

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

2018 OPTIONS FOR INDIVIDUAL MEASURES:  
REGISTRY 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 twelve months AND with a BMI outside of normal parameters, a follow-up plan is documented during the encounter or during the previous twelve 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 submitted a minimum of once per performance period for patients seen during the performance period. This measure may be submitted 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 twelve 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). *If more than one BMI is submitted during the measurement period, the most recent BMI will be used to determine if the performance has been met.*

**Measure Submission:**

The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by 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 and older on the date of the encounter with at least one eligible encounter during the measurement period

**DENOMINATOR NOTE:** \*Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for registry-based measures.

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, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99385\*, 99386\*, 99387\*, 99395\*, 99396\*, 99397\*, D7140, D7210, G0101, G0108, G0270, G0271, G0402, G0438, G0439, G0447

WITHOUT

Telehealth Modifier: GQ, GT, 95, POS 02

AND NOT

DENOMINATOR EXCLUSIONS:

BMI not documented, documentation the patient is not eligible for BMI calculation: G8422

OR

BMI is documented as being outside of normal limits, follow-up plan is not documented, documentation the patient is not eligible: G8938

NUMERATOR:

Patients with a documented BMI during the encounter or during the previous twelve months, AND when the BMI is outside of normal parameters, a follow-up plan is documented during the encounter or during the previous twelve 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 twelve 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 twelve 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 twelve 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 twelve months of the current encounter AND the patient has a documented follow-up plan for a BMI outside normal parameters within the previous twelve 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 outside 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 on the date of the current encounter or any time prior to the current encounter
- Patients who are pregnant any time during the measurement year
- Patients who refuse measurement of height and/or weight or refuse follow-up any time during the measurement period (Jan 1, 2017 – Dec 31, 2017).

**Patients with a documented BMI outside normal limits and a documented reason for not completing BMI follow-up plan during the current encounter or within the previous 12 months of the current encounter (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 Options:**

*Performance Met:*

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

**OR**

*Performance Met:*

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

**OR**

*Performance Met:*

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

**OR**

*Denominator Exception:*

BMI is documented as being outside of normal limits, follow-up plan is not completed for documented reason (G9716)

**OR**

*Performance Not Met:*

BMI not documented and no reason is given (G8421)

**OR**

*Performance Not Met:*

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

**RATIONALE:**

**BMI Above Normal Parameters**

Obesity is a chronic, multifactorial disease with complex psychological, environmental (social and cultural), genetic, physiologic, metabolic and behavioral causes and consequences. The prevalence of overweight and obese people is increasing worldwide at an alarming rate in both developing and developed countries. Environmental and behavioral changes brought about by economic development, modernization and urbanization have been linked to the rise in global obesity. The health consequences are becoming apparent (ICSI 2013. p.6).

Nationally, nearly 38 percent of adults are obese [NHANES, 2013-2014 data]. Nearly 8 percent of adults are extremely obese (BMI greater than or equal to 40.0); Obesity rates are higher among women (40.4 percent) compared to men (35.0 percent). Between 2005 and 2014, the difference in obesity among women was 5.1 percent higher among women and 1.7 percent higher among men. Women are also almost twice as likely (9.9 percent) to be extremely obese compared to men (5.5 percent); In addition, rates are the highest among middle-age adults (41 percent for 40- to 59-year-olds), compared to 34.3 percent of 20 to 39-year-olds and 38.5 percent of adults ages 60 and older (Flegal KM, Kruszon-Moran D, Carroll MD, et al, 2016, p.2286-2290).

Obesity is one of the biggest drivers of preventable chronic diseases and healthcare costs in the United States. Currently, estimates for these costs range from \$147 billion to nearly \$210 billion per year (Cawley J and Meyerhoefer C., 2012 & Finkelstein, Trogon, Cohen, et al., 2009). There are significant racial and ethnic inequities [NHANES, 2013-2014 data]: Obesity rates are higher among Blacks (48.4 percent) and Latinos (42.6 percent) than among Whites (36.4 percent) and Asian Americans (12.6 percent). The inequities are highest among women: Blacks have a rate of 57.2 percent, Latinos of 46.9 percent, Whites of 38.2 percent and Asians of 12.4 percent. For men, Latinos have a rate of 37.9 percent, Blacks of 38.0 percent and Whites of 34.7 percent. Black women (16.8 percent) are twice as likely to be extremely obese as White women (9.7 percent) (Flegal KM, Kruszon-Moran D, Carroll MD, et al., 2016, pp. 2284-2291).

BMI continues to be a common and reasonably reliable measurement to identify overweight and obese adults who may be at an increased risk for future morbidity. Although good quality evidence supports obtaining a BMI, it is important to recognize it is not a perfect measurement. BMI is not a direct measure of adiposity and as a consequence it can over- or underestimate adiposity. BMI is a derived value that correlates well with total body fat and markers of secondary complications, e.g., hypertension and dyslipidemia (Barlow, 2007).

In contrast with waist circumference, BMI and its associated disease and mortality risk appear to vary among ethnic subgroups. Female African American populations appear to have the lowest mortality risk at a BMI of 26.2-28.5 kg/m<sup>2</sup> and 27.1-30.2 kg/m<sup>2</sup> for women and men, respectively. In contrast, Asian populations may experience lowest mortality rates starting at a BMI of 23 to 24 kg/m<sup>2</sup>. The correlation between BMI and diabetes risk also varies by ethnicity (LeBlanc, 2011. p.2-3).

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:**

As cited in Fetch et al. (2013), The Institute for Clinical Systems Improvement (ICSI) Health Care Guideline, Prevention and Management of Obesity for Adults provides the Strength of Recommendation as Strong for the following:

- 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 normal or overweight BMI scores. 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.

Individuals who are overweight (BMI 25<30), and who do not have indicators of increased CVD risk (e.g., diabetes, pre-diabetes, hypertension, dyslipidemia, elevated waist circumference) or other obesity-related comorbidities and individuals who have a history of overweight and are now normal weight with risk factors at acceptable levels:

“Advise to frequently measure their own weight, and to avoid weight gain by adjusting their food intake if they start to gain more than a few pounds. Also, advise patients that engaging in regular physical activity will help them avoid weight gain.” (2013 AHA/AAC/TOS Obesity Guideline, p. S113)

“Advise overweight and obese individuals who would benefit from weight loss to participate for ≥6 months in a comprehensive lifestyle program that assists participants in adhering to a lower calorie diet and in increasing physical activity through the use of behavioral strategies... NHLBI Grade A (Strong)” (2013 AHA/AAC/TOS Obesity Guideline, p. S109)

#### USPSTF Clinical Guideline (Grade B Recommendation)

Individuals with a body mass index (BMI) of 30 kg/m<sup>2</sup> or higher should be offered or referred to intensive, multicomponent behavioral interventions that include the following components:

- Behavioral management activities, such as setting weight-loss goals
- Improving diet or nutrition and increasing physical activity
- Addressing barriers to change
- Self-monitoring
- Strategizing how to maintain 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).

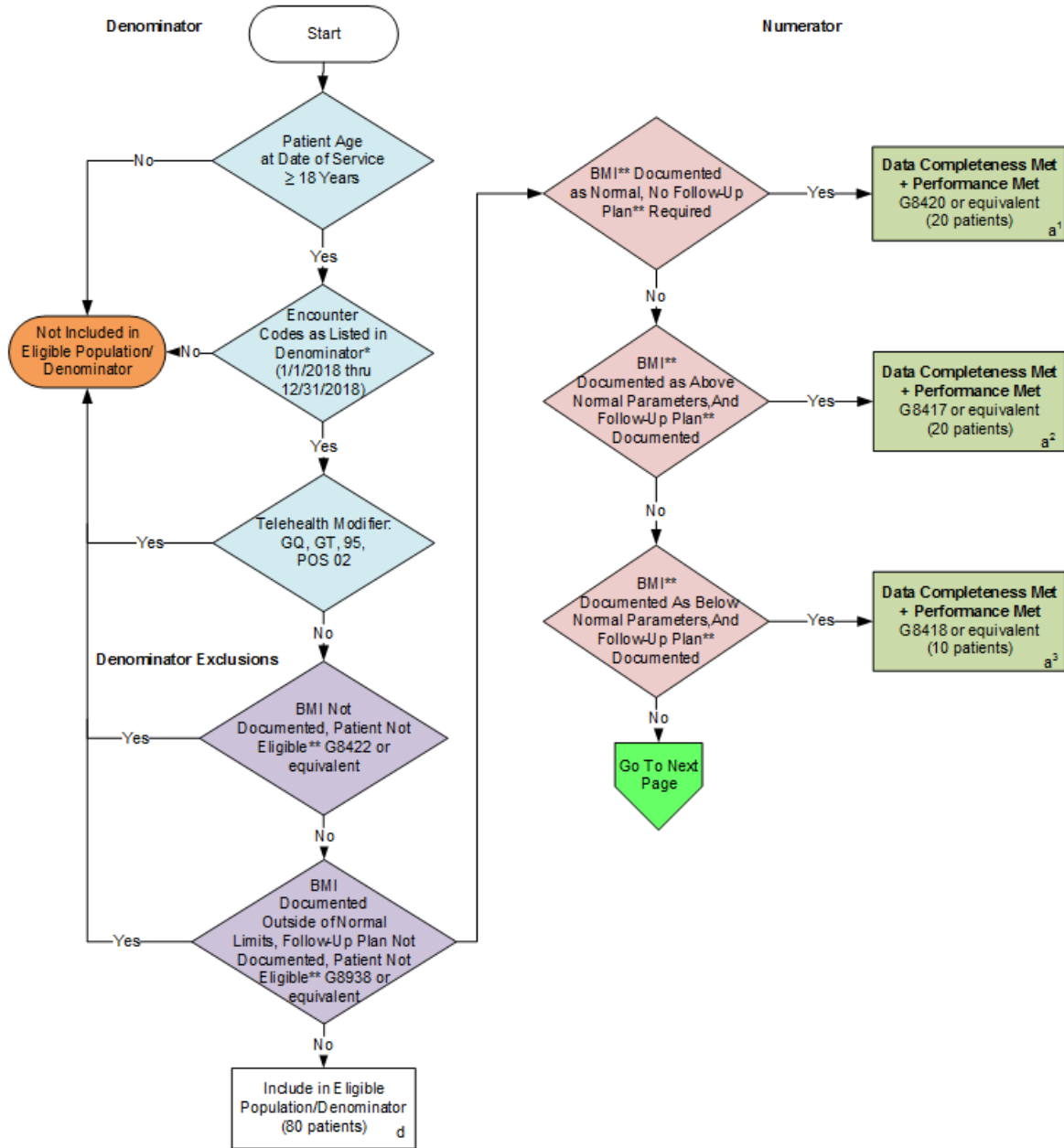
#### **COPYRIGHT:**

These measures were developed by Quality Insights, Inc. as a special project under the Quality Insights' Medicare Quality Improvement Organization (QIO) contract HHSM-500-2005-PA001C with the Centers for Medicare & Medicaid Services. These measures are in the public domain.

Limited proprietary coding is contained in the measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. Quality Insights, Inc. disclaims all liability for use or accuracy of any Current Procedural Terminology (CPT [R]) or other coding contained in the specifications. CPT® contained in the Measures specifications is copyright 2004-2017 American Medical Association. All Rights Reserved. These performance measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.

THE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.

**2018 Registry Flow for Quality ID #128 NQF #0421:  
Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan**

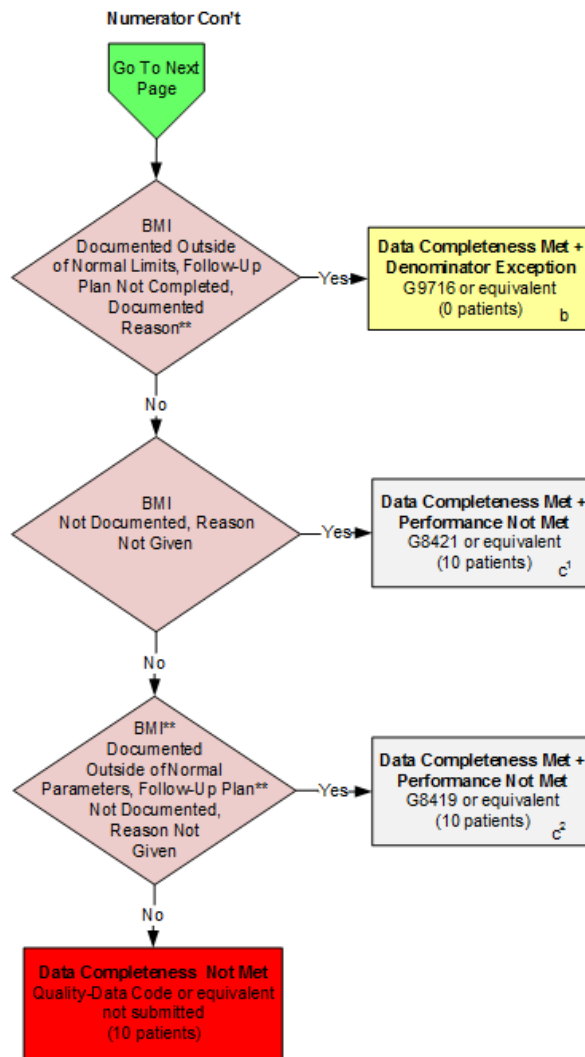


\* See the posted Measure Specification for specific coding and instructions to submit this measure.  
 \*\* See the posted Measure Specification for specific BMI and follow-up plan definitions, eligibility exclusion criteria, and denominator exception criteria for this measure.

NOTE: Submission Frequency: Patient-Intermediate

CPT only copyright 2017 American Medical Association. All rights reserved.  
 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 alone or as a substitution for the measure specification.  
 v2

**2018 Registry Flow for Quality ID #128 NQF #0421:  
Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan**



**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a¹+a²+a³=50 patients)} + \text{Denominator Exception (b = 0 patients)} + \text{Performance Not Met (c¹+c²=20 patients)}}{\text{Eligible Population / Denominator (d=80 patients)}} = \frac{70 \text{ patients}}{80 \text{ patients}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a¹+a²+a³=50 patients)}}{\text{Data Completeness Numerator (70 patients) – Denominator Exception (b = 0 patients) = 70 patients}} = \frac{50 \text{ patients}}{70 \text{ patients}} = 71.43\%$$

\* See the posted Measure Specification for specific coding and instructions to submit 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: Submission Frequency: Patient-Intermediate

CPT only copyright 2017 American Medical Association. All rights reserved. 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 alone or as a substitution for the measure specification.



**2018 Registry Flow For Quality ID  
#128 NQF #0421: Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up  
Plan**

Please refer to the specific section of the specification to identify the denominator and numerator information for use in submitting this Individual Specification. This flow is for registry data submission.

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:
4. Check Telehealth Modifier:
  - a. If Telehealth Modifier as Listed in the Denominator equals No, proceed to check BMI Not Documented, Patient Not Eligible.
  - b. If Telehealth Modifier as Listed in the Denominator equals Yes, do not include in Eligible Patient Population. Stop Processing.
5. Check BMI Not Documented, Patient Not Eligible\*\*:
  - a. 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\*\*.
  - b. If BMI Not Documented, Patient Not Eligible\*\* equals Yes, do not include in Eligible Patient Population. Stop Processing.
6. 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 No, proceed to Denominator Population.
  - b. If BMI Documented Outside of Normal Limits, Follow-Up Plan Not Documented, Patient Not Eligible\*\* equals Yes, do not include in Eligible Patient Population. Stop Processing.
7. 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 80 patients in the Sample Calculation.
8. Start Numerator

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 20 patients 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 20 patients 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 10 patient in Sample Calculation.
  - c. If BMI\*\* Documented as Below Normal Parameters, And Follow-Up Plan\*\* Documented equals No, proceed to check BMI Documented Outside of Normal Limits, Follow-Up Plan Not Documented, Recorded Reason\*\*.
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 as Data Completeness in the Sample Calculation listed at the end of this document. Letter c<sup>1</sup> equals 10 patients 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 10 patients 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 submitted. 10 patients have been subtracted from the Data Completeness Numerator in the Sample Calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a}^1+\text{a}^2+\text{a}^3=50 \text{ patients)} + \text{Denominator Exception (b = 0 patients)} + \text{Performance Not Met (c}^1+\text{c}^2=20 \text{ patients)}}{\text{Eligible Population / Denominator (d=80 patients)}} = \frac{70 \text{ patients}}{80 \text{ patients}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a}^1+\text{a}^2+\text{a}^3=50 \text{ patients)}}{\text{Data Completeness Numerator (70 patients) – Denominator Exception (b = 0 patients)}} = \frac{50 \text{ patients}}{70 \text{ patients}} = 71.43\%$$