Measure #128 (NQF 0421): Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan – 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 ≥ 23 and < 30 kg/m$^2$
- Age 18 – 64 years BMI ≥ 18.5 and < 25 kg/m$^2$

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:
All patients aged 18 years and older

Denominator Criteria (Eligible Cases):
- Patients aged ≥18 years on date of encounter
- 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/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 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/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.
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, Gjøen 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 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 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.

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2016 Claims/Registry Individual Measure Flow
PQRS #128 NQF #0421: Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan

Denominator

Start

Patient Age at Date of Service ≥ 18 Years

Not Included in Eligible Population/Denominator

Encounter Codes as Listed in Denominator* (1/1/2016 thru 12/31/2016)

Include in Eligible Population/Denominator** (8 patients)

Numerator

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

Yes

Reporting Met + Performance Met G8420 or equivalent (1 patient) a

No

BMI** Documented as Above Normal Parameters, And Follow-Up Plan** Documented

Yes

Reporting Met + Performance Met G8417 or equivalent (1 patient) a

No

BMI** Documented as Below Normal Parameters, And Follow-Up Plan** Documented

Yes

Reporting Met + Performance Met G8416 or equivalent (1 patient) a

No

BMI Not Documented, Patient Not Eligible**

Yes

Reporting Met + Performance Exclusion G8422 or equivalent (2 patients) b

No

BMI Documented Outside of Normal Limits, Follow-Up Plan Not Documented, Patient Not Eligible**

Yes

Reporting Met + Performance Exclusion G8938 or equivalent (0 patients) b

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* See the posted Measure Specification for specific coding and instructions to report this measure.

** See the posted Measure Specification for specific BMI and follow-up plan definitions, as well as eligibility exclusion criteria for this measure.

NOTE: Reporting Frequency: Patient-Intermediates

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2016 Claims/Registry Individual Measure Flow
PQRS #128 NQF #0421: Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan

Numerator Con't:

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BMI Not Documented, Reason Not Given

Yes

Reporting Met + Performance Not Met
GM421 or equivalent (1 patient)

No

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

Yes

Reporting Met + Performance Not Met
GM421 or equivalent (1 patient)

No

Reporting Not Met
Quality-Data Code or equivalent not reported (1 patient)

SAMPLE CALCULATIONS:

Reporting Rate=
Performance Met (a1+a2+a3=3 patients) + Performance Exclusion (b1+b2=2 patients) + Performance Not Met (c1+c2=2 patients) = 7 patients = 87.50% Eligible Population / Denominator (d=8 patients) = 8 patients

Performance Rate=
Performance Met (a1+a2+a3=3 patients) = 3 patients = 60.00%
Reporting Numerator (7 patients) – Performance Exclusion (b1+b2=2 patients) = 5 patients

* See the posted Measure Specification for specific coding and instructions to report this measure.
** See the posted Measure Specification for specific BMI and follow-up plan definitions, as well as eligibility exclusion criteria for this measure.
NOTE: Reporting Frequency: Patient-Intermediate
2016 Claims/Registry Individual Measure Flow
PQRS #128 NQF #0421: Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

1. Start with Denominator

2. Check Patient Age:
   a. If the Age is greater than or equal to 18 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
   b. If the Age is greater than or equal to 18 years of age on Date of Service and equals Yes during the measurement period, proceed to check Encounter Performed.

3. Check Encounter Performed:
   a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, include in the Eligible population.

4. Denominator Population
   a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 patients in the sample calculation.

5. Start Numerator

6. Check BMI** Documented as Normal, No Follow-Up Plan** Required:
   a. If BMI** Documented as Normal, No Follow-Up Plan** Required equals Yes, include in Reporting Met and Performance Met.
   b. Reporting Met and Performance Met letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter a1 equals 1 patient in Sample Calculation.
   c. If BMI** Documented as Normal, No Follow-Up Plan** Required equals No, proceed to check BMI** Documented as Above Normal Parameters, And Follow-Up Plan** Documented.

7. Check BMI** Documented as Above Normal Parameters, And Follow-Up Plan** Documented:
   a. If BMI** Documented as Above Normal Parameters, And Follow-Up Plan** Documented equals Yes, include in Reporting Met and Performance Met.
   b. Reporting Met and Performance Met letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter a2 equals 1 patient in Sample Calculation.
c. If BMI** Documented as Above Normal Parameters, And Follow-Up Plan** Documented equals No, proceed to check BMI** Documented as Below Normal Parameters, And Follow-Up Plan** Documented.

8. Check BMI** Documented as Below Normal Parameters, And Follow-Up Plan** Documented:
   a. If BMI** Documented as Below Normal Parameters, And Follow-up Plan** Documented equals Yes, include in Reporting met and Performance met.
   b. Reporting Met and Performance Met letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter a3 equals 1 patient in Sample Calculation.
   c. If BMI** Documented as Below Normal Parameters, And Follow-Up Plan** Documented equals No, proceed to check BMI Not Documented, Patient Not Eligible**.

9. Check BMI Not Documented, Patient Not Eligible**:
   a. If BMI Not Documented, Patient Not Eligible** equals Yes, include in Reporting Met and Performance Exclusion.
   b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b1 equals 2 patients in Sample Calculation.
   c. If BMI Not Documented, Patient Not Eligible** equals No, proceed to check BMI Documented Outside of Normal Limits, Follow-Up Plan Not Documented, Patient Not Eligible**.

10. Check BMI Documented Outside of Normal Limits, Follow-Up Plan Not Documented, Patient Not Eligible**:
    a. If BMI Documented Outside of Normal Limits, Follow-Up Plan Not Documented, Patient Not Eligible** equals Yes, include in Reporting Met and Performance Exclusion.
    b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b2 equals 0 patients in Sample Calculation.
    c. If BMI Documented Outside of Normal Limits, Follow-Up Plan Not Documented, Patient Not Eligible** equals No, proceed to check BMI Not Documented, Reason Not Given.

11. Check BMI Not Documented, Reason Not Given:
    a. If BMI Not Documented, Reason Not Given equals Yes, include in Reporting Met and Performance Not Met.
    b. Reporting Met and Performance Not Met letter is represented in the Reporting Rate in the Sample Calculation listed at the end of this document. Letter c1 equals 1 patient in the Sample Calculation.
    c. If BMI Not Documented, Reason Not Given equals No, proceed to check BMI** Documented Outside of Normal Parameters, Follow-Up Plan** Not Documented, Reason Not Given.

12. Check BMI** Documented Outside of Normal Parameters, Follow-Up Plan** Not Documented, Reason Not Given:
    a. If BMI** Documented Outside of Normal Parameters, Follow-up Plan** Not Documented, Reason Not Given equals Yes, include in Reporting Met and Performance Not Met.
b. Reporting Met and Performance Not Met letter is represented in the Reporting Rate in the Sample Calculation listed at the end of this document. Letter c2 equals 1 patient in the Sample Calculation.

c. If BMI** Documented Outside of Normal Parameters, Follow-up Plan** Not Documented, Reason Not Given equals No, proceed to Reporting Not Met.

13. Check Reporting Not Met:

a. If Reporting Not Met equals No, Quality Data Code or equivalent not reported. 1 patient has been subtracted from the reporting numerator in the sample calculation.

### SAMPLE CALCULATIONS:

**Reporting Rate=**

\[
\text{Performance Met (a' + a^2 + a^3 < 3 patients)} + \text{Performance Exclusion (b' + b^2 < 2 patients)} + \text{Performance Not Met (c' + c^2 < 2 patients)} = 7 \text{ patients} = \frac{87.50\%}{8 \text{ patients}}
\]

**Performance Rate=**

\[
\text{Performance Met (a' + a^2 + a^3 < 3 patients)} = 3 \text{ patients} = 60.00\%
\]

**Reporting Numerator (7 patients) - Performance Exclusion (b' + b^2 < 2 patients) = 5 patients**