

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

**2017 OPTIONS FOR INDIVIDUAL MEASURES:**  
**CLAIMS ONLY**

**MEASURE TYPE:**  
Process

**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  $\geq 18.5$  and  $< 25$  kg/m<sup>2</sup>

**INSTRUCTIONS:**

There is no diagnosis associated with this measure. This measure is to be reported a minimum of **once per 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. 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 or below normal parameters" (See Definitions for examples of 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:**

The listed denominator criteria is used to identify the intended patient population. The numerator quality-data codes included in this specification are used to submit the quality actions allowed by the measure. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

**DENOMINATOR:**

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

**Denominator Criteria (Eligible Cases):**

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

**AND**

**Patient encounter during the performance period (CPT or HCPCS):** 90791, 90792, 90832, 90834, 90837, 96150, 96151, 96152, 97161, 97162, 97163, 97165, 97166, 97167, 97802, 97803, 98960, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, D7140, D7210, G0101, G0108, G0270, G0271, G0402, G0438, G0439, G0447

**WITHOUT**

**Telehealth Modifier:** GQ, GT

## **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 or below normal parameters”. (See Definitions for examples of follow-up plan treatments).
- **Performance Met for G8417 & G8418**
  - If the provider documents a BMI and a follow-up plan at the current visit **OR**
  - If the patient has a documented BMI within the previous six months of the current encounter, the provider documents a follow-up plan at the current visit **OR**
  - If the patient has a documented BMI within the previous six months of the current encounter **AND** the patient has a documented follow-up plan for a BMI outside normal parameters within the previous six months of the current visit

### **Definitions:**

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

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

**OR**

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

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

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

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

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

**Patients with a documented BMI outside normal limits and a documented reason for not completing BMI follow-up plan (Denominator Exception):**

- 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
- 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:**

**BMI not Documented, Patient not Eligible**

***Denominator 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**

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

***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 Documented Outside of Normal Limits, Follow-Up Plan not Completed for Documented Reason**

***Denominator Exception: G9716:***

BMI is documented as being outside of normal limits, follow-up plan is not completed for documented reason

**OR**

**BMI not Documented, Reason not Given**

***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:**

**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/m<sup>2</sup>), which is equally detrimental to population health. When compared to normal weight individuals (BMI 18.5-25 kg/m<sup>2</sup>), 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 screening all adults (aged 18 years and older) for obesity. Clinicians should offer or refer patients with a BMI of 30 or higher to intensive, multicomponent behavioral interventions. This is a B recommendation (Moyer, 2012).

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

- Record height, weight and calculate body mass index at least annually

Clinicians should consider waist circumference measurement to estimate disease risk for patients who have BMI scores indicative of overweight or obesity class I. For adult patients with a BMI of 25 to 34.9 kg/m<sup>2</sup>, sex-specific waist circumference cutoffs should be used in conjunction with BMI to identify increased disease risk.

- A BMI greater or equal to 30 is defined as obese
- A BMI of 25-29 is defined as overweight
- Intensive intervention for obese individuals, based on BMI, is recommended by the U.S. Preventive Services to help control weight.

Similarly, the 2013 joint report/guideline from the American Heart Association, American College of Cardiology and The Obesity Society also recommend measuring height and weight and calculating BMI at annual visits or more frequently, using the current cutpoints for overweight (BMI>25.0-29.9 kg/m<sup>2</sup>) and obesity (BMI ≥30 kg/m<sup>2</sup>) to identify adults who may be at elevated risk of 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.

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).

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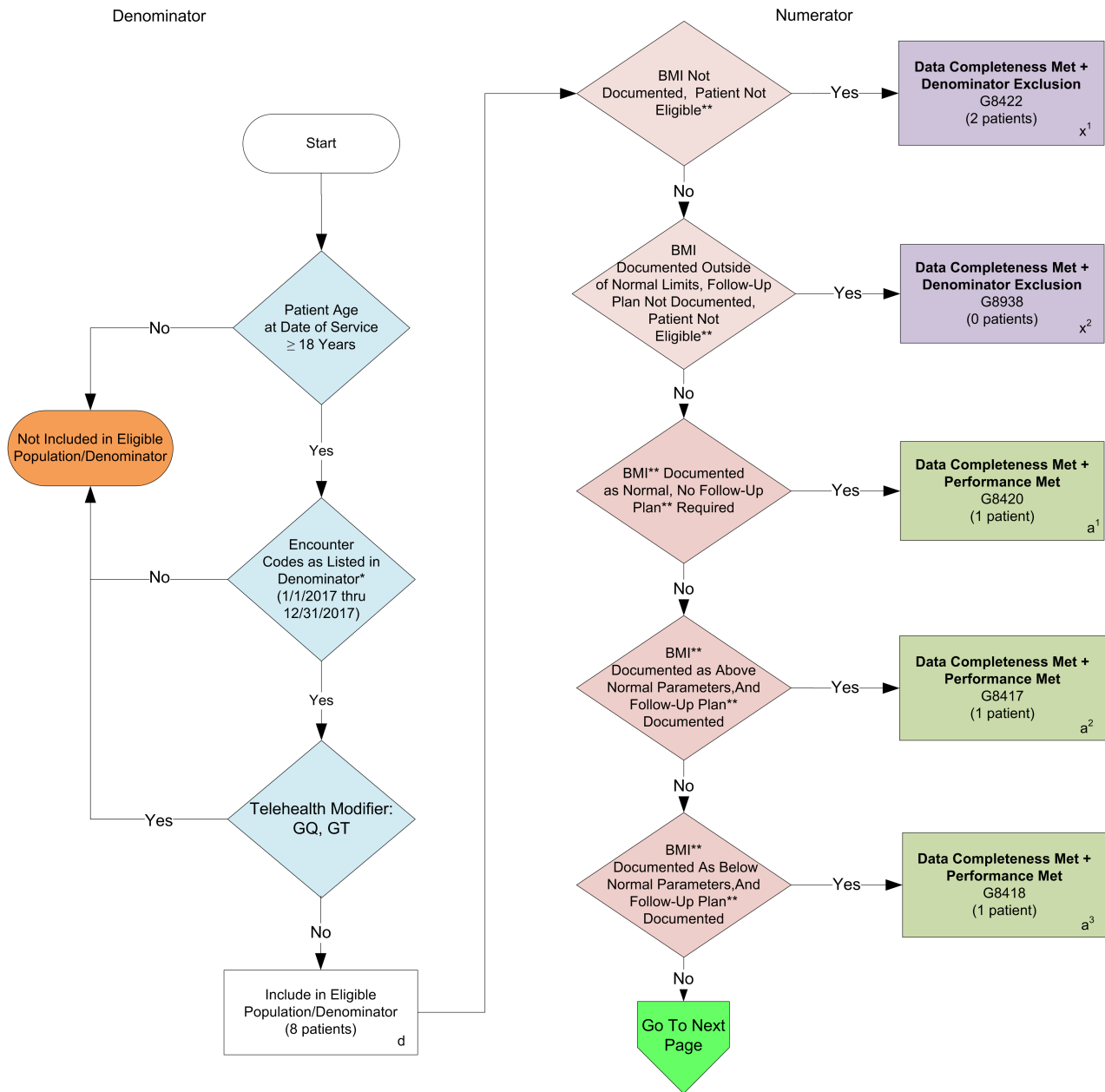
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## 2017 Claims Individual Measure Flow

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



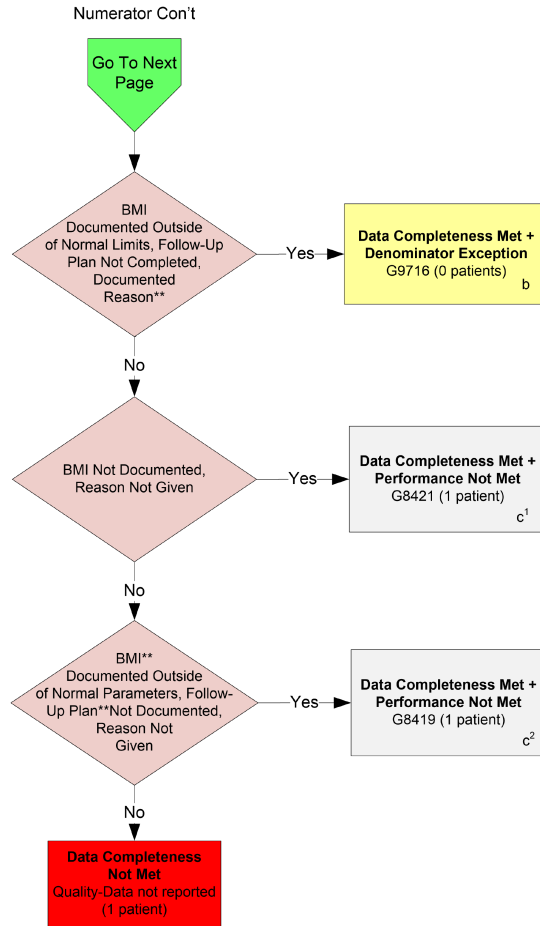
\* See the posted Measure Specification for specific coding and instructions to report this measure.

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

NOTE: Reporting Frequency: Patient-Intermediate

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 v1

**2017 Claims Individual Measure Flow  
#128 NQF #0421: Preventive Care and Screening: Body Mass Index (BMI) Screening  
and Follow-Up Plan**



**SAMPLE CALCULATIONS:**

**Data Completeness=**  

$$\frac{\text{Denominator Exclusion (x}^1+\text{x}^2=2 \text{ patients}) + \text{Performance Met (a}^1+\text{a}^2+\text{a}^3=3 \text{ patients}) + \text{Denominator Exception (b=0 patients)} + \text{Performance Not Met (c}^1+\text{c}^2=2 \text{ patients})}{\text{Eligible Population / Denominator (d=8 patients)}} = \frac{7 \text{ patients}}{8 \text{ patients}} = 87.50\%$$

**Performance Rate=**  

$$\frac{\text{Performance Met (a}^1+\text{a}^2+\text{a}^3=3 \text{ patients})}{\text{Data Completeness Numerator (7 patients) - Denominator Exclusion (x}^1+\text{x}^2=2 \text{ patients) - Denominator Exception (b=0 patients)}} = \frac{3 \text{ patients}}{5 \text{ patients}} = 60.00\%$$

\* 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, eligibility exclusion criteria, and denominator exception criteria for this measure.

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## 2017 Claims Individual Measure Flow

### #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 proceed to Check Telehealth Modifier: GQ, GT.
4. Check Telehealth Modifier: GQ, GT
  - a. If Telehealth Modifier: GQ, GT equals No, include in the Eligible population.
  - b. If Telehealth Modifier: GQ, GT equals Yes, do not include in Eligible Patient Population. Stop Processing.
5. 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.
6. Start Numerator
7. Check BMI Not Documented, Patient Not Eligible\*\*:
  - a. If BMI Not Documented, Patient Not Eligible\*\* equals Yes, include in Data Completeness Met and Denominator Exclusion.
  - b. Data Completeness Met and Denominator Exclusion is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter x<sup>1</sup> 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\*\*.
8. 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 Data Completeness Met and Denominator Exclusion.



- b. Data Completeness Met and Denominator Exclusion letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter x<sup>2</sup> 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\*\* Documented as Normal, No Follow-Up Plan\*\* Required.
9. 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 Data Completeness Met and Performance Met.
  - b. Data Completeness Met and Performance Met letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a<sup>1</sup> 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.
10. 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 Data Completeness Met and Performance Met.
  - b. Data Completeness Met and Performance Met letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a<sup>2</sup> 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
11. 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 Data Completeness Met and Performance Met.
  - b. Data Completeness Met and Performance Met letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a<sup>3</sup> 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\*\*.
12. Check BMI Documented Outside of Normal Limits, Follow-Up Plan Not Completed, Documented Reason\*\*:
- a. If BMI Documented Outside of Normal Limits, Follow-Up Plan Not Completed, Documented Reason\*\* equals Yes, include in Data Completeness Met and Denominator Exception.
  - b. Data Completeness Met and Denominator Exception letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b equals 0 patients in Sample Calculation.
  - c. If BMI Documented Outside of Normal Limits, Follow-Up Plan Not Completed, Documented Reason\*\* equals No, proceed to check BMI Not Documented, Reason Not Given.

13. Check BMI Not Documented, Reason Not Given:
  - a. If BMI Not Documented, Reason Not Given equals Yes, include in Data Completeness Met and Performance Not Met.
  - b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c<sup>1</sup> 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.
14. 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 Data Completeness Met and Performance Not Met.
  - b. Data Completeness Met and Performance Not Met letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c<sup>2</sup> 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 Data Completeness Not Met
15. Check Data Completeness Not Met:
  - a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not reported. 1 patient has been subtracted from the data completeness numerator in the sample calculation

**SAMPLE CALCULATIONS:**

**Data Completeness=**  
 Denominator Exclusion (x<sup>1</sup>+ x<sup>2</sup>=2 patients)+ Performance Met (a<sup>1</sup>+a<sup>2</sup>+a<sup>3</sup>=3 patients) +Denominator Exception (b=0 patients) + Performance Not Met (c<sup>1</sup>+c<sup>2</sup>=2 patients) = 7 patients. =  
**87.50%**  
 Eligible Population / Denominator (d=8 patients) = 8 patients

**Performance Rate=**  
 Performance Met (a<sup>1</sup>+a<sup>2</sup>+a<sup>3</sup>=3 patients) = 3 patients = **60.00%**  
 Data Completeness Numerator (7 patients) – Denominator Exclusion (x<sup>1</sup>+x<sup>2</sup>=2 patients) – Denominator Exception (b=0 patients) = 5 patients