2017 CMS Web Interface

PREV-9 (NQF 0421): Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan

Measure Steward: CMS

Contents

INTRODUCTION

There are a total of 15 individual measures (including one composite consisting of two measures) included in the 2017 CMS Web Interface targeting high-cost chronic conditions, preventive care, and patient safety. The measures documents are represented individually and contain measure specific information. The corresponding coding documents are posted separately in an Excel format.

The Measure Documents are being provided to allow group practices and Accountable Care Organizations (ACOs) an opportunity to better understand each of the 15 individual measures included in the 2017 CMS Web Interface data submission method. Each Measure Document contains information necessary to submit data through the CMS Web Interface.

Narrative specifications, supporting submission documentation, and calculation flows are provided within each document. Please review all of the measure documentation in its entirety to ensure complete understanding of these measures.

WEB INTERFACE SAMPLING INFORMATION

BENEFICIARY SAMPLING

For more information on the sampling process and methodology please refer to *the 2017 Web Interface Sampling Document*, available at CMS.gov.

NARRATIVE MEASURE SPECIFICATION

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 18 years and older BMI => 18.5 and < 25 kg/m2

IMPROVEMENT NOTATION:
Higher score indicates better quality

INITIAL POPULATION:
All patients 18 years and older on the date of the encounter with at least one eligible encounter during the measurement period

DENOMINATOR:
Equals Initial Population

DENOMINATOR EXCLUSIONS:
- Patients who are pregnant
- Patients receiving palliative care
- Patients who refuse measurement of height and/or weight or refuse follow-up

DENOMINATOR EXCEPTIONS:
Patients with a documented Medical Reason:
- Elderly Patients (65 or older) for whom weight reduction/weight gain would complicate other underlying health conditions such as the following examples:
  - Illness or physical disability
  - Mental illness, dementia, confusion
  - Nutritional deficiency, such as Vitamin/mineral deficiency
- Patients 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:
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 EXCLUSIONS:
Not Applicable

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 (for example a registered dietician, nutritionist, occupational therapist, physical therapist, primary care provider, exercise physiologist, mental health professional or surgeon), pharmacological interventions, dietary supplements, exercise counseling or nutrition counseling.

GUIDANCE:

- There is no diagnosis associated with this measure.
- This measure is to be reported a minimum of once per performance period for patients seen during the performance period.
- This measure may be reported by eligible clinicians 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.

BMI Measurement Guidance:

- Height and Weight - An eligible clinician 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.
- 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 is documented during the encounter or during the previous six months of the current encounter.
- If more than one BMI is reported during the measurement period, the most recent BMI will be used to determine if the performance has been met.
- Review the exclusions criteria to determine those patients that BMI measurement may not be appropriate or necessary.

Follow-Up Plan Guidance:

- 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 or below normal parameters." (See Definitions for examples of follow-up plan treatments).

Variation has been noted in studies exploring optimal BMI ranges for the elderly (see Donini et al., (2012); Holme and Tonstad (2015); and Diehr et al. (2008). Notably however, all these studies have arrived at ranges that differ from the standard range for ages 18 and older, which is >=18.5 and < 25 kg/m2. For instance, both Donini et al. (2012) and Holme and Tonstad (2015) reported findings that suggest that higher BMI (higher than the upper end of 25kg/m2) in the elderly may be beneficial. Similarly, worse outcomes have been associated with being underweight (at a threshold higher than 18.5 kg/m2) at age 65 (Diehr et al. 2008). Because of optimal BMI range variation recommendations from these studies, no specific optimal BMI range for the elderly is used. However, It may be

appropriate to exempt certain patients from a follow-up plan by applying the exception criteria. Review the following to apply the Medical Reason exception criteria:

The Medical Reason exception could include, but is not limited to, the following patients as deemed appropriate by the health care provider:

- Elderly Patients (65 or older) for whom weight reduction/weight gain would complicate other underlying health conditions such as the following examples:
    - Illness or physical disability
    - Mental illness, dementia, confusion
    - Nutritional deficiency such as Vitamin/mineral deficiency
- Patients in an urgent or emergent medical situation where time is of the essence and to delay treatment would jeopardize the patient's health status

SUBMISSION GUIDANCE

PATIENT CONFIRMATION

Establishing patient eligibility for reporting requires the following:

- Determine if the patient's medical record can be found
  - If you can locate the medical record select "Yes"

  OR

  - If you cannot locate the medical record select "No - Medical Record Not Found"

  OR

  - Determine if the patient is qualified for the sample
    - If the patient is deceased, in hospice, moved out of the country or was enrolled in HMO select "Not Qualified for Sample", select the applicable reason from the provided drop-down menu, and enter the date the patient became ineligible

Guidance *Patient Confirmation*

If "No – Medical Record Not Found" or "Not Qualified for Sample" is selected, the patient is completed but not confirmed. The patient will be "skipped" and another patient must be reported in their place, if available. The Web Interface will automatically skip any patient for whom "No – Medical Record Not Found" or "Not Qualified for Sample" is selected in all other measures into which they have sampled.

If "Not Qualified for Sample" is selected and the date is unknown, you may enter the last date of the measurement period (i.e., 12/31/2017).

The Measurement Period is defined as January 1 – December 31, 2017.

NOTE:

- *In Hospice: Select this option if the patient is not qualified for sample due to being in hospice care at any time during the measurement period (this includes non-hospice patients receiving palliative goals or comfort care)*
- *Moved out of Country: Select this option if the patient is not qualified for sample because they moved out of the country any time during the measurement period*
- *Deceased: Select this option if the patient died during the measurement period*
- *HMO Enrollment: Select this option if the patient was enrolled in an HMO at any time during the measurement period (i.e., Medicare Advantage, non-Medicare HMOs, etc.)*

SUBMISSION GUIDANCE

DENOMINATOR CONFIRMATION

- Determine if the patient is qualified for the measure
  - If the patient is qualified for the measure select "Yes"

  OR

  - If there is a denominator exclusion for patient disqualification from the measure select "Denominator Exclusion"

  OR

  - If there is an "other" CMS approved reason for patient disqualification from the measure select "No-Other CMS Approved Reason"

Denominator Exclusion codes can be found in the 2017 Web Interface PREV Coding Document. The Downloadable Resource Mapping Table can be located in Appendix II of this document.

Guidance *Denominator*

If "Denominator Exclusion" or "No – Other CMS Approved Reason" is selected, the patient will be "skipped" and another patient must be reported in their place, if available. The patient will only be removed from the measure for which one of these options was selected, not all Web Interface measures.

CMS Approved Reason may only be selected when approved by CMS. To request a CMS Approved Reason, you would need to provide the patient rank, measure, and reason for request in a Quality Payment Program Service Desk inquiry. A CMS decision will be provided in the resolution of the inquiry. Patients for whom a CMS Approved Reason is selected will be "skipped" and another patient must be reported in their place, if available.

SUBMISSION GUIDANCE

NUMERATOR REPORTING

- Determine if the patient had a BMI documented during the most recent visit or in the last 6 months prior to the most recent visit
  - If the patient has not had a BMI documented select "No"

  OR
  - If the patient has had a BMI calculated select "Yes"

Numerator codes can be found in the 2017 PREV Web Interface Coding Document. The Downloadable Resource Mapping Table can be located in Appendix II of this document.

Guidance ***Numerator***

NOTE:

- *The six month look-back can be calculated as a look-back of <7 months from the most recent encounter*

SUBMISSION GUIDANCE

NUMERATOR REPORTING

- If the patient had a BMI calculated, determine if the most recent BMI is within normal parameters
- If the most recent BMI is outside of normal parameters select "No"

  IF NO

  - If the patient's most recent BMI was not within normal limits, determine if a follow-up plan was documented
    - If there was no follow-up plan documented select "No"

    OR

    - If there was a follow-up plan documented select "Yes"

  OR

  - When a recommended follow-up for an abnormal BMI is not documented for medical reasons select "No - Denominator Exception - Medical Reasons"

  OR

  - If the most recent BMI is within normal parameters select "Yes"

Numerator and Denominator Exception codes can be found in the PREV Coding Document. The Downloadable Resource Mapping Table can be located in Appendix II of this document.

Guidance ***Numerator***

NOTE:

- *Amputees are not considered denominator exceptions*
- *BMI calculation and recommended follow-up plan cannot be completed during a telehealth encounter*

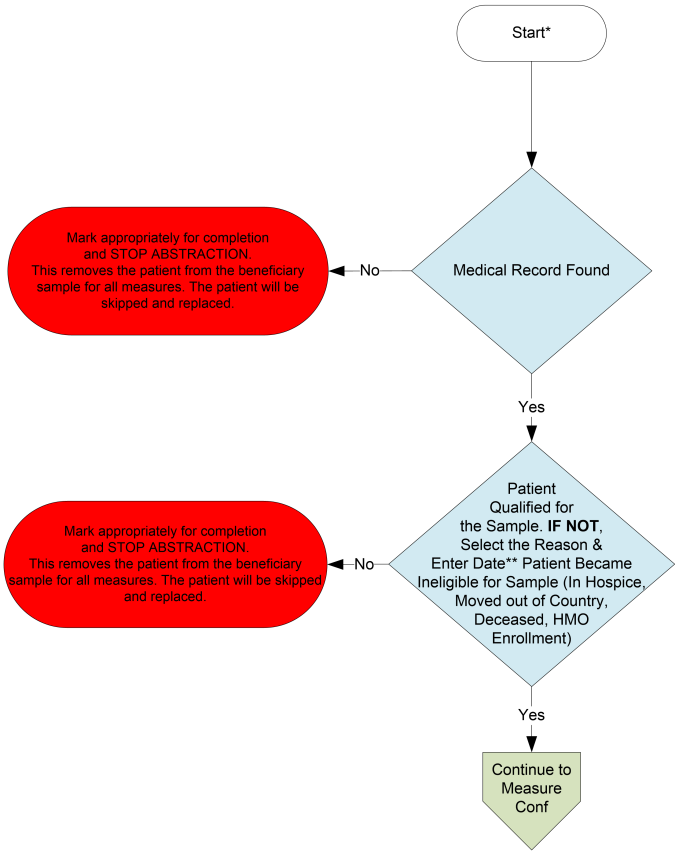
DOCUMENTATION REQUIREMENTS

When submitting data through the CMS Web Interface, the expectation is that medical record documentation is available that supports the action reported in the Web Interface i.e., medical record documentation is necessary to support the information that has been submitted.

Appendix I: Performance Calculation Flow:

Patient Confirmation Flow

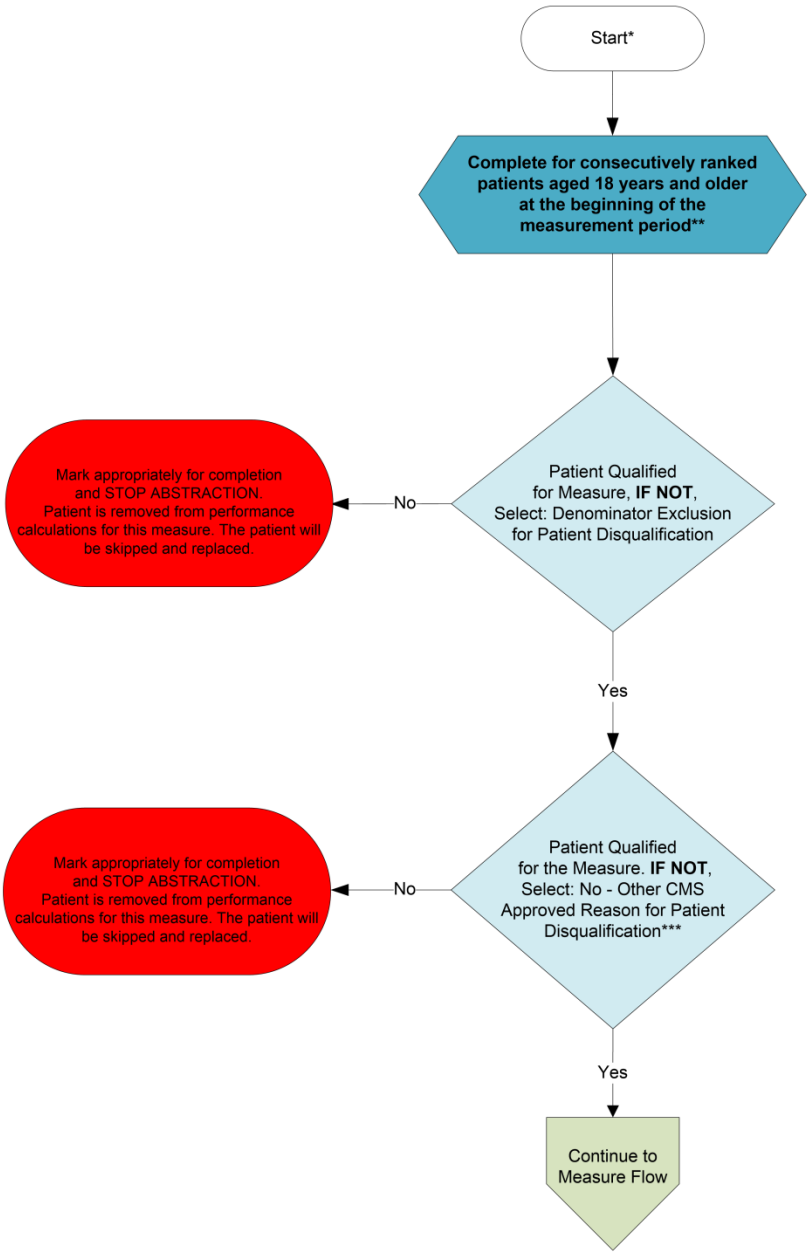
For 2017, confirmation of the “Medical Record Found”, or indicating the patient is “Not Qualified for Sample” with a reason of "In Hospice", "Moved out of Country", "Deceased", or "HMO Enrollment", will only need to be done **once** per patient.



*See the Measure Reporting Document for further instructions on how to report this measure
**If date is unknown, enter 12/31/2017

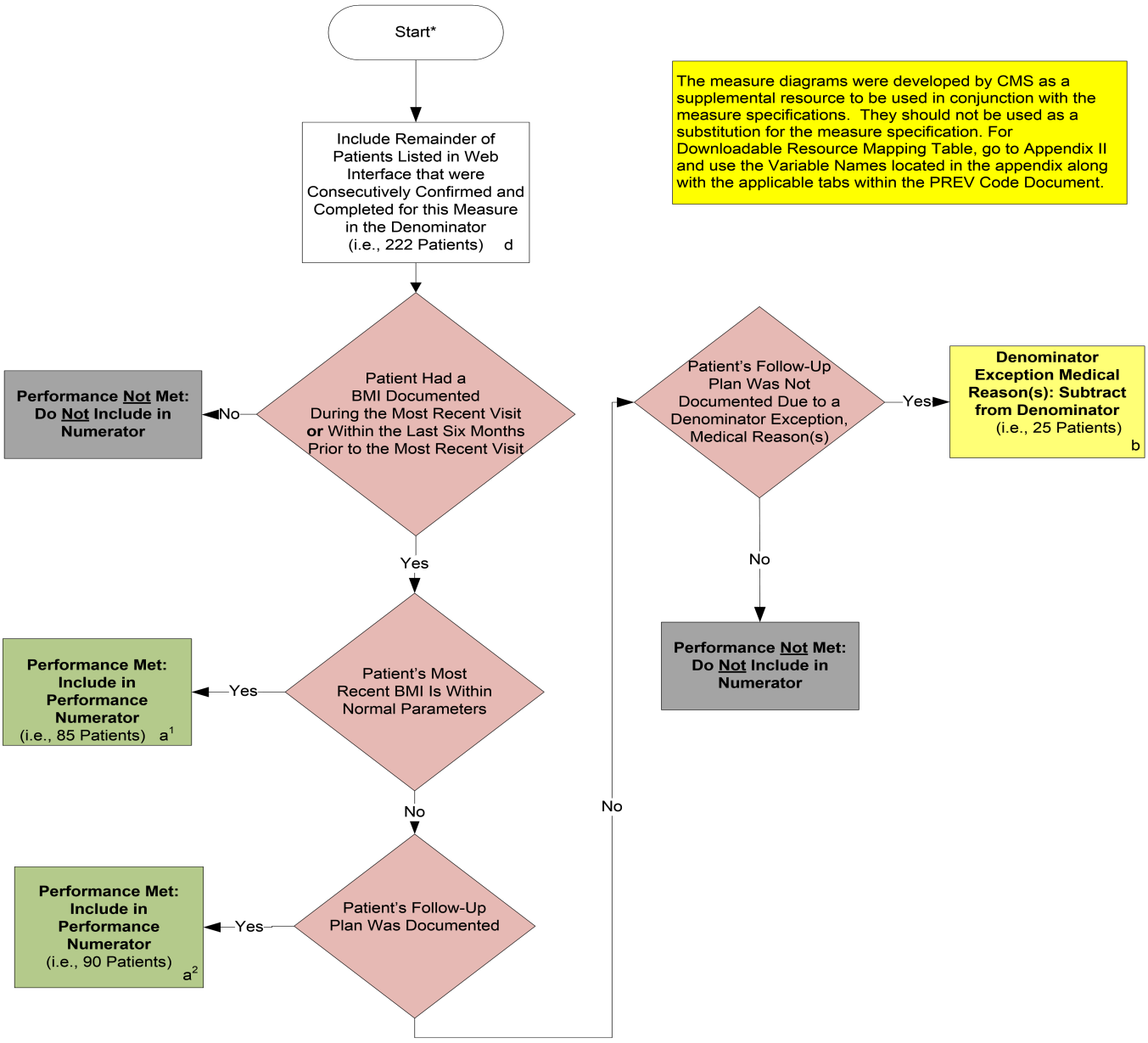
Measure Confirmation Flow for PREV-9

For 2017, measure specific reasons a patient is "Not Confirmed" or excluded for "Denominator Exclusion" or "Other CMS Approved Reason" will need to be done for each measure where the patient appears.



*See the Measure Reporting Document for further instructions on how to report this measure
**Further information regarding patient selection for specific disease and patient care measures can be found in the Web Interface Sampling Methodology Document. For patients who have the incorrect date of birth listed, a change of the patient date of birth by the abstractor may result in the patient no longer qualifying for the PREV-9 measure. If this is the case, the system will automatically remove the patient from the measure requirements.
***"Other CMS Approved Reason" may only be selected if you have received an approval from CMS in the resolution of a requested Quality Payment Program Service Desk Inquiry at qpp@cms.hhs.gov

Measure Flow for PREV-9



SAMPLE CALCULATION:

Performance Rate=

Performance Met (a^1=85 Patients + a^2=90 Patients) / Denominator (d=222 Patients) - Denominator Exception (b=25 Patients) = 175 Patients / 197 Patients = 88.83%

CALCULATION MAY CHANGE PENDING PERFORMANCE MET ABOVE

*See the Measure Reporting Document for further instructions on how to report this measure

Patient Confirmation Flow

For 2017, confirmation of the "Medical Record Found", or indicating the patient is "Not Qualified for Sample" with a reason of "In Hospice", "Moved out of Country", "Deceased", or "HMO Enrollment", will only need to be done once per patient. Refer to the Measure Reporting Document for further instructions.

1. Start Patient Confirmation Flow.

2. Check to determine if Medical Record can be found.
    a. If no, Medical Record not found, mark appropriately for completion and stop abstraction. This removes the patient from the beneficiary sample for all measures. The patient will be skipped and replaced. Stop processing.
    b. If yes, Medical Record found, continue processing.

3. Check to determine if Patient Qualified for the sample.
    a. If no, the patient does not qualify for the sample, select the reason why and enter the date (if date is unknown, enter 12/31/2017) the patient became ineligible for sample. For example; In Hospice, Moved out of Country, Deceased, HMO Enrollment. Mark appropriately for completion and stop abstraction. This removes the patient from the beneficiary sample for all measures. The patient will be skipped and replaced. Stop processing.
    b. If yes, the patient does qualify for the sample; continue to the Measure Confirmation Flow for PREV-9.

Measure Confirmation Flow for PREV-9

For 2017, measure specific reasons a patient is "Not Confirmed" or excluded for "Denominator Exclusion" or "Other CMS Approved Reason" will need to be done for each measure where the patient appears. Refer to the Measure Reporting Document for further instructions.

1. Start Measure Confirmation Flow for PREV-9. Complete for consecutively ranked patients aged 18 years and older at the beginning of the measurement period. Further information regarding patient selection for specific disease and patient care measures can be found in the Web Interface Sampling Methodology Document. For patients who have the incorrect date of birth listed, a change of the patient date of birth by the abstractor may result in the patient no longer qualifying for the PREV-9 measure. If this is the case, the system will automatically remove the patient from the measure requirements.

2. Check to determine if the patient qualifies for the measure (Denominator Exclusion).
    a. If no, the patient does not qualify for the measure select: Denominator Exclusion for patient disqualification. Mark appropriately for completion and stop abstraction. Patient is removed from the performance calculations for this measure. The patient will be skipped and replaced. Stop processing.
    b. If yes, the patient does qualify for the measure, continue processing.

3. Check to determine if the patient qualifies for the measure (Other CMS Approved Reason).
    a. If no, the patient does not qualify for the measure select: No – Other CMS Approved Reason for patient disqualification. Mark appropriately for completion and stop abstraction. Patient is removed from the performance calculations for this measure. The patient will be skipped and replaced. "Other CMS Approved Reason" may only be selected if you have received an approval from CMS in the resolution of a requested Quality Payment Program Service Desk Inquiry at QPP Service Desk. Stop processing.
    b. If yes, the patient does qualify for the measure, continue to the PREV-9 measure flow.

Measure Flow for PREV-9

The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used as a substitution for the measure specifications. For Downloadable Resource Mapping Table, go to Appendix II and use the Variable Names located in the appendix along with the applicable tabs within the PREV Coding Document.

1. Start processing 2017 PREV-9 (NQF 0421) Flow for the patients that qualified for sample in the Patient Confirmation Flow and the Measure Confirmation Flow for PREV-9. Note: Include remainder of patients listed in Web Interface that were consecutively confirmed and completed for this measure in the denominator. For the sample calculation in the flow these patients would fall into the 'd' category (eligible denominator, i.e. 222 patients).

2. Check to determine if the patient had a BMI calculated during the most recent visit or within the last six months prior to the most recent visit.
    a. If no, the patient did not have a BMI calculated during the most recent visit or within the last six months prior to the most recent visit, performance is not met and should not be included in the numerator. Stop processing.
    b. If yes, the patient had a BMI calculated during the most recent visit or within the last six months prior to the most recent visit, continue processing.

3. Check to determine if the patient's most recent BMI is within normal parameters.
    a. If no, the patient's most recent BMI is not within normal parameters, continue processing.
    b. If yes, the patient's most recent BMI is within normal parameters, performance is met and the patient will be included in the numerator. For the sample calculation in the flow these patients would fall into the 'a¹' category (numerator, i.e. 85 patients). Stop processing.

4. Check to determine if the patient's follow-up plan was documented.
    a. If no, the patient's follow-up plan was not documented, continue processing.
    b. If yes, the patient's follow-up plan was documented, performance is met and the patient will be included in the numerator. For the sample calculation in the flow these patients would fall into the 'a²' category (numerator, i.e. 90 patients). Stop processing.

5. Check to determine if the patient's follow-up plan was Not documented for a denominator exception, medical reason(s).
    a. If no, the patient's follow-up plan was Not documented for a denominator exception, medical reason(s), performance is not met and the patient should not be included in the numerator. Stop processing.
    b. If yes, the patient's follow-up plan was Not documented for a denominator exception, medical reason(s), this is a denominator exception and the case should be subtracted from the denominator. For the sample calculation in the flow these patients would fall into the 'b' category (denominator exception, i.e. 25 patients). Stop processing.

Sample Calculation

Performance Rate Equals
Performance Met is category 'a¹ plus a²' in the measure flow (175 patients)
Denominator is category 'd' in the measure flow (222 patients)
Denominator Exception is category 'b' in the measure flow (25 patients)

175 (Performance Met) divided by 197 (Denominator minus Denominator Exception) equals a performance rate of 88.83 percent
Calculation May Change Pending Performance Met

Appendix II: Downloadable Resource Mapping Table

Each data element within this measure's denominator or numerator is defined as a pre-determined set of clinical codes. These codes can be found in the 2017 Web Interface PREV Coding Document.

*PREV-9: Preventive Care and Screening: Screening for Body Mass Index (BMI) Screening and Follow-Up Plan			
Measure Component/Excel Tab	Data Element	Variable Name	Coding System(s)
Denominator Exclusion/ Denominator Exclusion Codes	Exclusion	PREGNANCY_CODE	I9 I10 SNM
		EX_CODE	I9 I10 SNM
		PATIENT_REASON_REFUSED	SNM
Numerator/Numerator Codes/Numerator Drug Codes	BMI Documented	BMI_CODE	LN
		BMI_ABNORMAL_CODE	HCPCS
	BMI Abnormal	BMI_ABNORMAL_CODE	HCPCS
		OVERWEIGHT_CODE	SNM
		UNDERWEIGHT_CODE	SNM
	Follow-up Plan	BMI_ABNORMAL_CODE	HCPCS
		BMI_FOLLOW_UP_CODE	I9 I10 C4 HCPCS SNM
		REFERRAL_CODE	SNM
		BMI_DRUG_CODE	RxNorm (Drug EX=N)
Denominator Exception/ Denominator Exception Codes	Medical Reason	MEDICAL_OTHER_REASON	SNM

** For EHR mapping, the coding within PREV-9 is considered to be all inclusive*

Appendix III: Measure Rationale and Clinical Recommendation Statements

RATIONALE:

BMI Above Normal Parameters

Obesity continues to be a costly public health concern in the United States. This is because obesity is associated with several comorbid health problems including increased risk for coronary artery disease, type 2 diabetes, various types of cancer, gallstones and disability. These comorbid conditions are associated with higher medical care utilization and costs among obese patients (Moyer, 2012, p. 373). Padula, Allen & Nair (2014) examined data from a commercial claims and encounter database to estimate the cost for obesity and associated comorbidities between 2006-2007 and found that on the average, obesity contributed to $1907 more in cost per patient per visit for inpatient and outpatient claims, while the increase in cost for comorbidities ranged from $527 for obesity with congestive heart failure (CHF) to $15, 733 for the combination of obesity, diabetes mellitus, hypertension and depression. Similarly, data from 2006 show that per capita annual medical spending costs attributable to obesity are higher by $1,429 (42 percent) when compared to per capita costs attributable to normal weight patients. The national aggregate cost for obesity related costs (across all payers) was estimated to be equivalent to $147 billion using 2008 dollars (Finkelstein, Trogdon, Cohen & Dietz, 2009). 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)

Against this background of high obesity related costs, CDC 2009 data showed that all states were still lagging behind the Healthy People 2010 obesity target of 15 percent and that the self-reported overall prevalence of obesity among adults had increased 1.1 percentage points in 2007 to 26.7 percent (2010). Most recent data shows that the prevalence of BMI-defined obesity in adults continues to exceed 30% (34.9 overall) and highest among middle-aged adults (34.9). The findings also revealed the prevalence of obesity being higher among black adult women (56.6%) compared with 37.1% of black adult men (Ogden, Carroll, Kit and Flegel, 2013). Despite the high obesity prevalence, and related costs, less than 50% of obese adults in 2010 received advice to exercise or perform physical activity (Barnes & Schoenborn, 2012) indicating a gap in care for a high impact disease condition.

Screening for BMI and follow-up therefore is critical to closing this gap and contributes to quality goals of population health and cost reduction. However, due to concerns for other underlying conditions (such as bone health) or nutrition related deficiencies providers are cautioned to use clinical judgment and take these into account when considering weight management programs for overweight patients, especially the elderly (NHLBI Obesity Education Initiative, 1998, p. 91).

BMI below Normal Parameters

On the other end of the body weight spectrum is underweight (BMI <18.5 kg/m2), which is equally detrimental to population health. When compared to normal weight individuals(BMI 18.5-25 kg/m2), underweight individuals have significantly higher death rates with a Hazard Ratio of 2.27 and 95% confidence intervals (CI) = 1.78, 2.90 (Borrell & Lalitha (2014).

Poor nutrition or underlying health conditions can result in underweight (Fryer & Ogden, 2012). The National Health and Nutrition Examination Survey (NHANES) results from the 2007-2010 indicate that women are more likely to be underweight than men (2012). Therefore patients should be equally screened for underweight and followed up with nutritional counselling to reduce mortality and morbidity associated with underweight.

CLINICAL RECOMMENDATION STATEMENTS:

The US Preventive Health Services Task Force (USPSTF) recommends that clinicians screen 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), the 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/m2, 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/m2) and obesity (BMI >=30 kg/m2) to identify adults who may be at elevated risk of mortality from all causes. They also recommended counseling overweight and obese individuals on their increased risk for CVD, type 2 diabetes, and all-cause mortality, and need for lifestyle changes.

Nutritional safety for the elderly should be considered when recommending weight reduction. "A clinical decision to forego obesity treatment in older adults should be guided by an evaluation of the potential benefits of weight reduction for day-to-day functioning and reduction of the risk of future cardiovascular events, as well as the patient's motivation for weight reduction. Care must be taken to ensure that any weight reduction program minimizes the likelihood of adverse effects on bone health or other aspects of nutritional status" Evidence Category D. (NHLBI Obesity Education Initiative, 1998, p. 91). In addition, weight reduction prescriptions in older persons should be accompanied by proper nutritional counseling and regular body weight monitoring. (NHLBI Obesity Education Initiative, 1998, p. 91).

The possibility that a standard approach to weight loss will work differently in diverse patient populations must be considered when setting expectations about treatment outcomes. Evidence Category B. (NHLBI Obesity Education Initiative, 1998).

Appendix IV: Use Notices, Copyrights, and Disclaimers