



# **2023 Quality Payment Program (QPP) Measure Specification and Measure Flow Guide for MIPS Clinical Quality Measures (CQMs)**

**Utilized by Merit-based Incentive Payment System (MIPS) Eligible Clinicians,  
Groups, or Third-Party Intermediaries**

**November 2022**

## **Introduction**

This document contains general guidance for the 2023 Quality Payment Program (QPP) Individual Measure Specifications and Measure Flows for MIPS clinical quality measures (CQMs) submissions. The individual measure specifications are detailed descriptions of the quality measures and are intended to be used by individual MIPS eligible clinicians submitting CQMs via Quality Clinical Data Registry (QCDR) or Qualified Registries and by groups submitting via Qualified Registry for the 2023 QPP. In addition, each measure specification document includes a measure flow and associated algorithm as a resource for the application of logic for data completeness and performance. Please note that the measure flows were created by CMS and may or may not have been reviewed by the Measure Steward. These diagrams should not be used in place of the measure specification but may be used as an additional resource.

## **Collection Types**

Data submission from individual CQMs may be collected by individual MIPS eligible clinicians or groups. Other collection types will use different submission methods as outlined below.

- There are separate documents for Medicare Part B claims measures collection type.
- Measure specifications for electronic health record (EHR) based submission should be used for the electronic clinical quality measures (eCQMs).
- Performance year 2022 was the final year that Web Interface (WI) measures were available for traditional MIPS reporting. However, Shared Savings Program Accountable Care Organizations reporting through the APM Performance Pathway (APP) may still report measures through WI.
- Information regarding Consumer Assessment of Healthcare Providers and Systems (CAHPS) Clinician & Group Survey (CG-CAHPS) may be found at: <https://www.ahrq.gov/cahps/about-cahps/index.html>
- Beginning with performance year 2023, MIPS Value Pathways (MVP) reporting is available. Each MVP contains traditional MIPS measures. Groups electing to report via MVP should use the relevant MVP tool kits.

## **Clinical Quality Measures Specifications**

Each measure is assigned a unique number. Measure numbers for 2023 QPP represent a continuation in numbering from the 2022 QPP measures. Measure stewards have provided revisions for the measures that are finalized for use in 2023 QPP.

## **Frequency with Definitions**

Frequency labels are provided in each measure instruction as well as the measure flow. The analytical submitting frequency defines the time period or event for which the measure should be submitted. Each individual MIPS eligible clinician participating in 2023 QPP should submit during the performance period according to the frequency defined for the measure. Below are definitions of the analytical submitting frequencies that are used for calculations of the individual measures:

- **Patient-Intermediate** measures are submitted a minimum of once per patient during the performance period. The most recent quality data code will be used, if the measure is submitted more than once.
- **Patient-Process** measures are submitted a minimum of once per patient during the performance period. The most advantageous quality data code will be used if the measure is submitted more than once.
- **Patient-Periodic** measures are submitted a minimum of once per patient per timeframe specified by the measure during the performance period. The most advantageous quality data code will be used if the measure is submitted more than once. If more than one quality data code is submitted during the episode time period, performance rates shall be calculated by the most advantageous quality data code.
- **Episode** measures are submitted once for each occurrence of a particular illness or condition during the

performance period.

- **Procedure** measures are submitted each time a procedure is performed during the performance period.
- **Visit** measures are submitted each time a patient is seen by the individual MIPS eligible clinician during the performance period.

### **Performance Period**

There are several sections (Instruction, Description, or Numerator Statement) within the measure specification that may include information on the performance period. Performance period for the measure refers to the calendar year of January 1st to December 31st. However, measures may have a different timeframe for determining if the quality action indicated within the measure was performed. This may be referenced as the measurement period. For example, in Quality ID # 19: Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care the submitting MIPS eligible clinician would be allowed to 'look back' from the date of the denominator eligible encounter and 'forward' to the end of the current program year to confirm if the most advantageous numerator option was met.

### **Denominator and Numerator**

Quality measures consist of a numerator and denominator that are used to calculate data completeness and performance for a defined patient population. These calculations indicate either achievement of a particular process of care being provided or a clinical outcome being attained. The denominator is the lower part of a fraction used to calculate a rate, proportion, or ratio and represents the population defined for the measure. The numerator is the upper portion of a fraction used to calculate a rate, proportion, or ratio and represents a subset of the denominator population. The numerator represents the target quality actions defined within the measure. It may be a process, condition, event, or outcome. Numerator criteria are the measure defined quality actions expected for each patient, procedure, or other unit of measurement defined in the denominator.

### **Denominator Codes (Eligible Cases)**

The denominator population is specified in the measure and submitted by individual MIPS eligible clinicians, groups, or third-party intermediaries. The denominator population may be defined by the following criteria:

- Demographic information
- International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis,
- International Classification of Diseases, Tenth Revision Procedure Coding System (ICD-10-PCS)
- Current Procedural Terminology (CPT)
- Healthcare Common Procedure Coding System (HCPCS) codes

The CQM collection type may include patients from all payers not just Medicare Part B Physician Fee Schedule (PFS) covered services.

If the specified denominator codes for a measure are not applicable to the patient (for the same date of service) as submitted by the individual MIPS eligible clinician, group, or third-party intermediary, then the patient does not fall into the measure's eligible denominator. Some measure specifications are adapted as needed during the annual update process for implementation in agreement with the measure steward.

Measure specifications include specific instructions regarding CPT Category I modifiers, place of service codes (POS), and other detailed information. Each MIPS eligible clinician, group, or third-party intermediary should carefully review the measure's denominator coding to determine whether codes submitted to a Qualified Registry or QCDR meet denominator inclusion criteria.

Denominator exclusions describe a circumstance where the patient should be removed from the denominator. Measure specifications define denominator exclusion(s) in which a patient should not be included in the intended population for the measure even if other denominator criteria are applicable. The Quality Data Codes (QDCs) or equivalent codes are available to describe the denominator exclusion and are provided within the measure specification. QDCs are HCPCS and CPT-II codes describe clinical outcomes that assist with determining the

intended population. Patients that meet the intent of the denominator exclusion do not need to be included for data completeness or in the performance rate of the measure.

### **Numerator Quality Data Codes**

If the patient does fall into the denominator population and no denominator exclusions apply, the applicable QDCs or equivalent as indicated by the registry that define the numerator options should be submitted for data completeness of quality data for CQM submissions.

#### **Performance Met**

If the intended quality action for the measure is performed for the patient, QDCs or equivalent from the CQM are available to describe that performance has been met and should be submitted to the Qualified Registry or QCDR.

#### **Denominator Exception**

When a patient falls into the denominator, but the measure specifications define circumstances in which a patient may be appropriately deemed as a denominator exception. CPT Category II codes with modifiers such as 1P, 2P, and 3P, HCPCS QDCs, or equivalents referenced in the CQM are available to describe medical, patient or system reasons for denominator exceptions and can be submitted to the Qualified Registry or QCDR. A denominator exception removes a patient from the performance denominator only if the numerator criteria are not met as defined by the exception. This allows for the exercise of clinical judgement by the MIPS eligible clinician.

#### **Performance Not Met**

When the denominator exception does not apply, a measure-specific CPT Category II code with or without modifier 8P, HCPCS QDC, or equivalent in the CQM is used to indicate that the quality action was not provided for a reason not otherwise specified and should be submitted to the Qualified Registry or QCDR.

#### **Inverse Measure**

A lower calculated performance rate for this type of measure would indicate better clinical care or control. The "Performance Not Met" numerator option for an inverse measure is the representation of the better clinical quality or control. Submitting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures a rate of 100% means all of the denominator eligible patients did not receive the appropriate care or were not in proper control.

Each measure specification provides detailed Numerator Options for submitting on the quality action described by the measure. The numerator clinical concepts described for each measure are to be followed when submitting data to a Qualified Registry or QCDR.

QDCs may be found in the numerator and may utilize CPT II or HCPCS coding. These QDCs describe quality actions that assist with determining the numerator outcome.

### **Clinical Quality Measure Collection Type**

For MIPS eligible clinicians submitting individually, measures (including patient-level measure[s]) may be submitted for the same patient by multiple MIPS eligible clinicians practicing under the same Tax Identification Number (TIN). If a patient sees multiple providers during the performance period, that patient can be counted for each individual National Provider Identifier (NPI) submitting if the patient meets denominator inclusion. The following is an example of two provider NPIs billing under the same TIN who are intending to submit Quality ID # 317: Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented . Provider A sees a patient on February 2, 2023 and documents in the medical record a normal blood pressure reading with follow-up not required and submits the appropriate QDC, G8783, for Quality ID # 317. Provider B sees the same patient at an encounter on July 16, 2023 and documents in the medical record a normal blood pressure reading with follow-up not required. Provider B should also submit the appropriate QDC's for the patient at the July encounter to meet data completeness for submission of Quality ID # 317.

### **Group Submission**

MIPS eligible clinicians submitting under a group practice selecting to participate in the group submission under the same Tax Identification Number (TIN), should be submitting on the same patient, when instructed within the chosen measure. For example, if submitting Quality ID # 317: Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented all MIPS eligible clinicians under the same TIN would submit each denominator eligible instance as instructed by this measure.

If the group chooses a measure that is required to be submitted once per performance period, then this measure should be submitted at least once during the measure period by at least one MIPS eligible clinician under the TIN. Quality ID # 6: Coronary Artery Disease (CAD): Antiplatelet Therapy is an example of a measure that would be submitted once per performance period under the TIN.

CMS recommends review of any measures that an individual MIPS eligible clinician or group intends to submit. Below is an example measure specification that will assist with demonstrating data completeness for a measure. For additional assistance, please contact the Quality Payment Program Service Now help desk at **1-866-288-8292 (TRS: 711)** (Monday – Friday 8:00AM – 8:00PM Eastern Time) or email via [gpp@cms.hhs.gov](mailto:gpp@cms.hhs.gov).

### **Clinical Quality Measure Specification Format (Refer to the Example CQM Specification Below)**

Each MIPS Clinical Quality Measure conforms to a standard format. The measure format includes the following fields.

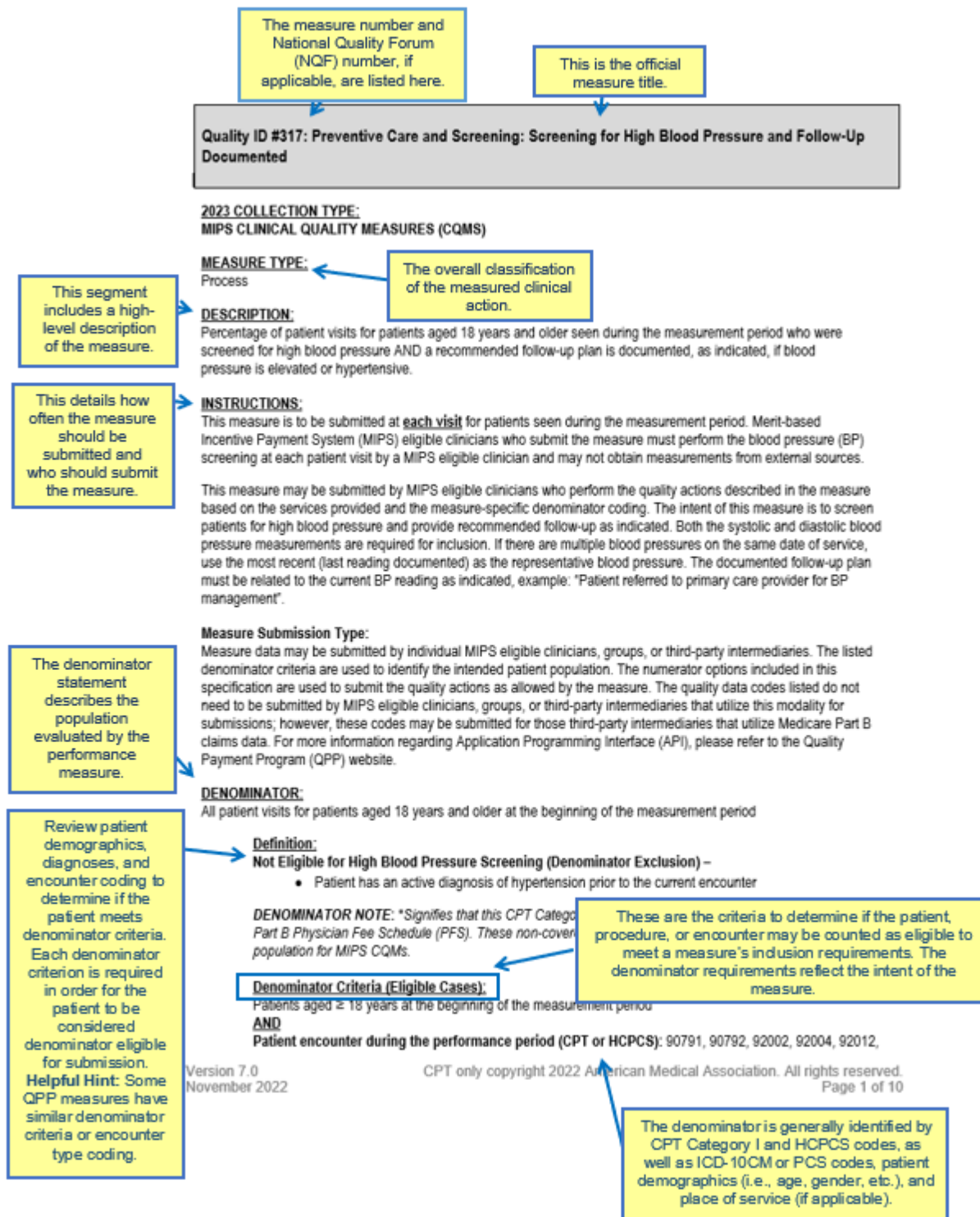
The measure header includes: Quality ID number, National Quality Forum (NQF) number (if applicable), and measure title.

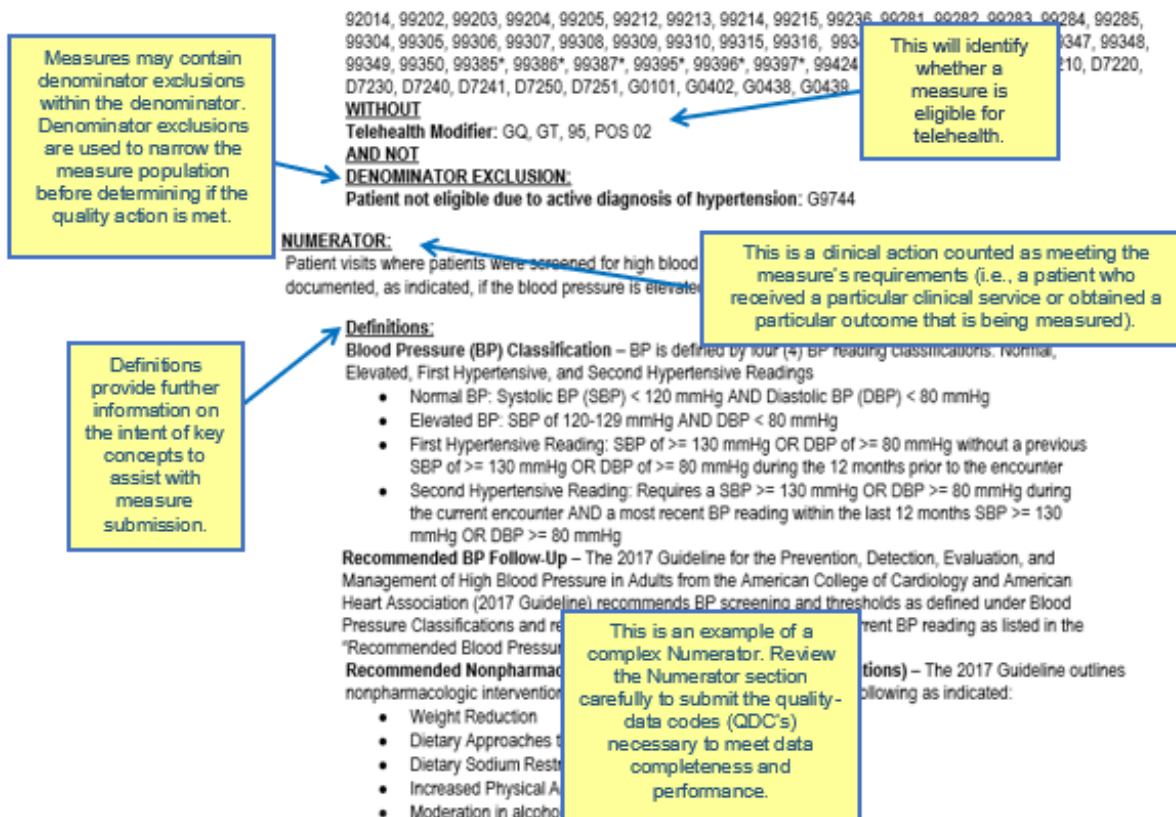
The body of the document includes the following sections:

- Collection type
- Measure type
- Measure description
- Instructions on submitting including frequency, timeframes, and applicability
- Denominator statement, denominator criteria, coding, and denominator exclusion
- Numerator statement and coding options (performance met, denominator exception, performance not met); definition(s) of terms where applicable
- Rationale
- Clinical recommendations statement or clinical evidence supporting the measure intent

The Rationale and Clinical Recommendation Statements sections provide limited clinical guidelines and supporting clinical references regarding the quality actions described in the measure. Please contact the Measure Steward for section references and further information regarding the clinical rationale and recommendations for the described quality action. Measure Steward contact information is located on “Measure Steward Contacts” tab of the 2023 MIPS Quality Measures List, which can be found on the performance year 2023 MIPS Explore Measures page: <https://gpp.cms.gov/mips/explore-measures>.

## Example Clinical Quality Measure (CQM) Specification:





Recommended Blood Pressure Follow-Up Table

BP Classification	Systolic BP mmHg	Diastolic BP mmHg	Recommended Follow-Up (must include all indicated actions for each BP Classification)
Normal BP Reading	< 120	AND < 80	No Follow-Up required
Elevated BP Reading	120-129	AND < 80	Rescreen BP in 2 to 6 months <b>AND</b> recommended nonpharmacologic interventions <b>OR</b> Referral to Alternate/Primary Care Provider

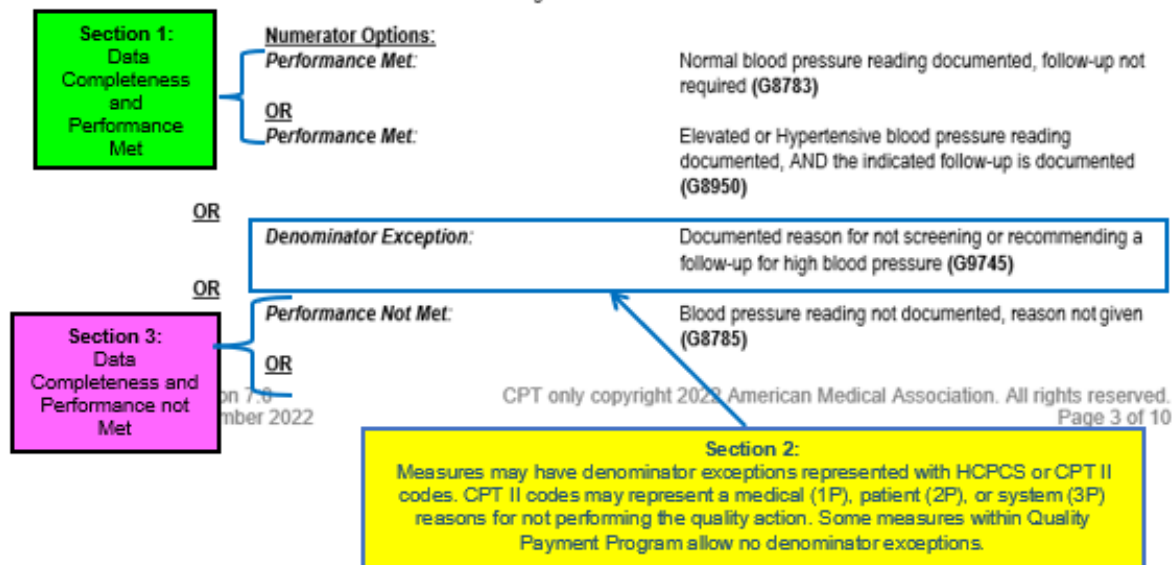


BP Classification	Systolic BP mmHg	Diastolic BP mmHg	Recommended Follow-Up (must include all indicated actions for each BP Classification)
First Hypertensive BP Reading	≥130	OR ≥ 80	Rescreen BP > 1 day and < 4 weeks <b>AND</b> recommended nonpharmacologic interventions  <b>OR</b> Referral to Alternate/Primary Care Provider
Second Hypertensive BP Reading	130-139 and NOT ≥140	OR 80-89 and NOT ≥90	Recommended nonpharmacologic intervention <b>AND</b> reassessment in 2 to 6 months <b>AND</b> an order for laboratory test or ECG for hypertension  <b>OR</b> Referral to Alternate/Primary Care Provider
Second Hypertensive BP Reading	≥140	OR ≥90	Recommended nonpharmacologic intervention <b>AND</b> BP-lowering medication <b>AND</b> reassessment within 4 weeks <b>AND</b> an order for laboratory test or ECG for hypertension  <b>OR</b> Referral to Alternate/Primary Care Provider

**Patients with a Documented Reason for not Screening or no Follow-Up Plan for High Blood Pressure (Denominator Exceptions) –**

- Documentation of medical reason(s) for not screening for high blood pressure (e.g., 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).
- Documentation of patient reason(s) for not screening for blood pressure measurements or for not ordering an appropriate follow-up intervention if patient BP is elevated or hypertensive (e.g., patient refuses).

**NUMERATOR NOTE:** Although the recommended screening interval for a normal BP reading is every year, to meet the intent of this measure, BP screening and follow-up must be performed at every patient visit. For patients with Normal blood pressure, a follow-up plan is not required (G8783). Denominator Exception(s) are determined on the date of the denominator eligible encounter.





Section 3, cont.:  
Data  
Completeness and  
Performance not  
Met

Performance Not Met:

Elevated or Hypertensive blood pressure reading documented, indicated follow-up not documented, reason not given (G8952)

#### RATIONALE:

Hypertension is a prevalent condition that affects approximately 66.9 million people in the United States. It is estimated that about 20-40% of the adult population has hypertension; the majority of people over age 65 have a hypertension diagnosis (1,2). Winter noted that 1 in 3 American adults have hypertension and the lifetime risk of developing hypertension is 90% (3). The African American population or non-Hispanic Blacks, the elderly, diabetics and individuals with chronic kidney disease are at increased risk of stroke, myocardial infarction and renal disease. Non-Hispanic Blacks have the highest prevalence at 38.6% (3). Hypertension is a major risk factor for ischemic heart disease, heart failure, stroke, atrial fibrillation, peripheral artery disease, chronic kidney disease, and cognitive decline. Lifestyle modifications, such as diet, exercise, and weight loss, along with pharmacologic therapy, are complementary approaches to reducing CVD risk in the population, but prevention of hypertension remains the optimal means of reducing risk and avoiding harmful consequences. Periodic BP screening can identify individuals who develop elevated BP over time. More frequent BP screening may be particularly important for individuals with elevated ASCVD risk (4).

This is a brief statement describing the evidence base and/or intent for the measure.

These codes are examples of QDC's or Quality Data Codes. These codes may be used to identify numerator options.

Hypertension is the most common reason for adult office visits other than pregnancy. Garrison stated that in 2007, 42 million ambulatory visits were attributed to hypertension (5). It also has the highest utilization of prescription drugs. Numerous resources and treatment options are available, yet only about 40-50% of the hypertensive patients have their blood pressure under control (<140/90) (1,2). In addition to medication non-compliance, poor outcomes are also attributed to poor adherence to lifestyle changes such as a low-sodium diet, weight loss, increased exercise and limiting alcohol intake. Many adults find it difficult to continue medications and lifestyle changes when they are asymptomatic. Symptoms of elevated blood pressure usually do not occur until secondary problems arise such as with vascular diseases (myocardial infarction, stroke, heart failure and renal insufficiency) (2).

Appropriate follow-up after blood pressure measurement is a pivotal component in preventing the progression of hypertension and the development of heart disease. Detection of marginally or fully elevated blood pressure by a specialty clinician warrants referral to a provider familiar with the management of hypertension and prehypertension. The 2010 ACCF/AHA Guideline for the Assessment of Cardiovascular Risk in Asymptomatic Adults continues to support using a global risk score such as the Framingham Risk Score, to assess risk of coronary heart disease (CHD) in all asymptomatic adults (6). Lifestyle modifications have demonstrated effectiveness in lowering blood pressure (7). The synergistic effect of several lifestyle modifications results in greater benefits than a single modification alone. Baseline diagnostic/laboratory testing establishes if a co-existing underlying condition is the etiology of hypertension and evaluates if end organ damage from hypertension has already occurred. Landmark trials such as ALLHAT have repeatedly proven the efficacy of pharmacologic therapy to control blood pressure and reduce the complications of hypertension. A review of 35 studies found that the pharmacist-led interventions involved medication counseling and patient education. Twenty-nine of the 35 studies showed statistically significant improvement in BP levels of the intervention groups at follow-up (8). Follow-up intervals based on blood pressure control have been established by the 2017 ACC/AHA guideline and the USPSTF.

#### References

1. Appleton, S. L., Neo, C., Hill, C. L., Douglas, K. A., & Adams, R. J. (2013). Untreated hypertension: prevalence and patient factors and beliefs associated with under-treatment in a population sample. *Journal of Human Hypertension*, 27, 453-462. doi:10.1038/jhh.2012.62ID
2. Luehr, D., Woolley, T., Burke, R., Dohmen, F., Hayes, R., Johnson, M., Schoenleber, M. (2012). Hypertension diagnosis and treatment; Institute for Clinical Systems Improvement health care guideline. Updated November, 2012
3. Winter, K. H., Tuttle, L. A. & Viera, A.J. (2013). Hypertension. *Primary Care Clinics in Office Practice*, 40, 179-194. doi:10.1016/j.pop.2012.11.008
4. Whelton, P.K., Carey, R.M., Aronow, W.S., Casey, D.E., Collins, K., Dennison Himmelfarb, C., Depalma, S.M., Gidding, S., Jamerson, K.A., Jones, D.W., MacLaughlin, E.J., Muntener, P., Ovbhaggele, B., Smith, S.C., Spencer, C.C., Stafford, R.S., Taler, S.J., Thomas, R.J., Williams, K. A., Williamson, J.D., Wright, J.T., (2018). 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection,

Evaluation, and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. Hypertension, 71(6), e13-e115. doi.org/10.1161/HYP.0000000000000065

5. Garrison, G. M. & Oberhelman, S. (2013). Screening for hypertension annually compared with current practice. Annals of Family Medicine, 11 (2), 116-121. doi:10.1370/afm.1467
6. Greenland, P., Alpert, J. S., Beller, G. A., Benjamin, E. J., Budoff, M. J., Fayad, Z. A., Foster, E., Hlatky, M. A., Hodgson, J. M., Kushner, F. G., Lauer, M. S., Shaw, L. J., Smith, S. C., Jr, Taylor, A. J., Weintraub, W. S., Wenger, N. K., Jacobs, A. K., Smith, S. C., Jr, Anderson, J. L., Albert, N., ... American Heart Association (2010). 2010 ACCF/AHA guideline for assessment of cardiovascular risk in asymptomatic adults: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. Journal of the American College of Cardiology, 56(25), e50-e103. <https://doi.org/10.1016/j.jacc.2010.09.001>
7. U.S. Department of Health and Human Services, National Institutes of Health, National Heart, Lung, and Blood Institute & National High Blood Pressure Education Program (2003). The Seventh Report of the Joint National Committee on the Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC-7). NIH Publication No. 03-5233
8. Reeves, L., Robinson, K., McClelland, T., Adedoyin, C., Broeseker, A., and Adunlin, G. (2020). "Pharmacist Interventions in the Management of Blood Pressure Control and Adherence to Antihypertensive Medications: A Systematic Review of Randomized Controlled Trials." Journal of Pharmacy Practice. Accessed October 5, 2022. <https://doi.org/10.1177/0897190020903573>

This is a summary of the clinical recommendations based on best practices.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The U.S. Preventive Services Task Force (USPSTF) recommends screening for high blood pressure in adults age 18 years and older. This is a grade A recommendation. (1)

#### **References**

1. U.S. Preventive Services Task Force (USPSTF). (2007). Screening for high blood pressure: U.S. Preventive Services Task Force reaffirmation. Annals of Internal Medicine, 147(11):783-6

This is the copyright for the measure as indicated by the measure steward.

#### **COPYRIGHT:**

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.**

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.

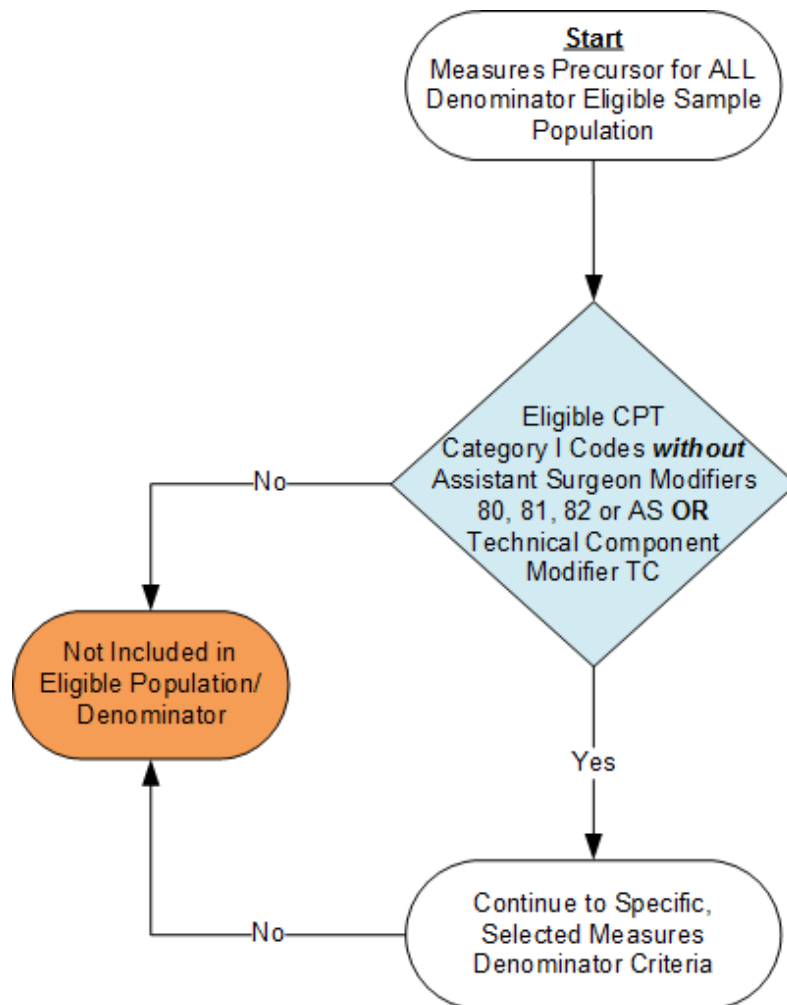
CPT® contained in the Measure specifications is copyright 2004-2022 American Medical Association. LOINC® is copyright 2004-2022 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms® (SNOMED CT®) copyright 2004-2022 International Health Terminology Standards Development Organisation. ICD-10 is copyright 2022 World Health Organization. All Rights Reserved.

## Interpretation of Clinical Quality Measure Flow

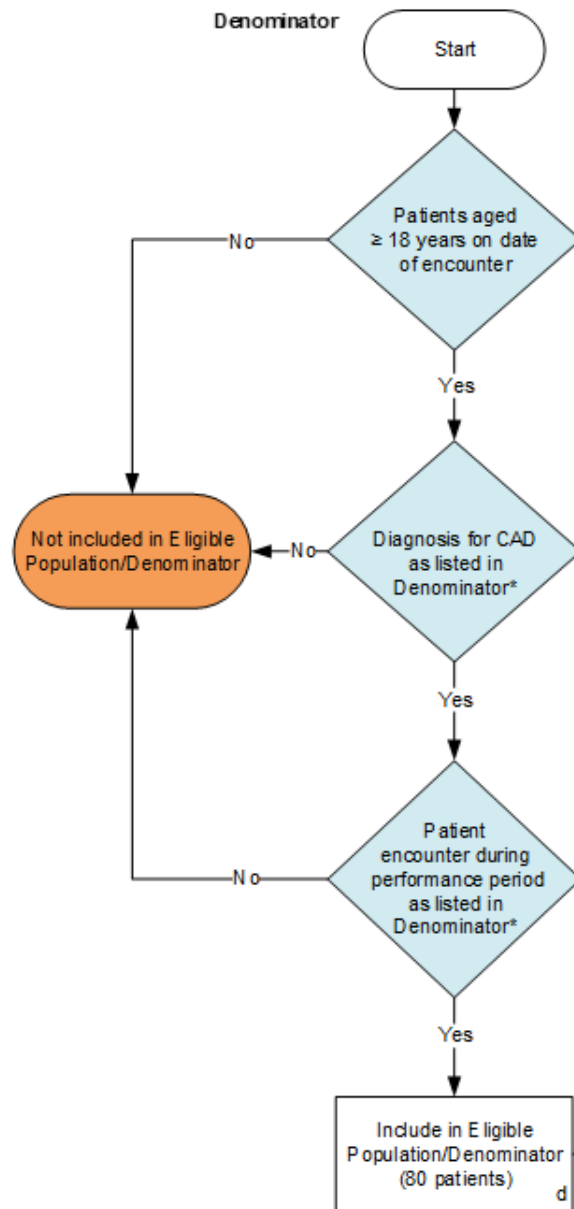
### Denominator

The CQM Flows are designed to provide interpretation of the measure logic and calculation methodology for data completeness and performance rates. The flows start with the identification of the patient population (denominator) for the applicable measure's quality action (numerator). When determining the denominator for all measures, please remember to include patients from all payers and CPT Categories **without** modifiers 80, 81, 82, AS or TC.

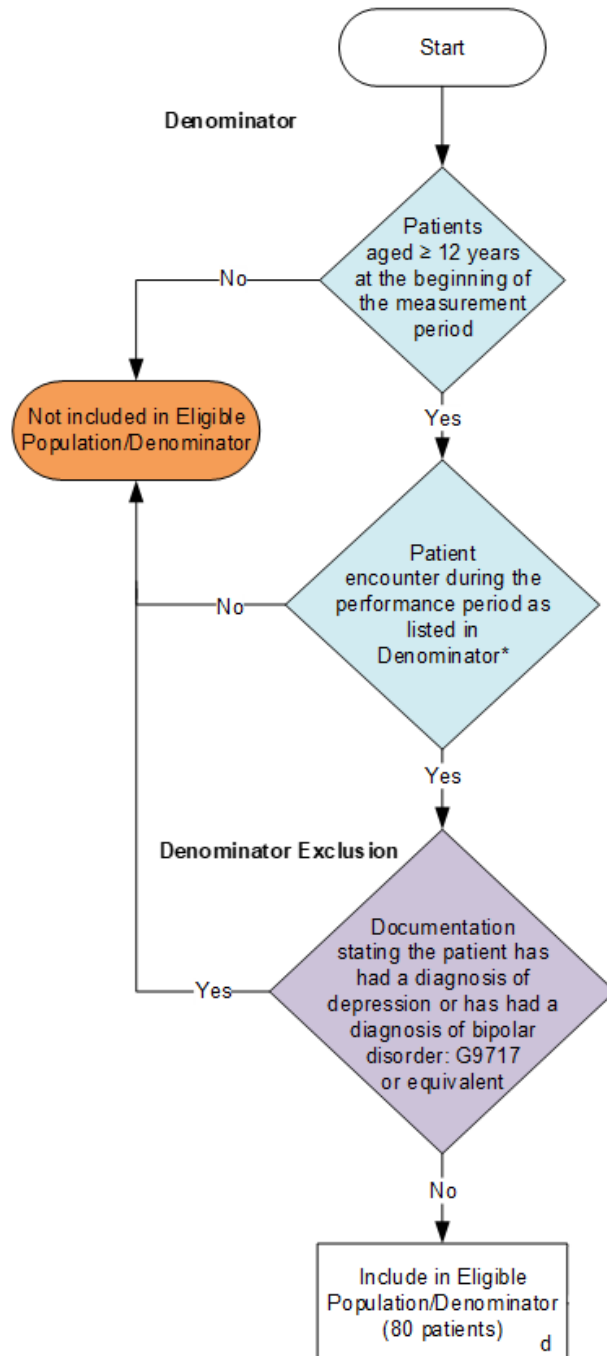
Below is an illustration of the above prerequisite denominator criteria to obtain the patient sample for all 2023 CQMs:



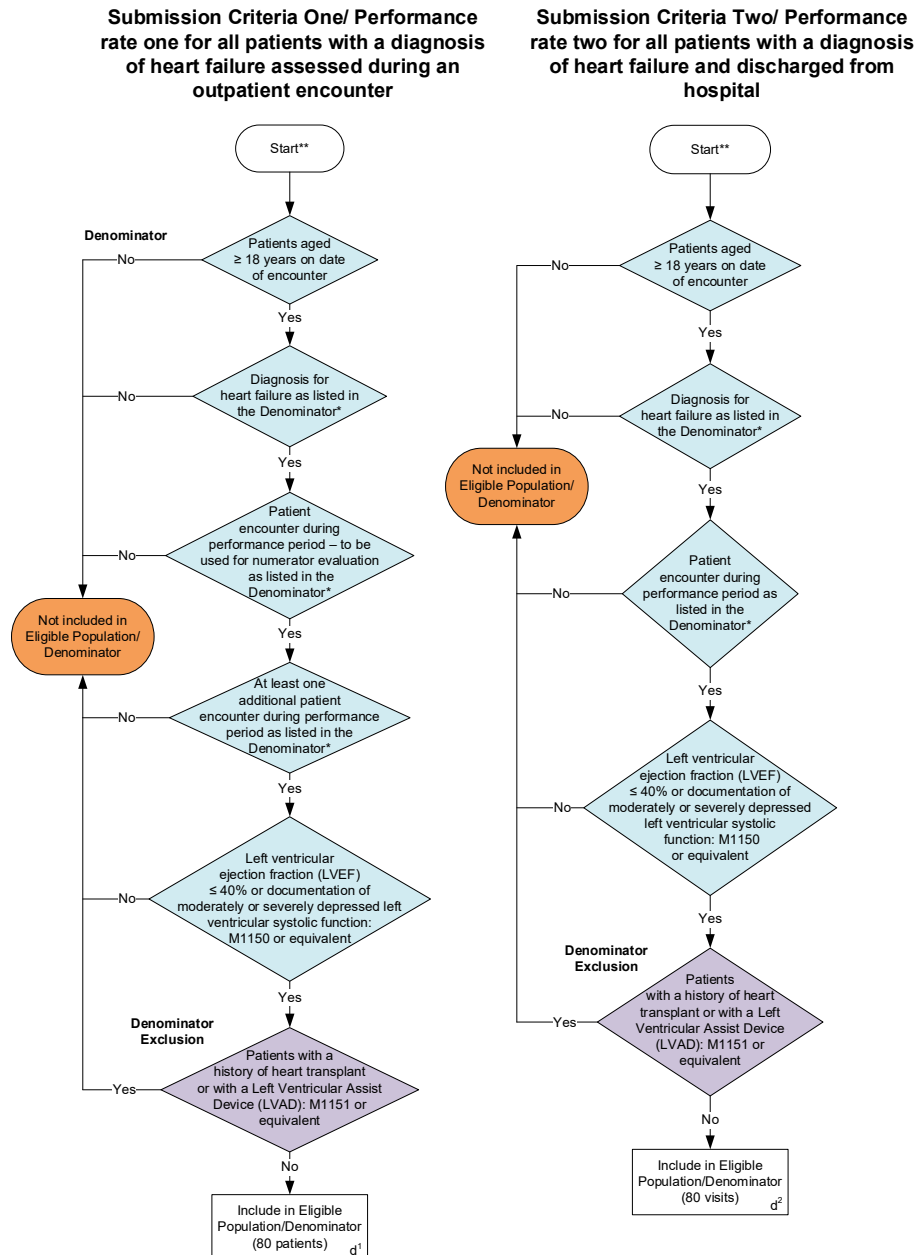
The CQM Flows in each specification document begin with the appropriate age group and denominator population for the measure. The Eligible Population box equates to the letter “d” by the patient population that meets the measures inclusion requirements. Below is an example of the denominator criteria used to determine the eligible population for Quality ID # 6: Coronary Artery Disease (CAD): Antiplatelet Therapy:



In some instances denominator exclusions will be found within the denominator. Quality ID # 134: Preventive Care and Screening: Screening for Depression and Follow-Up Plan below is an example of a measure that exhibits a denominator exclusion that is labeled and is represented by a purple diamond.

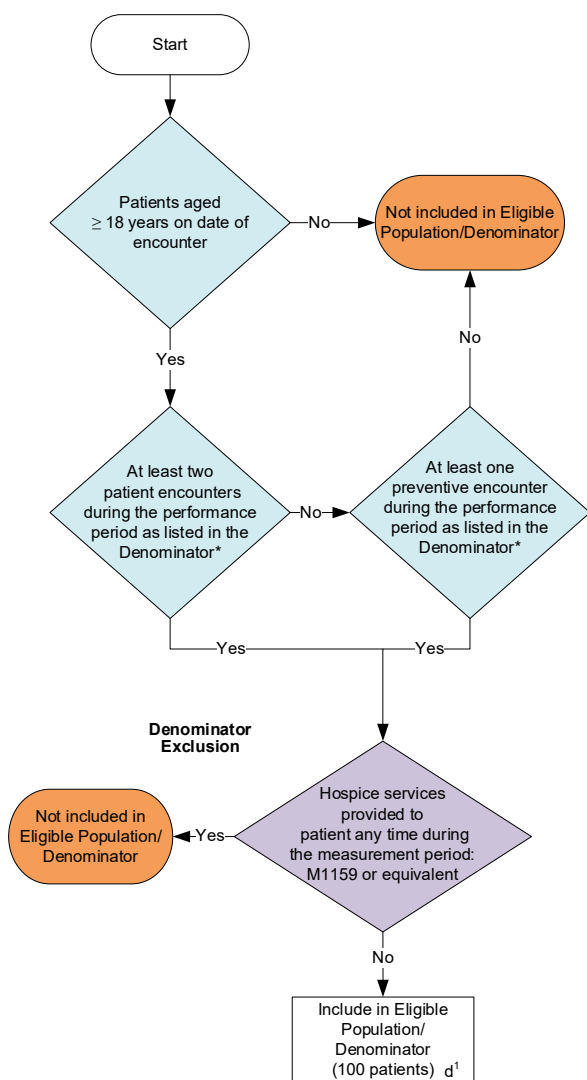


Some measures, such as Quality ID # 5: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) or Angiotensin Receptor-Neprilysin Inhibitor (ARNI) Therapy for Left Ventricular Systolic Dysfunction (LVSD), have multiple options to determine the measure's denominator. Patients meeting the submission criteria for either denominator option are included as part of the eligible population. Review the CQM to determine if multiple performance rates are required for each submission criteria.

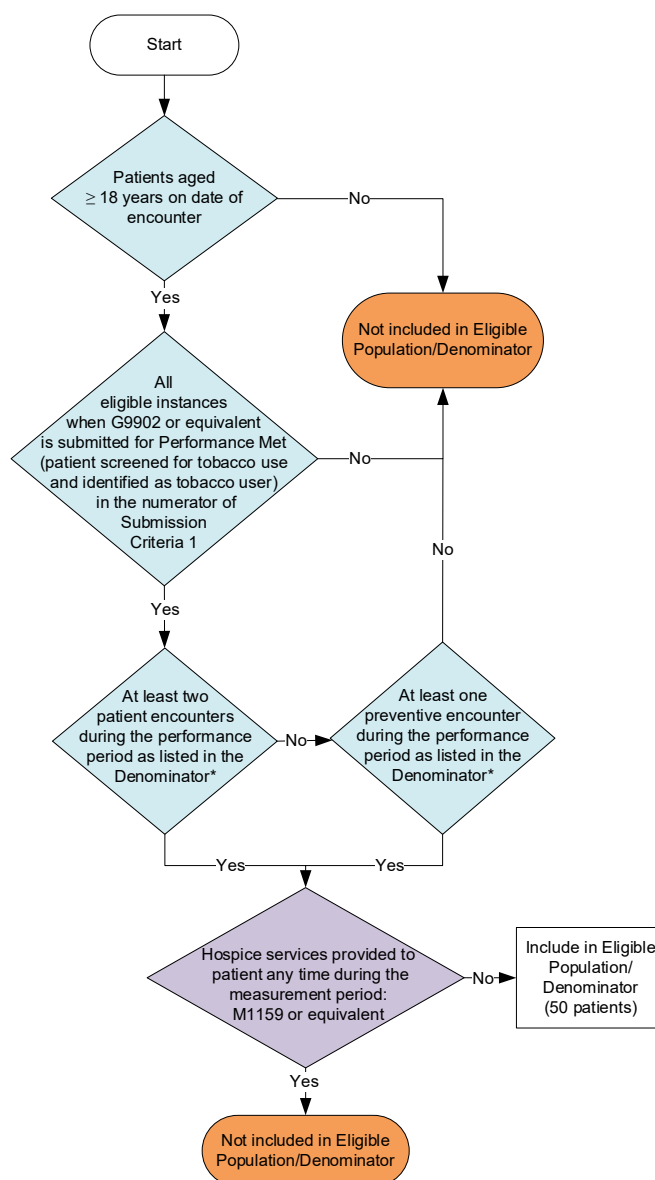


Some CQMs, such as Quality ID # 226: Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention have multiple submission criteria and multiple performance rates. Patients meeting the criteria for either denominator option are included as part of the eligible population. Review the CQM to determine if multiple performance rates are required for each submission criteria. The example below shows two of three submission criteria.

**Submission Criteria One/ All Patients who were screened for tobacco use**



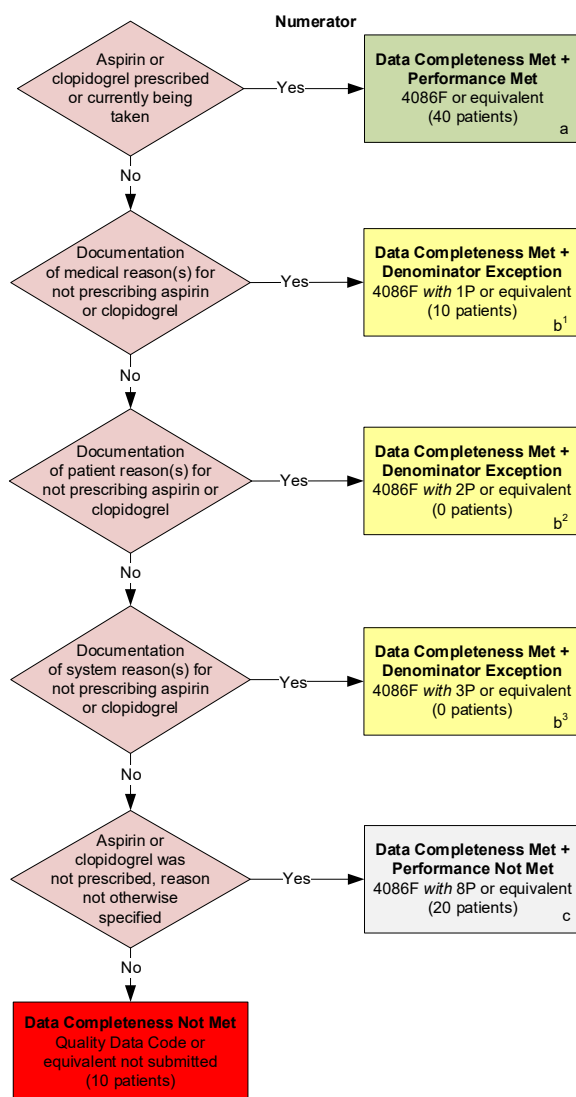
**Submission Criteria Two/ All Patients who were identified as a tobacco user and who received tobacco cessation intervention**





## Numerator

Once the denominator is identified, the flow illustrates and stratifies the quality action (numerator) for data completeness. Depending on the measure, there are several outcomes that may be applicable for submission. Each measure outcome is represented by a variable that is included in an algorithm. The number of patients within an outcome category will be used to populate the algorithm: Top right box - Performance Met = “a” and shaded green; Middle right boxes - Denominator Exception = “b” and shaded yellow; bottom box - Performance Not Met = “c” and shaded gray; and bottom box - Data Completeness Not Met = shaded red. On the flow, these outcomes are color-coded and labeled to identify the particular outcome of the measure represented. This is illustrated below for Quality ID # 6: Coronary Artery Disease (CAD): Antiplatelet Therapy:



## **Denominator/Numerator Variation of Medicare Part B claims vs. CQM Collection Types**

For measures submitted via Medicare Part B claims or CQM, there are separate Measure Specifications, Flows, and Narratives. The denominator for the CQM measure may differ slightly from the denominator as outlined in the Medicare Part B claims measure specification. In the CQM measure specifications the denominator exclusion will appear in the denominator. For example, Quality ID # 134: Preventive Care and Screening: Screening for Depression and Follow-Up Plan, includes a clarifying G-code G9717 in the denominator to identify patients that meet the denominator exclusion when no CPT or ICD-10 diagnosis code exists. In Quality ID # 134, Medicare Part B Claims collection type, the numerator includes the code G9717 used to identify patients who meet the denominator exclusion. To comply with the Measure Steward's intent of the measures and since Qualified Registries or QCDRs may not necessarily be reliant on Medicare Part B claims data; the CQM collection type measure specification and flow show these QDCs or clinical concepts in the denominator. Therefore, the numerator quality data code options for CQM specifications and flow may vary from the Medicare Part-B claims measure specification and flow.

## **Algorithms**

### **Data Completeness Algorithm**

The Data Completeness Algorithm calculation is based on the eligible population and sample outcomes of the possible quality actions as described in the flow of the measure. The Data Completeness Algorithm provides the calculation logic for patients who have been submitted in the MIPS eligible clinicians' appropriate denominator. Data completeness for a measure may include the following categories provided in the numerator: Performance Met, Denominator Exception, and Performance Not Met. Below is a sample Data Completeness Algorithm for Quality ID # 6: Coronary Artery Disease (CAD): Antiplatelet Therapy. In the example, 80 patients met the denominator criteria for eligibility, where 40 patients had the quality action performed (Performance Met), 10 patients did not receive the quality action for a documented reason (Denominator Exception), and 20 patients were reported as not receiving the quality action (Performance Not Met). **Note:** In the example, 10 patients were eligible for the measure but were not submitted and are not represented in the algorithm (Data Completeness Not Met). Additionally, depending on the Qualified Registry's or QCDR's data source and abstraction method, the data completeness may not reflect missing numerator data.

### **Data Completeness =**

$$\frac{\text{Performance Met (a=40 patients)} + \text{Denominator Exceptions (b}^1 + \text{b}^2 + \text{b}^3 = 10 \text{ patients)} + \text{Performance Met (c=20 patients)}}{\text{Eligible Population/Denominator (d=80 patients)}} = \frac{70 \text{ patients}}{80 \text{ patients}} = 87.50\%$$

### **Performance Algorithm**

The Performance Algorithm calculation begins with only those patients where data completeness was met and reported for the measure. For those patients reported, the numerator is then determined based on completion of the quality action as indicated by Performance Met. Meeting the quality action for a patient, as indicated in the CQM measure specification, would add one patient to the denominator and one to the numerator. Patients reporting with Denominator Exceptions are subtracted from the performance denominator when calculating the performance rate percentage. Below is a sample Performance Algorithm that represents this calculation for Quality ID # 6. In this scenario, the patient sample for data completeness per the numerator equals 70 patients where 40 of these patients had the quality action performed (Performance Met) and 10 patients were reported as having a Denominator Exception.

### **Performance Rate =**

$$\frac{\text{Performance Met (a=40 patients)}}{\text{Data Completeness Numerator (70 Patients) - Denominator Exception (b}^1 + \text{b}^2 + \text{b}^3 = 10 \text{ patients)}} = \frac{40 \text{ patients}}{60 \text{ patients}} = 66.67\%$$

For measures with inverse performance rates, such as Quality ID # 331: Adult Sinusitis: Antibiotic Prescribed for Acute Viral Sinusitis (Overuse), a lower rate indicates better performance. Submitting the Performance Not Met quality action is actually the clinically recommended outcome.

### **Multiple Performance Rates**

QPP measures may contain multiple performance rates. The Instructions section of the CQM will provide guidance if the measure is indeed a multiple performance. The CQM flow for these measures includes algorithm examples to understand the different data completeness and performance rates required for the measure. Please note, only the performance rates outlined in the measure specification are to be submitted for CQM submissions. CMS, with Measure Steward feedback, will calculate an overall performance rate for the measure if none is specified within the measure.