTING:

- It is not necessary to submit the measures group-specific intent G-code for registry-based submissions. However, the measures group-specific intent G-code has been created for registry only measures groups for use by registries that utilize claims data.

G8645: I intend to report the Asthma Measures Group

- Report the patient sample method:
20 Patient Sample Method via registries: 20 unique patients (a majority of which must be Medicare Part B FFS patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2016).
- Patient sample criteria for the Asthma Measures Group are patients aged 5 years and older with a specific diagnosis of asthma accompanied by a specific patient encounter:

One of the following diagnosis codes indicating 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

Accompanied by:

One of the following patient encounter codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99341

- To satisfactorily report the Asthma Measures Group requires reporting a numerator option on **all applicable** measures, for each patient within the eligible professional's patient sample, a minimum of once during the reporting period.
- Measure #110 only needs to be reported a minimum of once during the reporting period when the patient's visit included in the patient sample population is between January and March for the 2015-2016 influenza season OR between October and December for the 2016-2017 influenza season. When the patient's office visit is between April and September, Measure #110 is not applicable and will not affect the eligible provider's reporting or performance rate.
- Measures #128, #130, and #226 need only be reported on patients 18 years and older.
- Measure #128 does not need to be reported (is not applicable) if the patient is considered 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
- Measure #402 need only be reported on patients 12-20 years of age.
 - Instructions for qualifying numerator option reporting for each of the measures within the Asthma Measures Group are displayed on the next several pages. The following composite Quality Data Code (QDC) has been created for registries that utilize claims data. This QDC may be reported in lieu of individual QDCs when all quality clinical actions for all applicable measures within the group have been performed.

Composite QDC G8646: All quality actions for the applicable measures in the Asthma Measures Group have been performed for this patient

- Measure Group Reporting Calculations:

Measures groups containing a measure with a 0% performance rate will not be counted as satisfactorily reporting the measures group. The recommended clinical quality action must be performed on at least one patient for each applicable measure within the measures group reported by the eligible professional.

Performance exclusion QDCs are not counted in the performance denominator. If the eligible professional submits all performance exclusion QDCs, the performance rate would be 0/0 (null) and would be considered satisfactorily reporting.

If a measure within a measures group is not applicable to a patient, the patient would not be counted in the performance denominator for that measure (e.g., Preventive Care Measures Group - Measure #39: Screening for Osteoporosis for Women Aged 65-85 Years of Age would not be applicable to male patients according to the patient sample criteria). If the measure is not applicable for all patients within the sample, the performance rate would be 0/0 (null) and would be considered satisfactorily reporting.

- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures group option.

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

DESCRIPTION:

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

NUMERATOR:

Patients who were prescribed long-term control medication

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

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:

Performance Met:

Persistent asthma (mild, moderate or severe) (1038F)

AND

Inhaled corticosteroids prescribed (4140F)

OR

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)

AND

Persistent asthma (mild, moderate or severe) (1038F)

OR

Other Performance Exclusion:

Intermittent asthma (1039F)

OR

Performance Not Met:

Inhaled corticosteroids or alternative long-term control medication not prescribed, reason not otherwise specified (4140F with 8P)

AND

Persistent asthma (mild, moderate or severe) (1038F)

▲ Measure #110 (NQF 0041): Preventive Care and Screening: Influenza Immunization -- National Quality Strategy Domain: Community/Population Health

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

NUMERATOR:

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

Numerator Instructions:

- 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.

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 NOTE: *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.*

Numerator Options:

<u>OR</u>	Performance Met:	Influenza immunization administered or previously received (G8482)
	Other Performance Exclusion:	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) (G8483)
<u>OR</u>	Performance Not Met:	Influenza immunization was not administered, reason not given (G8484)

Measure #128 (NQF 0421): Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan -- National Quality Strategy Domain: Community/Population Health

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 ≥ 23 and < 30 kg/m²

Age 18 – 64 years BMI ≥ 18.5 and < 25 kg/m²

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/H²) and is commonly used to classify weight categories. BMI can be calculated using:

Metric Units: BMI = Weight (kg) / (Height (m) x Height (m))

OR

English Units: BMI = Weight (lbs) / (Height (in) x Height (in)) x 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 (e.g., 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 Options:

Performance Met:

BMI is documented within normal parameters and no follow-up plan is required (**G8420**)

OR

Performance Met:

BMI is documented above normal parameters and a follow-up plan is documented (**G8417**)

OR

Performance Met:

BMI is documented below normal parameters and a follow-up plan is documented (**G8418**)

OR

Performance Not Met:

BMI not documented and no reason is given (**G8421**)

OR

Performance Not Met:

BMI documented outside normal parameters, no follow-up plan documented, no reason given (**G8419**)

**Measure #130 (NQF 0419): Documentation of Current Medications in the Medical Record --
National Quality Strategy Domain: Patient Safety**

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

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 Options:

OR

Performance Met:

Eligible professional attests to documenting in the medical record they obtained, updated, or reviewed the patient's current medications (**G8427**)

Other Performance Exclusion:

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 (**G8430**)

OR

Performance Not Met:

Current list of medications not documented as obtained, updated, or reviewed by the eligible professional, reason not given (**G8428**)

▲ Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention -- National Quality Strategy Domain: Community/Population Health

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

NUMERATOR:

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

Definitions:

Tobacco Use – Includes use of any type of tobacco.

Tobacco Cessation 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 intervention report **4004F with 8P**.*

Numerator Options:

<u>Performance Met:</u>	Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user (4004F)
<u>OR</u>	
<u>Performance Met:</u>	Current tobacco non-user (1036F)
<u>OR</u>	
<u>Medical Performance Exclusion:</u>	Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons) (4004F with 1P)
<u>OR</u>	
<u>Performance Not Met:</u>	Tobacco screening OR tobacco cessation intervention not performed, reason not otherwise specified (4004F with 8P)

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

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

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

OR

Performance Met:

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

OR

Performance Not Met:

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

ASTHMA MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

MEASURE #53 - ASTHMA: PHARMACOLOGIC THERAPY FOR PERSISTENT ASTHMA – AMBULATORY CARE SETTING

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)

MEASURE #110 - PREVENTIVE CARE AND SCREENING: INFLUENZA IMMUNIZATION

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 ≥ 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 ≥ 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)

MEASURE #128 - PREVENTIVE CARE AND SCREENING: BODY MASS INDEX (BMI) SCREENING AND FOLLOW-UP PLAN

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/m² 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, Trogdon, 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/m²), underweight (BMI <18.5 kg/m²) 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/m² 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 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/m²) and obesity (BMI ≥30 kg/m²) 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.

MEASURE #130 – DOCUMENTATION OF CURRENT MEDICATIONS IN THE MEDICAL RECORD

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 (ADE) 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) National's Healthcare Disparities Report (2011) identified the rate of adverse drug events (ADE) among Medicare beneficiaries in ambulatory settings 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 sex. 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 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: [Joint Commission's 2015 Ambulatory Care National Patient Safety Goals guide](#)).

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.

MEASURE #226 – PREVENTIVE CARE AND SCREENING: TOBACCO USE: SCREENING AND CESSATION INTERVENTION

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)

MEASURE #402 - TOBACCO USE AND HELP WITH QUITTING AMONG ADOLESCENTS

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)