

# Cardiovascular, Spring 2020 Cycle: CDP Report

TECHNICAL REPORT MARCH 23, 2021

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# **Executive Summary**

Cardiovascular disease (CVD) is a significant burden in the United States (U.S.), leading to approximately one in four deaths per year. Considering the effect of CVD, measures that assess clinical care performance and patient outcomes are critical to reducing its negative impact.

For this project, the Cardiovascular Standing Committee evaluated four measures undergoing maintenance review against the National Quality Forum's (NQF) standard evaluation criteria. The Standing Committee recommended all four measures for endorsement. The Consensus Standards Approval Committee (CSAC) upheld the Standing Committee's recommendations.

#### **Endorsed Measures:**

- NQF #0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%) (American Heart Association)</li>
- NQF #0067 Coronary Artery Disease (CAD): Antiplatelet Therapy (American Heart Association)
- NQF #0076 Optimal Vascular Care (Minnesota (MN) Community Measurement)
- NQF #0290 Median Time to Transfer to Another Facility for Acute Coronary Intervention (Mathematica/Centers for Medicare & Medicaid Services (CMS))

Brief summaries of the spring 2020 measures are included in the body of the report; detailed summaries of the Standing Committee's discussion and ratings of the criteria for each measure are in Appendix A.

# Introduction

Cardiovascular disease (CVD) comprises coronary artery disease (CAD), heart failure (HF), stroke, and hypertension. It is highly prevalent in the U.S., affecting 48 percent of adults ages 20 and older.<sup>2</sup> Heart disease is the leading cause of death in the U.S.<sup>3</sup>

The measures in the Cardiovascular portfolio have been grouped into various topic areas related to cardiovascular health. These topic areas include primary prevention and screening, CAD, ischemic vascular disease (IVD), acute myocardial infarction (AMI), cardiac catheterization, percutaneous catheterization intervention (PCI), HF, rhythm disorders, implantable cardioverter-defibrillators (ICDs), cardiac imaging, cardiac rehabilitation, and high blood pressure.

# **NQF Portfolio of Performance Measures for Cardiovascular Conditions**

The Cardiovascular Standing Committee (<u>Appendix C</u>) oversees NQF's portfolio of cardiovascular measures (<u>Appendix B</u>), which includes measures for AMI, cardiac catheterization, PCI, CAD/IVD, cardiac imaging, HF, hyperlipidemia, hypertension, ICDs, rhythm disorders, and survival after cardiac arrest. This portfolio contains 41 endorsed measures: 19 process measures, 17 outcome and resource use measures, and five composite measures (see Table 1).

**Table 1. NQF Cardiovascular Portfolio of Measures** 

	Process	Outcome/Resource Use	Composite
Acute myocardial infarction (AMI)	5	3	1
Cardiac catheterization/percutaneous coronary intervention (PCI)	0	8	1
CAD/ischemic vascular disease (IVD)	6	1	1
HF	5	2	0
Hyperlipidemia	1	0	0
Hypertension	0	1	0
Implantable cardiovascular devices (ICDs)	1	0	2
Rhythm disorders	1	1	0
Survival after cardiac arrest	0	1	0
Total	19	17	5

Additional measures have been assigned to other portfolios. These include readmissions measures for AMI and HF (All-Cause Admissions/Readmissions), measures for coronary artery bypass graft (CABG) (Surgery), and measures for primary prevention of cardiovascular diseases (Prevention and Population Health).

# **Cardiovascular Measure Evaluation**

On June 30, 2020, the Cardiovascular Standing Committee evaluated four measures undergoing maintenance review against NQF's <u>standard measure evaluation criteria</u>.

**Table 2. Cardiovascular Measure Evaluation Summary** 

	Maintenance	New	Total
Measures reviewed	4	0	4
Measures endorsed	4	0	4

# Comments Received Prior to Standing Committee Evaluation

NQF accepts comments on endorsed measures on an ongoing basis through the Quality Positioning System (QPS). In addition, NQF solicits comments for a continuous 16-week period during each evaluation cycle via an online tool located on the project webpage. For this evaluation cycle, the commenting period opened on May 1, 2020, and closed on September 3, 2020. Pre-meeting commenting closed on June 12, 2020. As of that date, one comment was submitted. The commenter expressed disagreement with the NQF measure evaluation criteria for validity, stating that score-level testing should be required for measure #0290. At the time of evaluation, NQF considered data-element-level testing sufficient to demonstrate validity. The NQF Scientific Methods Panel (SMP) is engaged in a discussion of what demonstrates acceptable validity, but no changes have been finalized at the time of this report. This comment was shared with the Standing Committee prior to the measure evaluation meeting (Appendix F).

# **Comments Received After Standing Committee Evaluation**

The continuous 16-week public commenting period with NQF member support closed on September 3, 2020. Following the Standing Committee's evaluation of the measures under review, NQF received one comment from one individual pertaining to the draft report and the measures under review. This comment is included in the details of the review of measure #0066 in Appendix A.

Throughout the 16-week continuous public commenting period, NQF members had the opportunity to express their support (either *support* or *do not support*) for each measure submitted for endorsement consideration to inform the Standing Committee's recommendations. No NQF members provided their expression of support.

# Summary of Measure Evaluation

The following brief summaries of the measure evaluation highlight the major issues that the Standing Committee considered. Details of the Standing Committee's discussion and ratings of the criteria for each measure are included in Appendix A.

NQF #0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%) (American Heart Association): Endorsed

**Description**: Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period who also have diabetes OR a current or prior LVEF < 40% who were prescribed ACE inhibitor or ARB therapy; **Measure Type**: Process; **Level of Analysis**: Clinician : Individual; **Setting of Care**: Home Care, Outpatient Services, Post-Acute Care; **Data Source**: Registry Data

The Standing Committee recommended the measure for continued endorsement. It observed that the developers included the 2012 Guidelines for the Diagnosis and Management of Patients with Stable Ischemic Heart Disease. The Standing Committee noted that a 2014 update to the 2012 guidelines is available, so it may be beneficial for the measure developer to consider mentioning that although there are no substantial changes, which shows that the evidence has remained consistent. The Standing Committee expressed some concern related to the lack of data on racial and ethnic disparities. However, they agreed that median and mean scores of low 80s demonstrate reasonable measure performance gap. The Standing Committee stated no concerns regarding reliability for this measure. There were some concerns regarding low correlation for score-level validity testing. However, the results remained statistically significant, and no other major concerns were expressed by the Standing Committee. The Standing Committee had no concerns regarding measure feasibility. In their discussions related to usability and use, the Standing Committee noted that this measure is currently used in a variety of accountability applications, including the Merit-Based Incentive Payment System (MIPS) program, the PINNACLE registry, and the Diabetes Collaborative. However, the Standing Committee did highlight the feedback to add "angiotensin receptor neprilysin inhibitor (ARNI) in combination with ARB therapy" to the value set as part of that use. The Standing Committee noted improvement over time with no significant unintended consequences and passed the measure on use and usability. The Standing Committee observed that there are several related measures with similar focus but different target populations; it was highlighted that the developer has harmonized the related measures to the extent possible and did not consider these measures to be competing.

During the public comment period, one commenter questioned whether there are any guidelines more recent/current than the 2014 Guideline for Diagnosis and Management of Patients with Stable Ischemic Heart Disease. This comment was forwarded to the developer. The developer confirmed that the 2014 Guideline is the most recently published guideline.

Following the measure evaluation meeting, the CSAC convened to finalize endorsement decisions. The CSAC expressed no concerns with the Standing Committee's evaluation or recommendation and voted unanimously to endorse the measure.

# NQF #0067 Coronary Artery Disease (CAD): Antiplatelet Therapy (American Heart Association): Endorsed

**Description**: Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease (CAD) seen within a 12-month period who were prescribed aspirin or clopidogrel; **Measure Type**: Process; **Level of Analysis**: Clinician: Individual; **Setting of Care**: Home Care, Outpatient Services, Post-Acute Care; **Data Source**: Registry Data

The Standing Committee recommended the measure for continued endorsement. They noted that this is one of the staple measures of cardiology care for patients with CAD. The Standing Committee agreed the evidence base has not changed since the previous NQF endorsement in 2016 and determined that the evidence provided was based on the systematic review and grading of the body of empirical evidence. The Standing Committee observed the presence of a moderate measure performance gap. They did not raise any issues regarding the reliability of the measure but expressed some concerns regarding the validity of the measure. The Standing Committee noted that the measure did not include some of the exclusions nor did it specify the exceptions that were analyzed. The MIPS data set used for testing did not have missing data. It was not indicated whether missing data in other data sets could be systematic and whether omissions could lead to unbiased performance results. The Standing Committee also observed that risk adjustment was not conducted for the measure, which can compromise the validity of the results.

The Standing Committee recommended that risk adjustment be considered for future iterations of the measure. The Standing Committee also determined that the measure was both reliable and valid. They regarded the measure as moderately feasible with no significant concerns. In discussions related to usability and use, the Standing Committee concluded that the measure is used in a variety of accountability applications with good mechanisms in place for measure feedback. The Standing Committee also noted significant room for improvement over time and that the benefits of using antiplatelet therapy greatly outweigh the risks. The Standing Committee observed that several related measures are present but did not consider these measures to be competing.

Following the measure evaluation meeting, the CSAC convened to finalize endorsement decisions. The CSAC expressed no concerns with the Standing Committee's evaluation or recommendation and voted unanimously to endorse the measure.

#### NQF #0076 Optimal Vascular Care (MNCM): Endorsed

**Description**: The percentage of patients 18-75 years of age who had a diagnosis of ischemic vascular disease (IVD) and whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following: Blood pressure less than 140/90 mmHg; On a statin medication, unless allowed contraindications or exceptions are present; Non-tobacco user; On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present; **Measure Type**: Composite; **Level of Analysis**: Clinician : Group/Practice; **Setting of Care**: Outpatient Services; **Data Source**: Electronic Health Records, Paper Medical Records

Prior to the Standing Committee meeting, this measure was reviewed by the SMP. The SMP passed the measure with a high rating for reliability and a moderate rating for validity.

The Standing Committee recommended the measure for continued endorsement. This measure, originally developed by Health Partners, has been publicly reported in Minnesota for over 12 years. It is a patient-level, all-or-none composite measure that seeks to reduce modifiable risk factors associated with short- and long-term complications associated with IVD. The Standing Committee noted that the developer provided evidence for each component of the composite and that the evidence for each component was at least moderate in strength. The Standing Committee observed a slight drop in

performance from 2016 to 2019, while the number of eligible patients has almost doubled. The Standing Committee further noted that while performance was high on the individual components of the composite, the all-or-none construction showed a large opportunity for improvement. In addition, breaking the scores out by race and ethnicity demonstrates disparity and continued opportunity for improvement. The Standing Committee indicated strong support for the composite quality construct and rationale. The Standing Committee also discussed the impact of socioeconomic status on the components of the composite, particularly smoking status. A member noted that smoking status is one of the most important lifestyle components of cardiovascular risk.

Ultimately, the Standing Committee was satisfied with the quality construct and rationale. They were also satisfied with the SMP's rating and review of reliability, validity, and quality construct. The developer provided an overview of their use of area deprivation index in the risk adjustment. The index allows adjustment for social risk variables based on the patient's home ZIP code. The Standing Committee appreciated the additional information and had no additional comments or questions pertaining to the scientific acceptability of the measure. They regarded the measure as moderately feasible with no significant concerns. In discussions related to usability and use, the Standing Committee concluded that the measure is used in accountability applications with no unintended consequences or harms identified. The Standing Committee also noted general improvement over time. The Standing Committee observed that several related measures are present but did not consider these measures to be competing.

Following the measure evaluation meeting, the CSAC convened to finalize endorsement decisions. The CSAC expressed no concerns with the Standing Committee's evaluation or recommendation and voted unanimously to endorse the measure.

# NQF #0290 Median Time to Transfer to Another Facility for Acute Coronary Intervention (Mathematica/CMS): Endorsed

**Description**: This measure calculates the median time from emergency department arrival to time of transfer to another facility for acute coronary intervention. **Measure Type**: Process; **Level of Analysis**: Facility; **Setting of Care**: Emergency Department and Services; **Data Source**: Electronic Health Records, Paper Medical Records

The Standing Committee recommended the measure for continued endorsement. They noted updated evidence since the previous endorsement in 2016 and that the evidence was at least moderate in strength. They observed that while median time to transfer has remained consistent over time, there is continued demonstration of significant variation across facilities, supporting a moderate measure performance gap. The Standing Committee noted that reliability was sufficient across all sizes of institutions and that it tended to be higher at larger institutions, as expected. NQF received a pre-evaluation meeting comment from a member organization suggesting that empiric score-level validity testing would be ideal for measures in accountability programs. NQF staff clarified that for process measures, demonstration of data element validity meets the validity testing requirements currently in place.

The Standing Committee had questions regarding the significance of the cases excluded due to "Initial EKG Interpretation" and whether facilities that misinterpret an electrocardiogram (EKG) could be excluded from the measure. The developers clarified that the audit process for validating the data elements consists of pulling a random sample of cases and that hospitals are not able to influence which cases are selected for audit. The Standing Committee determined that the measure was both reliable and valid. They regarded the measure as moderately feasible with no significant concerns. In discussions related to usability and use, the Standing Committee concluded that the measure is used in the Hospital Outpatient Quality Reporting program and reported on Hospital Compare. The Standing Committee also noted that the median score does not appear to have shown much improvement over time but that variation in performance across facilities was present. The Standing Committee observed that a related measure is also present but that it focuses on a different treatment path.

Following the measure evaluation meeting, the CSAC convened to finalize endorsement decisions. The CSAC expressed no concerns with the Standing Committee's evaluation or recommendation and voted unanimously to endorse the measure.

# Measures Withdrawn From Consideration

Two measures previously endorsed by NQF have not been resubmitted for maintenance of endorsement or have been deferred during the endorsement evaluation process. Endorsement for NQF #2712 was removed. NQF #0669 was deferred to a later cycle.

Table 3. Measures Withdrawn From Consideration

Measure	Reason for withdrawal
NQF #0669 Cardiac Imaging for Preoperative Risk Assessment for Non-Cardiac, Low-Risk Surgery	This measure was deferred to the spring 2021 cycle.
NQF #2712 Statin Use in Persons With Diabetes	The developer did not seek re-endorsement.

# References

- 1. Heron M. Deaths: Leading Causes for 2014. *Natl Vital Stat Rep Cent Dis Control Prev Natl Cent Health Stat Natl Vital Stat Syst.* 2016;65(5):1-96.
- 2. Benjamin EJ, Muntner P, Alonso A, et al. Heart Disease and Stroke Statistics—2019 Update: A Report From the American Heart Association. *Circulation*. 2019;139:e56–e528. https://www.ahajournals.org/doi/full/10.1161/CIR.0000000000000659. Last accessed July 18, 2020.
- 3. Heron M. Deaths: Leading Causes for 2017. *Natl Vital Stat Rep Cent Dis Control Prev Natl Cent Health Stat Natl Vital Stat Syst.* 2017;68(6):1-77.

# **Appendix A: Details of Measure Evaluation**

Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable

Quorum (14 out of 21 Standing Committee members) was not met during the June 30, 2020 measure evaluation meeting. The Standing Committee discussed all measures during the meeting followed by voting, which was conducted using an online tool. One Standing Committee member did not submit votes for measure #0290, resulting in a lower overall vote total for that measure.

# **Endorsed Measures**

NQF #0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

#### Submission | Specifications

**Description**: Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period who also have diabetes OR a current or prior LVEF < 40% who were prescribed ACE inhibitor or ARB therapy

Numerator Statement: Patients who were prescribed ACE inhibitor or ARB therapy

**Denominator Statement**: All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period who also have diabetes OR current or prior LVEF <40%

**Exclusions**: Denominator Exceptions:

Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, and other medical reasons) Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., patient declined, other patient reasons)

Documentation of system reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., lack of drug availability, other reasons attributable to the healthcare system)

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Clinician: Individual

**Setting of Care:** Home Care, Outpatient Services, Post-Acute Care

Type of Measure: Process

Data Source: Registry Data

Measure Steward: American Heart Association

# **STANDING COMMITTEE MEETING June 30, 2020**

1. Importance to Measure and Report: The measure meets the Importance criteria.

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: H-15; M-2; L-0; I-0; 1b. Performance Gap: H-5; M-12; L-0; I-0

#### Rationale:

- In 2016, the developer included the 2012 ACCF/AHA/ACP/AATS/PCNA/SCAI/STS Guidelines for the Diagnosis and Management of Patients with Stable Ischemic Heart Disease. The recommendation stated the following points:
  - ACE inhibitors should be prescribed in all patients with stable ischemic heart disease (SIHD)
    who also have hypertension, diabetes mellitus, LVEF 40% or less, or chronic kidney disease
    (CKD), unless contraindicated. Level of Evidence: Level A
  - ARBs are recommended for patients with stable ischemic heart disease (SIHD) who have hypertension, diabetes mellitus, LV systolic dysfunction, or chronic kidney disease (CKD) and have indications for, but are intolerant of, ACE inhibitors." Level of Evidence: Level A

NQF #0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

- The developer provided a systematic review of the body of evidence supporting the benefits of ACE inhibitor/ARB therapy for patients with ischemic heart disease and included a summary of the quantity, quality, and consistency of the body of evidence.
- The developer attested to no changes in the evidence since the measure was last reviewed.
- The Standing Committee noted that a 2014 focused update to the guidelines was not included; however, it did not change the level, strength, or direction of the evidence.
- The developer provided January 2018-December 2018 data from 774 providers who reported on this measure through the registry reporting for MIPS. The data set reflects information at the provider level:
  - Of those 774 providers, all had at least one patient who qualified for the measure after accounting for exceptions for a total of 66,755 eligible patients.
  - o The average number of eligible patients is 86 for the 774 providers.
  - o The range of eligible patients for 774 providers is from one to 992.
- The developer also reported CMS-published quality benchmarks for MIPS 2020, 2019, and 2018, which are created using historical performance rates:

Year	Submission	Average	Standard
	Method	Performance Rate	Deviation
2018	CQM	83.2	N/A
2017	Registry/QCDR	83.3	11.1
2016	Registry/QCDR	81.7	11.1

- The developer did not provide any data on disparities from the measure as specified—this is encouraged for endorsement maintenance.
- The developer stated that while this measure is included in federal reporting programs, those programs have yet to make disparities data available to analyze and report.
- The developer provided data from the literature demonstrating that more men with coronary artery disease (CAD) took ACE-I/ARBs than women (55.1% (SE = 2.1%) vs 50.5% (SE = 2.3%)). However, there were minimal disparities in use of ACE-I/ARBs between racial and ethnic minorities compared with non-Hispanic, White people.
- The Standing Committee would have appreciated seeing additional disparities data. However, they concurred that the gap warrants a national performance measure.

# 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criteria.</u>

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability: **H-10; M-7; L-0; I-0**; 2b. Validity: **H-4; M-13; L-0; I-0** 

#### Rationale:

- The testing data source included registry data from the 2018 Merit-Based Incentive Payment System (MIPS) Program for the time period of January 1, 2018 through December 31, 2018. A total of 66,755 patients were included in this reliability testing and analysis. The patients included were associated with providers who had at least one eligible patient in the year.
- The developers conducted reliability testing using a beta-binomial model to assess the signal-to-noise ratio. The average reliability for providers with at least one eligible patient is 0.85. The developer states that 0.80-0.90 is considered high reliability.
- A reliability of zero would imply that all the variability in a measure is attributable to measurement
  error. A reliability of one would imply that all the variability is attributable to real differences in
  performance. A higher reliability score reflects greater confidence with which one can distinguish the
  performance of one physician from another. This is an appropriate test for measure score reliability. A
  reliability measure score of 0.70 is generally considered a minimum threshold for reliability.
- The Standing Committee had no concerns regarding the reliability testing.

NQF #0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

- The developers chose NQF #0067 Coronary Artery Disease (CAD): Antiplatelet Therapy to conduct correlation analysis due to the similarities in patient population and domain. They hypothesized that a positive association of scores would occur between providers who prescribe angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy for patients with diabetes or left ventricular systolic dysfunction (LVEF < 40%) and providers who prescribe antiplatelet therapy for patients with coronary artery disease within a 12-month period. Providers included in the analysis had at least one patient in the denominator after exceptions were applied.
- The correlation was highly, statistically significant with a coefficient of correlation of 0.47, which showed moderate correlation and further confirmed the developers' hypothesis.
- The Standing Committee had some concerns regarding the possibility of missing data and its potential for impact on the measure validity.
- The Standing Committee also expressed concern with the low correlation for score-level validity testing. However, they noted the results remained statistically significant.
- The Standing Committee determined the measure met the validity criterion.

#### 3. Feasibility: H-7; M-10; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

#### Rationale:

• The Standing Committee had no concerns regarding this criterion. The measure uses readily available data elements that are generated during care delivery.

#### 4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: Pass-17; No Pass-0 4b. Usability: H-4; M-12; L-1; I-0

#### Rationale:

• The Standing Committee had no concerns regarding these criteria. The measure is used in numerous accountability applications and is publicly reported. The developer noted that the MIPS quality benchmarks show a slight improvement in average performance rates between 2016 and 2018. The scores also appear very similar.

#### 5. Related and Competing Measures

- This measure is related to the following measures:
  - NQF #0081 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)
  - NQF #0081e 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)
  - NQF #0137 ACEI or ARB for Left Ventricular Systolic Dysfunction Acute Myocardial Infarction (AMI) Patients
  - NQF #1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
- The Standing Committee did not note any issues between these measures.

# 6. Standing Committee Recommendation for Endorsement: Y-16; N-1

#### 7. Public and Member Comment

NQF #0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

- One commenter questioned whether there are any guidelines more recent/current than the 2014 guidelines for Diagnosis and Management of Patients with Stable Ischemic Heart Disease. This comment was forwarded to the developer. The developer confirmed that the 2014 guidelines are the most recently published guidelines.
- 8. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Y-11; N-0 (November 17-18, 2020: Approved for continued endorsement)

#### 9. Appeals

• No appeals were received.

#### NQF #0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

#### Submission | Specifications

**Description**: Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease (CAD) seen within a 12-month period who were prescribed aspirin or clopidogrel

Numerator Statement: Patients who were prescribed aspirin or clopidogrel

**Denominator Statement**: All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period

**Exclusions**: Denominator exceptions:

- Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, and/or other medical reasons)
- Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)
- Documentation of system reason(s) for not prescribing aspirin or clopidogrel (e.g., lack of drug availability, other reasons attributable to the healthcare system)

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Clinician: Individual

Setting of Care: Home Care, Outpatient Services, Post-Acute Care

Type of Measure: Process

Data Source: Registry Data

Measure Steward: American Heart Association

#### STANDING COMMITTEE MEETING June 30, 2020

1. Importance to Measure and Report: <u>The measure meets the Importance criteria.</u>

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: H-14; M-3; L-0; I-0; 1b. Performance Gap: H-3; M-13; L-1; I-0

#### Rationale:

- The developer provided decision logic from secondary prevention to outcome for the use of antiplatelet therapy in decreasing morbidity, mortality, and hospitalization with patients in with chronic stable CAD.
- The developer provided two guidelines with four guideline statements supporting the use of aspirin and clopidogrel in patients with CAD:
  - 2012 ACCF/AHA/ACP/AATS/PCNA/SCAI/STS guidelines for the diagnosis and management of patients with stable IHD

#### NQF #0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

- Non-enteric-coated, chewable aspirin (162 to 325 mg) should be given to all patients with NSTE-ACS without contraindications as soon as possible after presentation, and a maintenance dose of aspirin (81 mg/d to 325 mg/d) should be continued indefinitely. Class I: Level of Evidence: A
- In patients with NSTE-ACS who are unable to take aspirin because of hypersensitivity or major gastrointestinal intolerance, a loading dose of clopidogrel followed by a daily maintenance dose should be administered. Class I: Level of Evidence: B
- 2014 AHA/ACC guidelines for the management of patients with non-ST-elevation acute coronary syndromes
  - Treatment with aspirin 75 to 162 mg daily should be continued indefinitely in the absence of contraindications in patients with SIHD. Class I: Level of Evidence: A
  - Treatment with clopidogrel is reasonable when aspirin is contraindicated in patients with SIHD. Class I: Level of Evidence: B
- In this 2020 submission, the developer included an updated literature search covering January 1, 2016 through February 19, 2020 for ST-elevation myocardial infarction (STEMI) patients and confirmed that none of the studies contained new conclusions that would alter the recommendation to prescribe antiplatelet therapy to patients with CAD.
- The developer also included a summary of the quantity, quality, and consistency of the body of evidence.
- The developer attested to no changes in the evidence since the measure was last reviewed.
- The Standing Committee noted a 2014 focused update to the guidelines; however, it did not change the level, strength, or direction of the evidence.
- The developer provided January 2018-December 2018 data from 1,846 providers who reported on this measure through the registry reporting for MIPS. The data set reflects information at the provider level:
  - Of those 1,846 providers, 1,843 of them had at least one patient who qualified for the measure after accounting for exceptions for a total of 506,259 eligible patients.
  - o The average number of eligible patients is 274 for the 1,843 providers.
  - The range of eligible patients for 1,843 providers is from one to 2,781.
- The developers also reported CMS-published quality benchmarks for MIPS 2020, 2019, and 2018, which are created using historical performance rates, which included 2,407 providers and the patient study sample of 1,023,530. The data demonstrated that:
  - o the overall mean performance for this measure was 86.2%, with a standard deviation of 10.5%. The minimum score equaled 0.00%, while the maximum score equaled 100.00%. The interquartile score equaled to 10.3%.

Year	Submission Method	Average Performance Rate	Standard Deviation
2018	CQM	89.2	N/A
2017	Registry/QCDR	89.6	13.2
2016	Registry/QCDR	87.3	11.72013 performance data from the Pinnacle registry.

- The developer did not provide any data on disparities from the measure as specified—this is encouraged for endorsement maintenance.
- The developer stated that while this measure is included in federal reporting programs, those programs have yet to make disparities data available to analyze and report.
- The developer provided data from the literature demonstrating that among those with coronary artery disease (CAD), women and racial/ethnic minorities were less likely to take aspirin, compared with men and non-Hispanic, White people (OR = 0.63 and 0.74 respectively).

#### NQF #0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

• The Standing Committee expressed some concern with the overall performance beginning to top out but noted the possibility of disparities in performance pertaining to race and gender. It decided that the moderate gap still warrants a national performance measure.

#### 2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability: **H-11; M-6; L-0; I-0**; 2b. Validity: **H-6; M-11; L-0; I-0** 

# Rationale:

- Reliability testing was conducted on the performance score, using registry data from the 2018 Merit-Based Incentive Payment System (MIPS) Program for the time period of January 1, 2018 to December 31, 2018; the data analysis only included data that was reported at the unique NPI level.
- A total of 1,846 providers are reporting on this measure through the registry reporting option for MIPS. Of those 1,846 providers, 1,843 of them had at least one patient who qualified for the measure. after accounting for exceptions for a total of 506,259 eligible patients. The average number of eligible patients is 274 for the 1,843 providers. The range of eligible patients for 1,843 providers is from one to 2,781.
- The developers used a beta-binomial model to assess the signal-to-noise ratio to conduct reliability testing. The average reliability for providers with at least one eligible patient is 0.95. As the developer stated, 0.80-0.90 is considered high reliability.
- A reliability of zero implies that all the variability in a measure is attributable to measurement error. A
  reliability of one implies that all the variability is attributable to real differences in performance. A
  higher reliability score reflects greater confidence with which one can distinguish the performance of
  one physician from another. This is an appropriate test for measure score reliability. A reliability
  measure score of 0.70 is generally considered a minimum threshold for reliability.
- The Standing Committee had no concerns regarding the reliability of the measure.
- The developers used data from the 2018 MIPS Registry Program to perform the correlation analysis for this measure.
- The developers chose NQF #0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%) to conduct correlation analysis due to the similarities in patient population and domain. They hypothesized that a positive association of scores would occur between providers who prescribe an antiplatelet therapy for patients with coronary artery disease and those who prescribe Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for patients with diabetes or left ventricular systolic dysfunction (LVEF < 40%) within a 12-month period.
- Providers included in the analysis had at least one patient in the denominator after exceptions were applied.
- The results demonstrated that NQF #0067 Coronary Artery Disease (CAD): Antiplatelet Therapy was positively correlated with NQF #0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%).
- The correlation was highly statistically significant, with a coefficient of correlation of 0.47, which showed moderate correlation, confirming the developers' hypothesis and demonstrating the criterion validity of the measure.
- The Standing Committee noted that the measure did not include some of the exclusions nor did it specify the exceptions that were analyzed. The MIPS data set used for testing did not have missing data. It was not indicated whether missing data in other data sets could be systematic and whether omissions could lead to unbiased performance results.
- The Standing Committee also observed that risk adjustment was not conducted for the measure, which can compromise the validity of the results. The Standing Committee recommended that risk adjustment be considered for future iterations of the measure.
- The Standing Committee determined the measure met the validity criterion.
- 3. Feasibility: H-4; M-13; L-0; I-0

#### NQF #0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

#### Rationale:

 The Standing Committee had no concerns regarding this criterion. The measure uses readily available data elements that are generated during care delivery.

#### 4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: Pass-17; No Pass -0 4b. Usability: H-5; M-12; L-0; I-0

#### Rationale:

• The Standing Committee had no concerns regarding these criteria. The measure is used in numerous accountability applications and is publicly reported. The developers noted that the MIPS quality benchmarks of this form show a slight improvement in average performance rates between 2016 and 2018. The scores also appear very similar.

#### 5. Related and Competing Measures

- The measure is related to the following measures:
  - NQF #0465 Perioperative Antiplatelet Therapy for Patients Undergoing Carotid Endarterectomy
  - o NQF #0073 Ischemic Vascular Disease (IVD): Use of Aspirin of Another Antiplatelet
  - NQF #0076 Optimal Vascular Care
- The Standing Committee did not note any issues between these measures.

#### 6. Standing Committee Recommendation for Endorsement: Yes-15; No-0

#### 7. Public and Member Comment

- No public and member comments were received for this measure.
- **8**. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Y-11; N-0 (November 17-18, 2020: Approved for continued endorsement)

# 9. Appeals

• No appeals were received.

# **NQF #0076 Optimal Vascular Care**

#### Submission | Specifications

**Description**: The percentage of patients 18-75 years of age who had a diagnosis of ischemic vascular disease (IVD) and whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:

- Blood pressure less than 140/90 mmHg
- On a statin medication, unless allowed contraindications or exceptions are present
- Non-tobacco user
- On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

**Numerator Statement**: The number of patients in the denominator whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:

• The most recent blood pressure in the measurement period has a systolic value of less than 140 mmHg AND a diastolic value of less than 90 mmHg

- On a statin medication, unless allowed contraindications or exceptions are present
- Patient is not a tobacco user
- On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

**Denominator Statement**: Patients ages 18 years or older at the start of the measurement period AND less than 76 years at the end of the measurement period who have a diagnosis of ischemic vascular disease (Ischemic Vascular Disease Value Set) with any contact during the current or prior measurement period OR had ischemic vascular disease (Ischemic Vascular Disease Value Set) present on an active problem list at any time during the measurement period.

Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease) AND

At least one established patient office visit (Established Pt Diabetes & Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.

**Exclusions**: The following exclusions are allowed to be applied to the eligible population: permanent nursing home residents, receiving hospice or palliative care services, or died prior to the end of the measurement period.

Adjustment/Stratification: Statistical risk model Level of Analysis: Clinician: Group/Practice Setting of Care: Outpatient Services

Type of Measure: Composite

Data Source: Electronic Health Records, Paper Medical Records

Measure Steward: MN Community Measurement

#### **STANDING COMMITTEE MEETING June 30, 2020**

1. Importance to Measure and Report: The measure meets the Importance criteria.

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-2; M-15; L-0; I-0**; 1b. Performance Gap: **H-11; M-6; L-0; I-0**; 2c. Composite construction: **H-11; M-5; L-1; I-0** 

# Rationale:

- The developer provided evidence for each component of this composite measure.
- Component # 1: Blood Pressure Control
  - The developer provided a diagram illustrating the steps between the assessment of blood pressure control at each visit and reducing the risk of long-term cardiovascular complications associated with hypertension.
  - The developer provided three recommendations for blood pressure targets from the 2015 AHA/ACC/ASH Scientific Statement on the Treatment of Hypertension in Patients with Coronary Artery Disease:
    - Blood pressure (BP) Goal for patients with CAD is <140/90 mm Hg. Class I; Level of Evidence: A
    - The <140/90-mm Hg BP target is reasonable for the secondary prevention of cardiovascular events in patients with hypertension and CAD. Class IIa; Level of Evidence B
    - A lower target BP (<130/80 mm Hg) may be appropriate in some individuals with CAD, previous MI, stroke or transient ischemic attack, or CAD risk equivalents (carotid artery disease, PAD, abdominal aortic aneurysm). Class IIb; Level of Evidence B
  - The developer provided a systematic review of the body of evidence supporting the treatment of hypertension for patients with cardiovascular disease to a target blood pressure goal of less than 140 systolic and less than 90 diastolic.
  - The developer also provided the quality, quantity, and consistency of the body of evidence, which included eight randomized control trials, six prospective observational studies, one meta-analysis, including 147 RCTs and 1 meta-regression, including 31 interventional trials.

- o The developer noted the presence of data that supported yet failed to prove that a lower blood pressure target (<130/80 mm Hg) may be appropriate in some individuals with CAD.
- The developer provided a Cochrane Review: Blood pressure targets for the treatment of people with hypertension and cardiovascular disease (2018). This review concluded with the following statement: "At present, evidence is insufficient to justify lower blood pressure targets (K 135/85 mmHg) in people with hypertension and established cardiovascular disease. More trials are needed to examine this topic."
- The developer's measure development workgroup for this measure concluded that the lack of consensus in the guidelines left no clear direction for measurement to align with and recommended the target remain unchanged from previous versions.
- Component # 2: Statin Use
  - o The developer provided a diagram illustrating the steps between assessing patients (ages ≥21 to 75) with cardiovascular disease variables/risk to determine appropriate statin use and reducing the risk of long-term cardiovascular complications associated with increased cholesterol levels.
  - The developer provided two systematic reviews: ICSI Stable Coronary Artery Disease (April 2011), Address Modifiable Risk Factors and Comorbid Conditions and ICSI Lipid Management in Adults (October 2009).
  - o The developer provided two clinical guidelines with recommendations for statin treatment:
    - ICSI Lipid Management in Adults (updated Nov 2013/completed prior to ACC/AHA release). Initiate Statin Treatment Recommendations: Clinicians should initiate statin therapy, regardless of LDL, in patients with established ASCVD. Evidence Grading: Strong Recommendation (the workgroup is confident that the desirable effects of adhering to this recommendation outweigh the undesirable effects. This is a strong recommendation for or against. This applies to most patients.) High Quality Evidence (further research is very unlikely to change our confidence in the estimate of effect)
    - 2013 ACC/AHA Guideline: Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults:
      - High-intensity statin therapy should be initiated or continued as first-line therapy in women and men <75 years of age who have clinical ASCVD\*, unless contraindicated. Class I; Level of Evidence: A
      - In individuals with clinical ASCVD\* in whom high-intensity statin therapy would otherwise be used, when high-intensity statin therapy is contraindicated or when characteristics predisposing to statin-associated adverse effects are present, moderate-intensity statin should be used as the second option if tolerated. Class I; Level of Evidence: A
  - O The developer also provided secondary prevention recommendations from the ACC/AHA guideline for adults ≤75 years of age with clinical ASCVD who are not receiving statin therapy or receiving a low- or moderate-intensity statin. The recommendations state that moderate-intensity therapy should be used, if tolerated, when either high-intensity statin therapy is contraindicated or patient characteristics predisposing to statin-associated adverse effects are present. No clear evidence of an additional reduction in ASCVD events from high-intensity statin therapy in patients >75 was present
  - The developer provided a systematic review of the body of evidence supporting the
    prevention of secondary cardiovascular events for patients with cardiovascular disease by
    appropriately prescribing statin medications.
  - The developer also provided the quantity, quality, and consistency of the body of evidence, which included 60 randomized control trials, one systematic review, and one meta-analysis.
  - The developer attested that the evidence for this component has not changed since the previous review in 2016.
- Component # 3: Tobacco Free
  - The developer provided evidence from the United States Preventive Services Task Force (USPSTF), stating that despite considerable progress in tobacco control over the past 50 years,

- in 2013, an estimated 17.8% of U.S. adults and 15.9% of pregnant women ages 15 to 44 years were current cigarette smokers.
- The CDC indicated that smoking is a major cause of cardiovascular disease and that tobacco use contributes to heart disease and stroke by raising triglycerides, lowering HDL (good) cholesterol, increasing clotting factors, damaging cells that line blood vessels, increasing the buildup of plague, and thickening and narrowing blood vessels.
- The developer provided an additional study: Receipt of evidence-based brief cessation interventions by health professionals and use of cessation assisted treatments among current adult cigarette-only smokers (National Adult Tobacco Survey, 2009-2010). This study demonstrated 5 As: (1) Ask about tobacco use, (2) Advise tobacco users to quit, (3) Assess willingness to make a quit attempt, (4) Assist tobacco users in making a quit attempt, and (5) Arrange for follow-up. Interventions significantly increased patients' use of recommended counseling and medication for cessation.
- Component # 4: Daily Aspirin or Antiplatelet Medication
  - o The developer provided a diagram illustrating the steps between assessing patients with cardiovascular disease variables/risk to determine appropriate aspirin/antiplatelet use and reducing the risk of a subsequent cardiovascular event (secondary prevention).
  - The developer provided three recommendations for antiplatelet agents/anticoagulants for patients with ischemic vascular disease from the AHA/ACCF Secondary Prevention and Risk Reduction Therapy for Patients with Coronary and Other Atherosclerotic Vascular Disease: 2011 Update:
    - Taking 75-162 mg of aspirin daily is recommended in all patients with coronary artery disease unless contraindicated. Class I; Level of Evidence: A
    - Taking 75 mg of clopidogrel daily is recommended as an alternative for patients who are intolerant of or allergic to aspirin. Class I; Level of Evidence: B
    - For patients with symptomatic atherosclerotic peripheral artery disease of the lower extremity, antiplatelet therapy with aspirin (75-325 mg daily) or clopidogrel (75 mg daily) should be started and continued. Class I; Level of Evidence: A
  - The developer provided a systematic review of the body of evidence supporting the prevention of secondary cardiovascular events for patients with cardiovascular disease by appropriately prescribing aspirin or antiplatelet medications.
  - The developer also provided the quality, quantity, and consistency of the body of evidence, which included one meta-analysis of 22 randomized control trials, one collaborative metaanalysis involving 287 studies, 135,000 patients involving therapy vs. control, and 77,000 patients comparing different antiplatelet regimens.
  - o The developer provided two more recent guidelines:
    - American College of Cardiology Clinician Guide to the ABCs of Primary and Secondary Prevention of Atherosclerotic Cardiovascular Disease 2018, recommendations for antiplatelet therapy for secondary prevention:
      - Taking 81-162 mg/day of aspirin indefinitely (Class I)
      - Taking clopidogrel, prasugrel, or ticagrelor (i.e., PY12 inhibitor) in addition to aspirin after PCI (Class I)
      - Medication, dosing, and duration depend on the type of stent and whether on dual antiplatelet therapy
      - Taking 81-325 mg/day of aspirin or clopidogrel for all patients following a non-cardioembolic ischemic stroke (Class I)
    - American College of Cardiology Dual Anti Platelet Therapy (DAPT) Guidelines
      - In patients treated with DAPT, a daily aspirin dose of 81 mg (range 75 mg to 100 mg) is recommended. Class I; Level of Evidence: B-NR
- The Standing Committee noted that the evidence provided for each component was at least moderate in strength and had no concerns regarding the overall evidence.

• In 2019 (2018 dates of service), 678 clinics submitted data on over 185,000 patients with ischemic vascular disease. Sixty-one percent (exactly 61.1%) of the patients met all four component targets in the composite measure and were considered optimally managed. Of the clinics that were reportable (patient *n* greater than or equal to 30), there was a wide range of variability with the lowest scoring clinic at 16.1% and the highest scoring clinic at 83.1%.

The trends for this measure are as follows:

Report Year	Rate	Patients (Denominator)	Numerator	Eligible	% submit/eligible
2016	66.1%	104,395	69,026	104,494	99.9%
2017	61.6%	186,913	115,190	186,913	100%
2018	61.5%	177,898	109,434	177,822	99.9%
2019	61.1%	185,840	113,536	185,840	185,840

Trend over time by Component and Report Year

	2016	2017	2018	2019
BP <140/90	85.0%	84.1%	83.5%	83.7%
Aspirin Use	96.7%	93.6%	93.3%	92.5%
Tobacco Free	83.0%	82.5%	82.4%	82.4%
Statin Use	94.7%	90.9%	91.6%	91.6%

- Measure rates by race and ethnicity demonstrate disparity and continued opportunity for improvement and reducing the gap in care and outcomes.
- The Standing Committee noted that while performance was high on the individual components of the
  composite, the all-or-none construction showed a significant performance gap and that disparities for
  race and ethnicity are present. The Standing Committee concluded that there is a continued need for a
  national performance measure.
- This measure is an all-or-none composite (e.g., all essential care processes received or outcomes
  experienced by each patient). The desired goal is for the patient to achieve multiple, intermediate,
  physiological, clinical outcome-and-medication use targets to best reduce their overall risk of
  developing further ischemic vascular complications (short- and long-term) or an additional
  cardiovascular event.
- The developer stated that reducing modifiable risks was the reason why this measure was developed. The components of this measure include blood pressure control, appropriate use of statins, appropriate use of daily aspirin or antiplatelet medication, and being tobacco-free.
- The measure numerator is calculated at the patient level and numerator compliance is defined as the patient achieving all four components of the measure. The components are weighted equally.
- The developer stated that achieving all components of the measure results is more likely to result in an overall risk reduction for cardiovascular complications. In addition, reporting all components together is a patient-centered approach to reporting. Individual components of the measure may be reported separately or used for quality improvement.

- The Standing Committee discussed the impact of socioeconomic status on the components of the composite, particularly smoking status. A member noted that smoking status is one of the most important lifestyle components of cardiovascular risk.
- Ultimately, the Standing Committee was satisfied with the quality construct and rationale.

#### 2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability: **H-10; M-7; L-0; I-0**; 2b. Validity: **H-11; M-6; L-0; I-0** 

# Rationale:

- This measure was reviewed by the Scientific Methods Panel (SMP) and discussed on the SMP call. A summary of the measure and the Panel discussion is provided below.
- Because voting was done via survey after the meeting, the Standing Committee did not have the
  opportunity to accept the SMP's ratings for scientific acceptability and voted on each criterion.
  - Reliability testing was conducted at the measure score level using signal-to-noise analysis (Adams' method) = 0.809
  - o The SMP rated the measure high for reliability: H-5; M-3; L-1; I-0.
  - o The Standing Committee had no concerns regarding reliability.
  - Validity testing was conducted at the score level by correlating the measure with other diabetes care measures.
    - While the SMP questioned some of the assumptions made regarding the relationship between this measure and the comparators, they generally agreed that the measure was valid.
    - Some SMP members raised concerns with a lack of clear validation results for the risk adjustment model.
  - The SMP passed the measure on validity, with votes split between high and moderate ratings: H-3; M-3; L-2; I-1.
  - The developer provided the Standing Committee with an overview of their use of area deprivation index in the measure's risk adjustment. The index allows for adjustment for social risk variables based on the patient's home ZIP code.
  - o The Standing Committee had no concerns regarding validity.
  - The SMP generally agreed the composite construct was valid but expressed concerns regarding the need for further analysis on the composite construct that would validate the composite on data collected since the previous endorsement.
  - o The SMP passed the measure on quality construct with votes split between high and moderate ratings: H-3; M-3; L-1; I-1.
  - o The Standing Committee had no concerns regarding quality construct.

#### 3. Feasibility: H-0; M-16; L-1; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

#### Rationale:

- All data elements are in defined fields in electronic health records (EHRs).
- The developer reported lessons learned over several years of operational use about data submission, providing detailed specifications, audit methods, patient confidentiality, EHRs, data collection burden, and the impact of health plans on the number of medical groups reporting this measure.
- There are no fees associated with participation and submitting data for this measure to Minnesota Community Measurement (MNCM). There are costs associated with data extraction and abstraction.
- The Standing Committee had no concerns regarding feasibility.

#### 4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: Pass-16; No Pass-1 4b. Usability: H-9; M-7; L-1; I-0

#### Rationale:

- Public reporting:
  - o MN Community Measurement- MN HealthScores Website.
  - Health Care Quality Report
  - o Quality of Care for Chronic Conditions in Minnesota
- Payment:
  - o HealthPartners Partners in Quality Program
- Regulatory and Accreditation Programs:
  - o Minnesota Statewide Quality Reporting and Measurement System (SQRMS).
- Professional Certification or Recognition Program
  - o MN Department of Health Health Care Homes Certification & Recertification
- Quality Improvement with Benchmarking (external benchmarking to multiple organizations):
  - o MN Department of Health Health Care Homes Performance Measurement and Evaluation
- The Standing Committee had no concerns regarding use.
- The developer provided Minnesota statistics and noted that since the start of public reporting of this measure in 2007, there has been steady improvement in composite rates for achieving all targets. The statewide average has improved from 38.9% to 61.1%. Even with this improvement, there is continued demonstration of variability and opportunity for improvement.
- The developer reported that it has been beneficial to see the slow, steady improvement on a statewide basis. The developer moved away from the historical "visit-counting" method and saw an appropriate increase in the denominator, which was previously artificial because patients truly did have ischemic vascular disease. At the same time, the numerator rates did not change significantly, demonstrating that patients were achieving optimal targets.
- The Standing Committee had no concerns regarding usability.

#### 5. Related and Competing Measures

- This measure is related to the following measures:
  - NQF #0067 Coronary Artery Disease (CAD): Antiplatelet Therapy
  - NQF #0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet
  - o NQF #0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
  - o NQF #0018 Controlling High Blood Pressure
- The Standing Committee did not note any issues between these measures.

#### 6. Standing Committee Recommendation for Endorsement: Yes-15; No-2

#### 7. Public and Member Comment

• No public and member comments were received for this measure.

# **8. Consensus Standards Approval Committee (CSAC) Endorsement Decision**: Y-11; N-0 (November 17-18, 2020: Approved for continued endorsement)

#### 9. Appeals

No appeals were received.

# NQF #0290 Median Time to Transfer to Another Facility for Acute Coronary Intervention

#### <u>Submission</u> | <u>Specifications</u>

**Description**: This measure calculates the median time from emergency department arrival to time of transfer to another facility for acute coronary intervention.

**Numerator Statement**: This measure is reported as a continuous variable statement: time (in minutes) from emergency department arrival to transfer to another facility for acute coronary intervention.

**Denominator Statement**: This measure is reported as a continuous variable statement: time (in minutes) from emergency department arrival to transfer to another facility for acute coronary intervention.

**Exclusions**: Excluded populations include the following:

• Patients less than 18 years of age

• Patients receiving fibrinolytic therapy administration

**Adjustment/Stratification**: No risk adjustment or risk stratification

Level of Analysis: Facility

**Setting of Care:** Emergency Department and Services

Type of Measure: Process

**Data Source**: Electronic Health Records, Paper Medical Records **Measure Steward**: Centers for Medicare and Medicaid Services

#### **STANDING COMMITTEE MEETING June 30, 2020**

1. Importance to Measure and Report: The measure meets the Importance criteria.

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: H-2; M-13; L; 1; I-0; 1b. Performance Gap: H-1; M-15; L-0; I-0

#### Rationale:

- The developer provided steps between the measure focus and the health outcome. Decreasing
  transfer time in STEMI patients requiring an acute coronary intervention from a non-PCI-capable
  hospital to a PCI-capable hospital has the potential to lead to reduced door-to-balloon time, which
  leads to a decrease in mortality.
- The developer provided the 2013 ACCF/AHA Guideline for the Management of ST-Elevation Myocardial Infarction, which includes two recommendations for the transfer of patients who require primary PCI from a non-PCI-capable hospital to a PCI-capable hospital in cases when primary PCI can be performed within 120 minutes of first medical contact (FMC):
  - "Immediate transfer to a PCI-capable hospital for primary PCI is the recommended triage strategy for patients with STEMI who initially arrive at or are transported to a non-PCI capable hospital, with an FMC-to-device time system goal of 120 minutes or less." (Class I, Level of Evidence: B)
  - o "Immediate transfer to a PCI-capable hospital for coronary angiography is recommended for suitable patients with STEMI who develop cardiogenic shock or acute severe HF, irrespective of the time delay from MI onset." (Class I, Level of Evidence: B)
- The developer provided a systematic review of the body of evidence supporting the timely transfer of STEMI patients requiring a PCI. The details of the quality, quantity, and consistency of the evidence provided was associated with the guideline (single randomized trial or non-randomized studies).
- A focused update was published in the Journal of the American College of Cardiology (2015
   ACC/AHA/SCAI Focused Update on Primary Percutaneous Coronary Intervention for Patients With ST Elevation Myocardial Infarction: An Update of the 2011 ACCF/AHA/SCAI Guideline for Percutaneous
   Coronary Intervention and the 2013 ACCF/AHA Guideline for the Management of ST-Elevation
   Myocardial Infarction). This update does not change the recommendations provided in support of this
   measure.
- The developer identified 14 new articles that were published since the systematic review of the body of evidence (2016-2019).
- The developer stated that these articles are aligned with the existing evidence.
- The Standing Committee had no concerns regarding evidence.
- Results appear to have remained consistent from 2010 to 2018.
- The developer noted that "women, older patients, non-White patients, and Hispanic patients had longer median times to transfer than their male, younger, White, non-Hispanic counterparts."
- A summary of performance data from the 2016 review cycle includes the following info:

o In 2010-2011, a total of 421 facilities, representing 8,008 emergency department (ED) encounters, had results published on Hospital Compare. Data from 2010-11 indicated a median facility score of 56 minutes, with an interquartile range (IQR) of 45-70 minutes. In 2014-15, 425 facilities, representing 8,166 ED encounters, had results published on Hospital Compare. Data from 2014-15 indicated a median facility score of 54 minutes, with an IQR of 42-69 minutes.

Updated performance data:

Encounter-level distribution of measure scores, median score is 55, IQR of 38-90 minutes

	Mean	Min	5%	10%	25%	50%	75%	90%	95%	Max
2018	85	1	22	27	38	55	90	186	274	521

Measure scores are reported in minutes: 459 facilities, representing 9,050 ED encounters, calendar year 2018, data from the CMS Clinical Data Warehouse

Facility-level distribution of measure scores: median score is 54, IQR of 43-70 minutes

	Mean	Std Dev	Min	10%	25%	50%	75%	90%	Max
2018	64	40	18	34	43	54	70	92	373

Measure scores are reported in minutes: 450 facilities, calendar year 2018, data from the CMS Clinical Data Warehouse

• The Standing Committee observed that while median time to transfer has remained consistent over time, there is continued demonstration of significant variation across facilities, supporting a moderate measure performance gap.

# 2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability: **H-0; M-16; L-0; I-0**; 2b. Validity: **H-0; M-15; L-1; I-0** 

# Rationale:

• Reliability was calculated using a signal-to-noise analysis with an intraclass correlation coefficient (ICC) approach. Reliability was calculated across facilities and for small, medium, and large facilities.

	,	<u>, ,                                  </u>
	Reliability Statistic (ICC)	95% Confidence Interval
Overall (across facilities), N = 459	0.74	0.69-0.78
Small facilities (11-14 cases), N = 163	0.70	0.61-0.77
Medium facilities (15-20 cases), N = 148	0.77	0.69-0.83
Large facilities (21-113 cases), N = 148	0.89	0.85-0.92

- The reliability testing indicates moderate to good reliability for all sizes of facilities included in the measure
- The Standing Committee had no concerns regarding reliability.
- The developer stated that this measure uses exclusion to arrive at a relevant patient population for measure calculation rather than as clinical exclusions per se. For this reason, it states that calculation with and without exclusions would be inappropriate.
- The developer provided an analysis of exclusion prevalence. The overwhelming majority of exclusions (61% of encounters) are due to "initial ECG interpretation." The proportion of these exclusions varies notably across facilities.

- Data element validity was established by assessing the level of agreement between facility abstraction and auditor abstraction (via the CMS Clinical Data Abstraction Center). Two methods were used to estimate the agreement: Kappa statistics (for categorical variables) and Pearson correlation coefficients (for continuous variables).
- All critical data elements were included in the testing. For categorical data elements, the Kappa statistics ranged from 0.33 to 1.0. All values indicated substantial (or higher) agreement, except for Transfer for Acute Coronary Intervention (0.33 -> fair agreement). For continuous data elements, the Pearson correlation coefficients ranged from 0.97 to 1.00, with all values indicating near perfect agreement.
- The developer stated it has seen improvement in Kappa values for two critical data elements since the previous submission: initial ECG interpretation and "reason for no fibrinolytic administration". It interprets this to suggest improvement in documentation by emergency departments.
- The Standing Committee had questions regarding the significance of the cases excluded due to "Initial EKG Interpretation" and whether facilities that misinterpret an EKG could be excluded from the measure. The developers clarified that the audit process for validating the data elements consists of pulling a random sample of cases and that hospitals are not able to influence which cases are selected for audit.
- The Standing Committee determined that the measure was valid.

#### 3. Feasibility: H-1; M-15; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

#### Rationale:

- The data elements for this measure are routinely generated as part of care delivery. However, they are not all captured in structured data fields, making conversation to an electronic or digital measure challenging. In particular, the data elements of Initial ECG Interpretation, Reason for Not Administering Fibrinolytic Therapy, and Transfer for Acute Coronary Intervention are not generally in structured fields. Application of the measure algorithm currently requires abstraction by someone other than the person obtaining the original information.
- The developer reports that three of five members of the AMI and Stroke expert workgroup agreed that "the practical aspects of reporting this chart-abstracted measure do not place undue burden on facilities that collect the data."
- The Standing Committee had no concerns regarding feasibility.

#### 4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: Pass-16; No Pass-0 4b. Usability: H-1; M-12; L-3; I-0

#### Rationale:

- Publicly reported on <u>Hospital Compare</u>
- Currently in use in CMS' <u>Hospital Outpatient Quality Reporting Program</u>
- Those being measured receive quarterly results through CMS' Hospital Compare website.
- Stakeholders may provide feedback via the ServiceNow Q&A tool on QualityNet. They may also submit
  comments through the annual rulemaking process for the Outpatient Prospective Payment System
  (OPPS). The developer stated it has received no feedback to date and no comments during calendar
  years 2016-2019.
- The developer indicated it is willing to consider feedback and has a process for incorporating changes into the measure.
- The Standing Committee had no concerns regarding use.
- Both the data presented in the previous submission and the data submitted in this submission appear to have remained stable over time.

- Data from 2010-11 indicated a median facility score of 56 minutes, with an interquartile range (IQR) of 45-70 minutes.
- Data from 2014-15 indicated a median facility score of 54 minutes, with an IQR of 42-69 minutes.
- o Data from 2018 indicated a median facility score of 54 minutes, with an IQR of 43-70 minutes.
- The Standing Committee noted that the median score does not appear to have shown much improvement over time, but that variation in performance across facilities was present.

#### 5. Related and Competing Measures

- This measure is related to the following measure(s):
  - o NQF #0288 Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
- The Standing Committee did not note any issues between these measures.

# 6. Standing Committee Recommendation for Endorsement: Yes-16; No-0

#### 7. Public and Member Comment

- No public and member comments were received for this measure.
- **8. Consensus Standards Approval Committee (CSAC) Endorsement Decision**: Y-11; N-0 (November 17-18, 2020: Approved for continued endorsement)

#### 9. Appeals

No appeals were received.

# Appendix B: Cardiovascular Portfolio—Use in Federal Programs<sup>a</sup>

NQF#	Title	Federal Programs: Finalized or Implemented as of June 22, 2020
0018	Controlling High Blood Pressure	Medicare Shared Savings Program (Implemented), Merit-Based Incentive Payment System (MIPS) Program (Implemented), Marketplace Quality Rating System (QRS) (Implemented), Medicaid (Implemented)
0066	Coronary Artery Disease (CAD): Angiotensin- Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy – Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%)	MIPS (Implemented)
0067	Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	MIPS (Implemented)
0070/0070e	Coronary Artery Disease (CAD): Beta-Blocker Therapy  – Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	MIPS (Implemented), Medicaid Promoting Interoperability Program for Eligible Professionals (Implemented)
0081/0081e	Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	MIPS (Implemented), Medicaid Promoting Interoperability Program for Eligible Professionals (Implemented)
0083/0083e	Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	MIPS (Implemented), Medicaid Promoting Interoperability Program for Eligible Professionals (Implemented)
0229	Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following heart failure (HF) hospitalization for patients 18 and older	Hospital Value-Based Purchasing (VBP) (Implemented)
0230	Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following acute myocardial infarction (AMI) hospitalization for patients 18 and older	Hospital Value-Based Purchasing (VBP) (Implemented)
0290	Median Time to Transfer to Another Facility for Acute Coronary Intervention	Hospital Outpatient Quality Reporting (Hospital OQR) (Implemented)
0643	Cardiac Rehabilitation Patient Referral From an Outpatient Setting	MIPS (Implemented)
0669	Cardiac Imaging for Preoperative Risk Assessment for Non-Cardiac, Low-Risk Surgery	Hospital OQR (Implemented)

<sup>&</sup>lt;sup>a</sup> Per CMS Measures Inventory Tool, last accessed 02/10/2021

NQF#	Title	Federal Programs: Finalized or Implemented as of June 22, 2020
1525	Atrial Fibrillation and Atrial Flutter: Chronic Anticoagulation Therapy	MIPS (Implemented)
2474	Cardiac Tamponade and/or Pericardiocentesis Following Atrial Fibrillation Ablation	MIPS (Implemented)

# **Appendix C: Cardiovascular Standing Committee and NQF Staff**

# STANDING COMMITTEE

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Senior Medical Officer, Centers for Disease Control and Prevention (CDC), Division for Heart Disease and Stroke Prevention

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**NATIONAL QUALITY FORUM** 

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#### Karri Albanese, BA

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# Mike DiVecchia, MBA, PMP

Senior Project Manager, Quality Measurement

# **Appendix D: Measure Specifications**

NQF #0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

#### **STEWARD**

American Heart Association

#### **DESCRIPTION**

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period who also have diabetes OR a current or prior LVEF < 40% who were prescribed ACE inhibitor or ARB therapy

**TYPE** 

**Process** 

#### **DATA SOURCE**

Registry Data Quality Payment Program – MIPS Quality Program.

**LEVEL** 

Clinician: Individual

#### **SETTING**

Home Care, Outpatient Services, Post-Acute Care

#### NUMERATOR STATEMENT

Patients who were prescribed ACE inhibitor or ARB therapy

#### NUMERATOR DETAILS

Time period for data collection: At least once during the measurement period

Note: For reporting, Submission Criteria 1 and 2, described below, are combined for a single reported performance score on the combined measure population. If a patient has both diabetes and LVSD, reporting Submission Criteria #2 (CAD with diabetes) will count as appropriate reporting for this patient.

#### Definition:

Prescribed – May include prescription given to the patient for ACE inhibitor or ARB therapy at one or more visits in the measurement period OR patient already taking ACE inhibitor or ARB therapy as documented in current medication list.

Numerator Note: Eligible clinicians who have given a prescription to the patient for or whose patient is currently taking a combination medication therapy, which contains either an ACE inhibitor or ARB (e.g., angiotensin receptor neprilysin inhibitor [ARNI, sacubitril/valsartan], ACEI+diuretic, ARB+diuretic, ACEI+calcium channel blocker) would meet performance for this measure.

FOR SUBMISSION CRITERIA 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF < 40% (without a diagnosis of diabetes)

Report Quality Data Code G8935: Clinician prescribed angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy

FOR SUBMISSION CRITERIA 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes

Report Quality Data Code G8473: Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy prescribed

#### **DENOMINATOR STATEMENT**

All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period who also have diabetes OR current or prior LVEF <40%

#### **DENOMINATOR DETAILS**

Time period for data collection: 12 consecutive months

Definition

LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction.

FOR SUBMISSION CRITERIA 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF < 40%

Patients aged >= 18 years on date of encounter

AND

Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.2, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.790, I25.791, I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, Z95.1, Z95.5, Z98.61

AND

Patient encounter during the performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

**WITHOUT** 

Telehealth Modifier: GQ, GT, 95, POS 02

AND

Two Denominator Eligible Visits

AND

Left Ventricular Ejection Fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function: G8934

FOR SUBMISSION CRITERIA 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes

Patients aged >= 18 years on date of encounter

AND

Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9,

124.0, 124.1, 124.8, 124.9, 125.10, 125.110, 125.111, 125.118, 125.119, 125.2, 125.5, 125.6, 125.700, 125.701, 125.708, 125.709, 125.710, 125.711, 125.718, 125.719, 125.720, 125.721, 125.728, 125.729, 125.730, 125.731, 125.738, 125.739, 125.750, 125.751, 125.758, 125.759, 125.760, 125.761, 125.768, 125.769, 125.790, 125.791, 125.798, 125.799, 125.810, 125.811, 125.812, 125.82, 125.83, 125.89, 125.9, 295.1, 295.5, 298.61

#### AND

Diagnosis for diabetes (ICD-10-CM): E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.321, E10.329, E10.331, E10.339, E10.341, E10.349, E10.351, E10.359, E10.3211, E10.3212, E10.3213, E10.3219, E10.3291, E10.3292, E10.3293, E10.3299, E10.3311, E10.3312, E10.3313, E10.3319, E10.3391, E10.3392, E10.3393, E10.3399, E10.3411, E10.3412, E10.3413, E10.3419, E10.3491, E10.3492, E10.3493, E10.3499, E10.3511, E10.3512, E10.3513, E10.3519, E10.3521, E10.3522, E10.3523, E10.3529, E10.3531, E10.3532, E10.3533, E10.3539, E10.3541, E10.3542, E10.3543, E10.3549, E10.3551, E10.3552, E10.3553, E10.3559, E10.3591, E10.3592, E10.3593, E10.3599, E10.36, E10.37X1, E10.37X2, E10.37X3, E10.37X9, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.10, E11.11, E11.21, E11.22, E11.29, E11.311, E11.319, , E11.3211, E11.3212, E11.3213, E11.3219, E11.3291, E11.3292, E11.3293, E11.3299, E11.3311, E11.3312, E11.3313, E11.3319, E11.3391, E11.3392, E11.3393, E11.3399, E11.3411, E11.3412, E11.3413, E11.3419, E11.3491, E11.3492, E11.3493, E11.3499, E11.3511, E11.3512, E11.3513, E11.3519, E11.3521, E11.3522, E11.3523, E11.3529, E11.3531, E11.3532, E11.3533, E11.3539, E11.3541, E11.3542, E11.3543, E11.3549, E11.3551, E11.3552, E11.3553, E11.3559, E11.3591, E11.3592, E11.3593, E11.3599, E11.36, E11.37X1, E11.37X2, E11.37X3, E11.37X9, E11.39, E11.40, E11.41, E11.42, E11.43, E11.44, E11.49, E11.51, E11.52, E11.59, E11.610, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, E13.00, E13.01, E13.10, E13.11, E13.21, E13.22, E13.29, E13.311, E13.319, E13.3211, E13.3212, E13.3213, E13.3219, E13.3291, E13.3292, E13.3293, E13.3299, E13.3311, E13.3312, E13.3313, E13.3319, E13.3391, E13.3392, E13.3393, E13.3399, E13.3411, E13.3412, E13.3413, E13.3419, E13.3491, E13.3492, E13.3493, E13.3499, E13.3511, E13.3512, E13.3513, E13.3519, E13.3521, E13.3522, E13.3523, E13.3529, E13.3531, E13.3532, E13.3533, E13.3539, E13.3541, E13.3542, E13.3543, E13.3549, E13.3551, E13.3552, E13.3553, E13.3559, E13.3591, E13.3592, E13.3593, E13.3599, E13.36, E13.37X1,E13.37X2,E13.37X3,E13.37X9,E13.39, E13.40, E13.41, E13.42, E13.43, E13.44, E13.49, E13.51, E13.52, E13.59, E13.610, E13.618, E13.620, E13.621, E13.622, E13.628, E13.630, E13.638, E13.641, E13.649, E13.65, E13.69, E13.8, E13.9, O24.011, O24.012, O24.013, O24.019, 024.02, 024.03, 024.111, 024.112, 024.113, 024.119, 024.12, 024.13, 024.311, 024.312, 024.313, 024.319, 024.32, 024.33, 024.811, 024.812, 024.813, 024.819, 024.82, 024.83 AND

Patient encounter during the performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

**WITHOUT** 

Telehealth Modifier: GQ, GT, 95, POS 02

AND

Two Denominator Eligible Visits

Note: The eligible clinician should submit data on one of the submission criteria, depending on the clinical findings. If the patient has CAD and LVSD (without a diagnosis of Diabetes), use

Denominator Submission Criteria 1. If the patient has CAD and Diabetes, use Denominator Submission Criteria 2. If the patient has both diabetes and LVSD, the eligible professional may submit quality data for Submission Criteria 2 and this will count as appropriate submission for this patient.

#### **EXCLUSIONS**

**Denominator Exceptions:** 

Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons)

Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., patient declined, other patient reasons)

Documentation of system reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., lack of drug availability, other reasons attributable to the health care system)

#### **EXCLUSION DETAILS**

Time period for data collection: During the encounter within the 12-month period

Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. The AHA and ACC exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure 0066, exceptions may include medical reason(s) (e.g., allergy, intolerance, pregnancy, renal failure due to ACE Inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to the health care system) for not prescribing ACE inhibitor or ARB therapy. Although this methodology does not require the external reporting of more detailed exception data, the AHA and ACC recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The AHA and ACC also advocates for the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.

#### Additional details:

FOR SUBMISSION CRITERIA 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF<40% Report Quality Data Code G8936: Clinician documented that patient was not an eligible candidate for angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (e.g., allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons) or (e.g., patient declined, other patient reasons) or (e.g., lack of drug availability, other reasons attributable to the health care system)

FOR SUBMISSION CRITERIA 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes

Report Quality Data Code G8474: Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy not prescribed for reasons documented by the clinician (e.g., allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons) or (e.g., patient declined, other patient reasons) or (e.g., lack of drug availability, other reasons attributable to the health care system)

#### **RISK ADJUSTMENT**

No risk adjustment or risk stratification

## **STRATIFICATION**

Consistent with CMS' Measures Management System Blueprint and national recommendations put forth by the IOM (now NASEM) and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer.

#### **TYPE SCORE**

Rate/proportion better quality = higher score

## **ALGORITHM**

THERE ARE TWO SUBMISSION CRITERIA FOR THIS MEASURE:

- 1) Patients who are 18 years and older with a diagnosis of CAD with LVEF < 40% OR
- 2) Patients who are 18 years and older with a diagnosis of CAD who have diabetes
  Note: For reporting, Submission Criteria 1 and Submission Criteria 2 are combined for a single
  reported performance score on the combined measure population. If a patient has both
  diabetes and LVSD, reporting Submission Criteria #2 (CAD with diabetes) will count as
  appropriate reporting for this patient. For the purposes of this measure, the single performance
  rate can be calculated as follows:

Performance Rate = (Numerator 1 + Numerator 2)/ [(Denominator 1 - Denominator Exceptions 1) + (Denominator 2 - Denominator Exceptions 2)]

Calculation algorithm for Submission Criteria 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF<40%

- 1. Find the patients who meet the initial population (i.e., the general group of patients that a set of performance measures is designed to address).
- 2. From the patients within the initial population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases, the initial population and denominator are identical.
- 3. From the patients within the denominator, find the patients who meet the numerator criteria (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.
- 4. From the patients who did not meet the numerator criteria, determine if the provider has documented that the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: medical reason(s) (e.g., allergy, intolerance, pregnancy, renal failure due to ACE Inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of

drug availability, other reasons attributable to the health care system) for not prescribing ACE inhibitor or ARB therapy)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation.

Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.

Calculation algorithm for Submission Criteria 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes

- 1. Find the patients who meet the initial population (i.e., the general group of patients that a set of performance measures is designed to address).
- 2. From the patients within the initial population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
- 3. From the patients within the denominator, find the patients who meet the numerator criteria (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.
- 4. From the patients who did not meet the numerator criteria, determine if the provider has documented that the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: medical reason(s) (e.g., allergy, intolerance, pregnancy, renal failure due to ACE Inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to the health care system) for not prescribing ACE inhibitor or ARB therapy)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation.

Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure. 140560 | 107246 | 141015

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## NQF #0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

## **STEWARD**

American Heart Association

## **DESCRIPTION**

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease (CAD) seen within a 12-month period who were prescribed aspirin or clopidogrel

## **TYPE**

**Process** 

## **DATA SOURCE**

Registry Data Quality Payment Program – MIPS Quality Program.

## **LEVEL**

Clinician: Individual

## SETTING

Home Care, Outpatient Services, Post-Acute Care

#### **NUMERATOR STATEMENT**

Patients who were prescribed aspirin or clopidogrel

## **NUMERATOR DETAILS**

Time period for data collection: At least once during the measurement period

Definition: Prescribed - May include prescription given to the patient for aspirin or clopidogrel at one or more visits in the measurement period OR patient already taking aspirin or clopidogrel as documented in current medication list. Report CPT Category II code 4086F: Aspirin or clopidogrel prescribed

#### **DENOMINATOR STATEMENT**

All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period

## **NATIONAL QUALITY FORUM**

## **DENOMINATOR DETAILS**

Time period for data collection: 12 consecutive months

Patients aged >/= 18 years on date of encounter

AND

Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.2, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.790, I25.791, I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, Z95.1, Z95.5, Z98.61

AND

Patient encounter during the performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

WITHOUT

Telehealth Modifier: GQ, GT, 95, POS 02

#### **EXCLUSIONS**

**Denominator exceptions** 

- Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons)
- Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)
- Documentation of system reason(s) for not prescribing aspirin or clopidogrel (e.g., lack of drug availability, other reasons attributable to the health care system)

#### **EXCLUSION DETAILS**

Time period for data collection: During the encounter within the 12-month period

Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. The AHA and ACC exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure Coronary Artery Disease (CAD): Antiplatelet Therapy, exceptions may include medical reason(s) (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to the health care system) for not prescribing aspirin or clopidogrel. Although this methodology does not require the external reporting of more detailed exception

data, the AHA and ACC recommend that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The AHA and ACC also advocate the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.

Additional details:

Append a modifier to CPT Category II code:

4086F-1P: Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons)

4086F-2P: Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)

4086F-3P: Documentation of system reason(s) for not prescribing aspirin or clopidogrel (e.g., lack of drug availability, other reasons attributable to the health care system)

## **RISK ADJUSTMENT**

No risk adjustment or risk stratification

## **STRATIFICATION**

Consistent with CMS' Measures Management System Blueprint and national recommendations put forth by the IOM (now NASEM) and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer

#### **TYPE SCORE**

Rate/proportion better quality = higher score

## **ALGORITHM**

Calculating the performance rate:

- 1. Define the initial population. The initial population is identified through a common set of characteristics that define the overall group of patients or other unit of measurement targeted for evaluation
- 2. Define the denominator by identifying the subset of the initial population that meets the denominator criteria. Note: in some cases, the initial population and denominator are identical
- 3. Determine the numerator by identifying the subset of the denominator that meets the numerator criteria
- 4. From the patients who did not meet the numerator criteria, determine if the provider has documented whether each patient represents an exception. Subtract from the denominator those patients that meet the conditions for a denominator exception; although the exception cases are removed from the denominator for the measure calculation, the exception rate (i.e., percentage of patients with valid exceptions) should be calculated and reported along with performance rates to highlight variations in care
- 5. Calculate the performance rate

A patient not meeting the numerator criteria and without a valid and documented exception represents a quality failure. 140560 | 107246

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## **NQF #0076 Optimal Vascular Care**

## **STEWARD**

MN Community Measurement

## **DESCRIPTION**

The percentage of patients 18-75 years of age who had a diagnosis of ischemic vascular disease (IVD) and whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:

- Blood pressure less than 140/90 mmHg
- On a statin medication, unless allowed contraindications or exceptions are present
- Non-tobacco user
- On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

## **TYPE**

Composite

## **DATA SOURCE**

Electronic Health Records, Paper Medical Records An excel template with formatted columns for data fields is provided. Almost all the medical groups in MN (99.9%) extract the information from their EMR. Other options have been historically available: Registries can be used as a source of information to create the data file; however groups must ensure that all of their

eligible patients are included. Paper abstraction forms are provided for those clinics who wish to use them as an interim step to creating their data file.

All data is uploaded in electronic format (.csv file) to a HIPAA secure, encrypted and password protected data portal.

#### **LEVEL**

Clinician: Group/Practice

## **SETTING**

**Outpatient Services** 

## NUMERATOR STATEMENT

The number of patients in the denominator whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:

- The most recent blood pressure in the measurement period has a systolic value of less than 140 mmHg AND a diastolic value of less than 90 mmHg
- On a statin medication, unless allowed contraindications or exceptions are present
- Patient is not a tobacco user
- On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

## **NUMERATOR DETAILS**

In order to be numerator compliant all four components must be met

- \* Blood pressure less than 140/90 mmHg AND
- \* On a statin medication, unless allowed contraindications or exceptions are present AND
- \* Non-tobacco user AND
- \* On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

**BLOOD PRESSURE COMPONENT** 

Blood Pressure Date [Date (mm/dd/yyyy)] AND

BP Systolic [Numeric] AND

BP Diastolic [Numeric]

Numerator component calculation: numerator component compliant is BP during the measurement year AND Systolic < 140 AND Diastolic < 90.

**BP** Date

Enter the date of the most recent blood pressure result during the measurement period.

- A test result from a provider outside of the reporting medical group is allowed if the result is documented in the reporting medical group's patient record and is the most recent test result during the measurement period.
- Do not include BP readings:
- o Taken during an acute inpatient stay or an ED visit.
- Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).
- o Obtained the same day as a major diagnostic or surgical procedure (e.g., EKG/ECG, stress test, administration of IV contrast for a radiology procedure, endoscopy).

- o Reported by or taken by the patient.
- Leave BLANK if a blood pressure was not obtained during the measurement period.

**BP Systolic** 

Enter the value of the most recent systolic blood pressure result during the measurement period.

- If more than one value is recorded on the most recent date, the lowest value may be submitted. It does NOT need to be from the same reading submitted in Column Z (BP Diastolic).
- NOTE: The systolic blood pressure is the upper number in the recorded fraction. For example, the systolic value for a blood pressure of 124/72 mmHg is 124.
- Leave BLANK if a blood pressure was not obtained during the measurement period.
   BP Diastolic

Enter the value of the most recent diastolic blood pressure result during the measurement period.

- If more than one value is recorded on the most recent date, the lowest value may be submitted. It does NOT need to be from the same reading as submitted in (BP Systolic).
- NOTE: The diastolic blood pressure is the lower number in the recorded fraction. For example, the diastolic value for a blood pressure of 124/72 mmHg is 72.
- Leave BLANK if a blood pressure was not obtained during the measurement period.

CHOLESTEROL MANAGEMENT STATIN COMPONENT

LDL Date [Date (mm/dd/yyyy)] AND

LDL Value [Numeric]

For calculating exceptions to statin use based on very low LDL (< 40 for cardiovascular disease and < 70 for patients with diabetes)

Enter the date of the most recent LDL test result between 01/01/2015 and 12/31/2019.

- A test result from a provider outside of the reporting medical group is allowed if the result is documented in the reporting medical group's patient record and is the most recent test result within the allowable time period.
- If the LDL result is too high to calculate, still enter the LDL test date if it is the most recent test result within the allowable time period.
- LDL values within the last five years will be used to calculate potential exceptions to being on a statin medication.
- Leave BLANK if an LDL test was not performed between 01/01/2015 and 12/31/2019.

Enter the value of the most recent LDL test result between 01/01/2015 and 12/31/2019.

• Leave BLANK if an LDL test was not performed during the allowable time period, or if the most recent test result was too high to calculate.

Statin Medication [Numeric] AND

Statin Medication Date [Date (mm/dd/yyyy)] AND/OR

Station Medication Exception [Numeric] AND

Station Medication Exception Date [Date (mm/dd/yyyy)]

Numerator component calculation: numerator component compliant if on a statin (prescribed/ordered) or low LDL value (see above) or documented contraindication/exception is present.

Statin Medication:

Enter the code that corresponds to whether the patient was prescribed a statin medication or if a statin medication was active on the patient's medication list during the measurement period. Please see Appendix A for a list of statin medications.

- 1 = Yes, patient was prescribed a statin medication, or a statin medication was indicated as active on the patient's medication list during the measurement period.
- 2 = No, patient was not prescribed a statin medication and a statin medication was not indicated as active on the patient's medication list during the measurement period.
- The following exceptions to statin medication use will be identified by the Data Portal based on the submitted LDL values:
- o Patients with ischemic vascular disease aged 21 to 75 years and an LDL result less than 40 mg/dL
- o Patients aged 40 75 years with an LDL result less than 70 mg/dL
- o Patients aged 21 39 years with an LDL less than 190 mg/dL

Statin Medication Date

Enter the date of the most recent statin prescription, order or review on an active medications list that included a statin during the measurement period.

• If a statin was not prescribed, ordered, or reviewed as an active medication during the measurement period, leave BLANK.

**Station Medication Exception** 

If the patient was NOT prescribed or did not have a statin medication active on their medication list during the measurement period (Column AA = 2), enter the value that corresponds to any of the following contraindications or exceptions:

- 1 = Pregnancy at any time during the measurement period
- 2 = Active liver disease (liver failure, cirrhosis, hepatitis)
- 3 = Rhabdomyolysis
- 4 = End stage renal disease on dialysis
- 5 = Heart failure
- 6 = Other provider documented reason: breastfeeding during the measurement period
- 7 = Other provider documented reason: woman of childbearing age not actively taking birth control during the measurement period
- 8 = Other provider documented reason: allergy to statin
- 9 = Drug interaction with a listed medication taken during the measurement period (valid drug-drug interactions include HIV protease inhibitors, nefazodone, cyclosporine, gemfibrozil, and danazol).
- 10 = Other provider documented reason: intolerance (with supporting documentation of trying a statin at least once within the last five years). Additionally, Myopathy and Myositis (CHOL-05) Value Set may be used to document intolerance to statins.
- If none of the above contraindications or exceptions are documented, leave BLANK.
- NOTE: Items 1 5 above can be defined by diagnosis codes that may be used in data collection. Value Sets include: Pregnancy V/Z Codes (PREG-01), Pregnancy Diagnosis Codes (PREG-02), Liver Disease (CHOL-01), Rhabdomyolysis (CHOL-02), ESRD on Dialysis (CHOL-03), and Heart Failure (CHOL-04)

Statin Medication Exception Date:

If the patient has a documented contraindication or exception enter the date of the contraindication or exception.

• If only the month and year are known, enter the first day of the month.

## ASPIRIN/ANTIPLATELET COMPONENT

Aspirin or Anti-platelet Medication [Numeric] AND

Aspirin or Anti-platelet Date [Date (mm/dd/yyyy)] AND/OR

Aspirin or Anti-platelet Exception [Numeric] AND

Aspirin or Anti-platelet Exception Date [Date (mm/dd/yyyy)]

Numerator component calculation: numerator component compliant if indicated on daily aspirin or anti-platelet medication (prescribed/ ordered) or documented contraindication/exception is present.

Aspirin or Anti-platelet Medication

Enter the code that corresponds to whether the patient is prescribed a daily aspirin product or antiplatelet medication or if an aspirin product or anti-platelet medication was active on the patient's medication list at any time during the measurement period.

Please see Appendix B for methods to identify appropriate aspirin products or antiplatelet medications.

- 1 = Yes, patient was prescribed a daily aspirin product or antiplatelet medication, or one was indicated as active on the patient's medication list during the measurement period.
- 2 = No, patient was not prescribed a daily aspirin product or antiplatelet medication and one was not indicated as active on the patient's medication list during the measurement period.
- Aspirin/narcotic combination medications do not qualify as a daily aspirin product.

Aspirin or Anti-platelet Medication Date

Enter the date of the most recent daily aspirin product or anti-platelet medication prescription, order or review of an active medication list that included a daily aspirin product or anti-platelet medication during the measurement period.

\* If a daily aspirin product or anti-platelet medication was not prescribed, ordered or reviewed as an active medication during the measurement period, leave blank.

Aspirin or Anti-platelet Medication Exception

For patients who were not prescribed or taking a daily aspirin product or anti-platelet medication during the measurement period, enter the code that corresponds to any of the following contraindications or exceptions:

- 1 = Prescribed anti-coagulant medication during the measurement period
- 2 = History of gastrointestinal bleeding
- 3 = History of intracranial bleeding
- 4 = Bleeding disorder
- 5 = Other provider documented reason: allergy to aspirin or anti-platelets
- 6 = Other provider documented reason: use of non-steroidal anti-inflammatory agents
- 7 = Other provider documented reason: documented risk for drug interaction
- 8 = Other provider documented reason: uncontrolled hypertension (systolic blood pressure greater than 180 mmHg and/or diastolic blood pressure greater than 110 mmHg)
- 9 = Other provider documented reason: gastroesophageal reflux disease (GERD)

If none of the above contraindications or exceptions are documented, leave BLANK.

NOTE: Items 1 and 2 above can be defined by diagnosis codes that may be used in data collection. Value Sets include: GI Bleed (ASA-01) and Intracranial Bleed (ASA-02).

Aspirin or Anti-platelet Exception Date

If the patient has a documented contraindication or exception enter the date of the contraindication or exception. If only the month and year are known, enter the first day of the month.

## TOBACCO COMPONENT

Tobacco Status Documentation Date [Date (mm/dd/yyyy)] AND

Tobacco Status [Numeric]

Numerator component calculation: numerator component compliant if tobacco status within the last two years and status is tobacco-free.

**Tobacco Status Documentation Date:** 

Enter the most recent date that the patient's tobacco status was documented during the measurement period or year prior.

If the patient's tobacco status is not documented or the date of the documentation cannot be determined, leave BLANK.

**Tobacco Status:** 

Enter the code that corresponds to the patient's most recent tobacco status during the measurement period or year prior.

- 1 = Tobacco free (patient does not use tobacco; patient was a former user and is not a current user)
- 2 = No documentation
- 3 = Current tobacco user (tobacco includes any amount of cigarettes, cigars, pipes or smokeless tobacco)
- \* If the date of the tobacco status documentation is not documented in the patient record, enter 2.
- \* E-cigarettes are not considered tobacco products.

A blank field will create an ERROR upon submission.

## **DENOMINATOR STATEMENT**

Patients ages 18 years or older at the start of the measurement period AND less than 76 years at the end of the measurement period who have a diagnosis of ischemic vascular disease (Ischemic Vascular Disease Value Set) with any contact during the current or prior measurement period OR had ischemic vascular disease (Ischemic Vascular Disease Value Set) present on an active problem list at any time during the measurement period.

Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease)

AND

At least one established patient office visit (Established Pt Diabetes & Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.

## **DENOMINATOR DETAILS**

Please also refer to all code lists included in the data dictionary attached in S.2b.

Patients ages 18 years or older at the start of the measurement period AND less than 76 years at the end of the measurement period who have a diagnosis of ischemic vascular disease (Ischemic Vascular Disease Value Set) with any contact during the current or prior measurement period OR had ischemic vascular disease (Ischemic Vascular Disease Value Set) present on an active problem list at any time during the measurement period.

Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease)

AND

At least one established patient office visit (Established Pt Diabetes & Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.

Eligible Specialties:

Family Medicine, Internal Medicine, Geriatric Medicine, Cardiology

Eligible Providers:

Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurses (APRN)

## **EXCLUSIONS**

The following exclusions are allowed to be applied to the eligible population: permanent nursing home residents, receiving hospice or palliative care services, or died prior to the end of the measurement period.

## **EXCLUSION DETAILS**

- \* Patient was a permanent nursing home resident at any time during the measurement period
- \* Patient was in hospice or receiving palliative care at any time during the measurement period
- \* Patient died prior to the end of the measurement period

#### **RISK ADJUSTMENT**

Statistical risk model

## **STRATIFICATION**

The measure for the ischemic vascular disease population is not currently stratified when publicly reported on our consumer website, MN HealthScores. The data is, however, stratified by insurance product in our 2019 Health Care Disparities Reports by insurance type and race/ethnicity/language and country of origin.

https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-Final.pdf https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-By-RELC.pdf

These reports note gaps in outcomes for ischemic vascular disease patients in public programs versus other purchasers (6.6%) and disparities by race and ethnicity (as much as 12% for Black or African American and American Indian or Alaskan Natives)

#### **TYPE SCORE**

Ratio better quality = higher score

## **ALGORITHM**

This measure is calculated by submitting a file of individual patient values (e.g. blood pressure, tobacco status, etc) to a HIPAA secure data portal. Programming within the data portal

determines if each patient is a numerator case and then a rate is calculated for each clinic site. Please also refer to the measure calculation algorithms submitted within the data dictionary for this measure.

If any component of the numerator is noncompliant for any one of the four components, then the patient is numerator noncompliant for the composite patient level all-or none optimal vascular care measure.

Numerator logic is as follows:

**Blood Pressure Component:** 

Is Blood Pressure date in the measurement year? If no, is numerator noncompliant for this component. If yes, assess next variable.

BP Systolic < 140? If no, is numerator noncompliant for this component. If yes, assess next variable.

BP Diastolic < 90? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component.

Note: BP needs to occur during the measurement year AND most recent BP systolic less than 140 AND BP diastolic less than 90

Assess next component.

Cholesterol Statin Use Component:

Is the patient on a statin medication? If yes, and most recent date is in the measurement year, is numerator compliant for this component. If no, assess next variable.

For patients not on a statin the following variables are used to assess numerator compliance related to contraindications or exceptions to statin use:

Is the patient age 18 to 20? If yes, numerator compliant (free-pass), if no, assess next variable.

Patients age 21 to 75. Is their most recent LDL in the last five years less than 40? If Yes, numerator compliant (free-pass), if no, assess next variable.

Does the patient have a valid contraindication/ exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, ends stage renal disease on dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with documentation of trying a statin at least once in the last 5 years)? If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.

Note: Patient is either on a statin (prescribed/ ordered) during the measurement year or has a valid exception either by age, presence or absence of ischemic vascular disease, low untreated LDL or valid contraindication/ exception.

Assess next component.

Tobacco-Free Component:

Is Tobacco Status = 1 (Tobacco Free) and Tobacco Assessment Date a valid date? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component. Assess next component.

Daily Aspirin/ Anti-platelet Component:

Is the patient on daily aspirin or an antiplatelet? If yes, and date of most recent aspirin/ antiplatelet is in the measurement year is numerator compliant, if no, assess next variable.

Does the patient have a valid contraindication/ exception to aspirin anti-platelet use defined as one of the following: anti-coagulant medication, history of gastrointestinal bleed, history of intracranial bleed, allergy, or physician documented reasons related to: risk of drug interaction,

use of NSAIDS, uncontrolled HTN or gastro-intestinal reflux disease. If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.

Note: Patients are either on daily aspirin (indicated/ prescribed/ ordered) or an anti-platelet prescribed/ ordered) during the measurement year or has a valid contraindication/ exception.

If all of the above numerator components are in compliance, then the patient calculated as a numerator case for the optimal vascular care measure. 112459 | 148276

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## NQF #0290 Median Time to Transfer to Another Facility for Acute Coronary Intervention

#### **STEWARD**

Centers for Medicare and Medicaid Services

## **DESCRIPTION**

This measure calculates the median time from emergency department arrival to time of transfer to another facility for acute coronary intervention.

## TYPE

**Process** 

## **DATA SOURCE**

Electronic Health Records, Paper Medical Records An electronic data collection tool is made available from vendors or facilities can download the free CMS Abstraction & Reporting Tool (CART). Paper tools for manual abstraction, which are posted on www.QualityNet.org, are also available for the CART tool. These tools are posted on www.QualityNet.org.

#### **LEVEL**

Facility

## **SETTING**

**Emergency Department and Services** 

#### NUMERATOR STATEMENT

This measure is reported as a continuous variable statement: Time (in minutes) from emergency department arrival to transfer to another facility for acute coronary intervention.

## **NUMERATOR DETAILS**

NQF #0290 is a continuous measure; therefore, the numerator and denominator details contained in Section S.5 and S.7 are the same.

The following data elements are used to define the measure population:

- E/M Code
- ICD-10-CM Principal Diagnosis Code
- Initial ECG Interpretation
- Transfer for Acute Coronary Intervention

The measure population includes patients with a diagnosis of acute myocardial infarction (AMI) and ST-segment elevation on the electrocardiogram (ECG) performed closest to emergency department (ED) arrival who are transferred from the ED to a short-term general hospital for inpatient care, or to a federal healthcare facility specifically for an acute coronary intervention (ACI). Patients are included in the measure population if:

- Initial ECG Interpretation is equal to "Yes"; and
- Fibrinolytic Administration is equal to "No"; and
- Transfer for Acute Coronary Intervention is equal to "[1] There was documentation the patient was transferred from this facility's emergency department to another facility specifically for acute coronary intervention."

Median times to transfer within a three-month period are aggregated, on a rolling basis, for AMI patients who are transferred for ACI.

## **DENOMINATOR STATEMENT**

This measure is reported as a continuous variable statement: Time (in minutes) from emergency department arrival to transfer to another facility for acute coronary intervention.

#### **DENOMINATOR DETAILS**

NQF #0290 is a continuous measure; therefore, the numerator and denominator details contained in Section S.5 and S.7 are the same.

The following data elements are used to define the measure population:

- E/M Code
- ICD-10-CM Principal Diagnosis Code
- Initial ECG Interpretation
- Transfer for Acute Coronary Intervention

The measure population includes patients with a diagnosis of acute myocardial infarction (AMI) and ST-segment elevation on the electrocardiogram (ECG) performed closest to emergency department (ED) arrival who are transferred from the ED to a short-term general hospital for inpatient care, or to a federal healthcare facility specifically for an acute coronary intervention (ACI). Patients are included in the measure population if:

- Initial ECG Interpretation is equal to "Yes"; and
- Fibrinolytic Administration is equal to "No"; and
- Transfer for Acute Coronary Intervention is equal to "[1] There was documentation the patient was transferred from this facility's emergency department to another facility specifically for acute coronary intervention."

## **EXCLUSIONS**

**Excluded Populations:** 

- Patients less than 18 years of age; or
- Patients receiving fibrinolytic therapy administration.

## **EXCLUSION DETAILS**

The following data elements are used to define the measure exclusions:

- Birthdate
- Fibrinolytic Therapy Administration

## **RISK ADJUSTMENT**

No risk adjustment or risk stratification

#### **STRATIFICATION**

## **TYPE SCORE**

Continuous variable better quality = lower score

#### **ALGORITHM**

Measure algorithm is available in the attached Measure Information Form. Measure algorithm is as follows:

- 1. Start. Run all cases that are included in the AMI Hospital Outpatient Population Algorithm and pass the edits defined in the Data Processing Flow through this measure. Proceed to Initial ECG Interpretation.
- 2. Check Initial ECG Interpretation.
- a. If Initial ECG Interpretation is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If Initial ECG Interpretation equals No, the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- c. If Initial ECG Interpretation equals Yes, the case will proceed to Fibrinolytic Administration.
- 3. Check Fibrinolytic Administration.
- a. If Fibrinolytic Administration is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If Fibrinolytic Administration equals Yes, the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- c. If Fibrinolytic Administration equals No, the case will proceed to Transfer for Acute Coronary Intervention.
- 4. Check Transfer for Acute Coronary Intervention.
- a. If Transfer for Acute Coronary Intervention is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If Transfer for Acute Coronary Intervention equals 2 or 3, the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- c. If Transfer for Acute Coronary Intervention equals 1, the case will proceed to ED Departure Date.
- 5. Check ED Departure Date.
- a. If ED Departure Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If ED Departure Date equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

- c. If ED Departure Date equals Non-UTD Value, the case will proceed to ED Departure Time.
- 6. Check ED Departure Time.
- a. If ED Departure Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If ED Departure Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- c. If ED Departure Time equals Non-UTD Value, the case will proceed to Arrival Time.
- 7. Check Arrival Time.
- a. If Arrival Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
- b. If Arrival Time equals Non-UTD Value, the case will proceed to the Measurement Value.
- 8. Calculate the Measurement Value. Time in minutes is equal to the ED Departure Date and ED Departure Time (in minutes) minus the Outpatient Encounter Date and Arrival Time (in minutes).
- 9. Check the Measurement Value.
- a. If Measurement Value is less than 0 minutes, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If Measurement Value is greater than or equal to 0 minutes, the case will proceed to Reason for Not Administering Fibrinolytic Therapy.
- 10. Check Reason for Not Administering Fibrinolytic Therapy.
- a. If Reason for Not Administering Fibrinolytic Therapy is missing, the case will proceed to a Measure Category Assignment of X and the case will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If Reason for Not Administering Fibrinolytic Therapy equals 1, 2, or 3, the case will proceed to a Measure Category Assignment of D1, the OP-3a Overall Rate. Initialize the Measure Category Assignment for OP-3b and OP-3c equal to B. Do not change the Measure Category Assignment that was already calculated for the overall rate of OP-3a. Proceed to Reason for Not Administering Fibrinolytic Therapy.
- 11. Check Reason for Not Administering Fibrinolytic Therapy.
- a. If Reason for Not Administering Fibrinolytic Therapy equals 1 or 2, the case will proceed to a Measure Category Assignment of D2, the OP-3c Quality Improvement Rate. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If Reason for Not Administering Fibrinolytic Therapy equals 3, the case will proceed to a Measure Category Assignment of D, the OP-3b Reporting Rate. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

## Submission Threshold

In order to reduce the burden on hospitals that treat a low number of patients but otherwise meet the submission requirements for a particular quality measure, hospitals that have five or fewer cases in a quarter (both Medicare and non-Medicare) for any measure set (i.e., Stroke) will not be required to submit patient level data for the entire measure set for that quarter. (Hospital Outpatient Quality Reporting Specifications Manual, Release Notes Version: 13.0a) 109921 | 138817 | 138553 | 141592 | 146188 | 113612 | 141015 | 151003 | 150979

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## COPYRIGHT / DISCLAIMER

This measure does not have a copyright.

# **Appendix E1: Related and Competing Measures (tabular)**

Comparison of NQF #0066, NQF #0081, NQF #0137, and NQF #1662

	0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
Steward	American Heart Association	PCPI Foundation	Centers for Medicare & Medicaid Services	Renal Physicians Association
Description	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period who also have diabetes OR a current or prior LVEF < 40% who were prescribed ACE inhibitor or ARB therapy	Percentage of patients aged 18 years and older with a diagnosis of heart failure (HF) with a current or prior left ventricular ejection fraction (LVEF) < 40% who were prescribed ACE inhibitor or ARB or ARNI therapy either within a 12-month period when seen in the outpatient setting OR at each hospital discharge	Percentage of acute myocardial infarction (AMI) patients with left ventricular systolic dysfunction (LVSD) who are prescribed an ACEI or ARB at hospital discharge. For purposes of this measure, LVSD is defined as chart documentation of a left ventricular ejection fraction (LVEF) less than 40% or a narrative description of left ventricular systolic (LVS) function consistent with moderate or severe systolic dysfunction.	Percentage of patients aged 18 years and older with a diagnosis of CKD (Stages 1-5, not receiving RRT) and proteinuria who were prescribed ACE inhibitor or ARB therapy within a 12-month period
Туре	Process	Process	Process	Process
Data Source	Registry Data Quality Payment Program – MIPS Quality Program. No data collection instrument provided No data dictionary	Registry Data Not applicable No data collection instrument provided Attachment NQF0081_I9tol10_conversion_2 019Apr09.xlsx	Claims (Only), Paper Records Centers for Medicare & Medicaid Services (CMS) Abstraction & Reporting Tool (CART). Vendor tools also available. URL No data dictionary	Claims, Electronic Health Records, Other, Paper Medical Records, Registry Data N/A Attachment ACE_or_ARB_data_file2015.pdf
Level	Clinician : Individual	Clinician : Group/Practice, Clinician : Individual	Facility, Other, Population : Regional and State	Clinician : Group/Practice, Clinician : Individual

	0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
Setting	Home Care, Outpatient Services, Post-Acute Care	Home Care, Inpatient/Hospital, Other, Outpatient Services Domiciliary, Nursing Facility	Hospital	Home Care, Other, Outpatient Services, Post-Acute Care Domiciliary, Rest Home, or Custodial Care Services
Numerator Statement	Patients who were prescribed ACE inhibitor or ARB therapy	Patients who were prescribed ACE inhibitor or ARB or ARNI therapy either within a 12-month period when seen in the outpatient setting OR at each hospital discharge	AMI patients who are prescribed an ACEI or ARB at hospital discharge	Patients who were prescribed ACE inhibitor or ARB therapy within a 12-month period *The above list of medications/drug names is based on clinical guidelines and other evidence. The specified drugs were selected based on the strength of evidence for their clinical effectiveness. This list of selected drugs may not be all-inclusive or current. Physicians and other health care professionals should refer to the FDA's web site page entitled "Drug Safety Communications" for up-to-date drug recall and alert information when prescribing medications.  Definitions:  Prescribed – May include prescription given to the patient for ACE Inhibitor or ARB therapy OR patient already taking ACE Inhibitor or ARB therapy as documented in the current medication list

	0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
Numerator Details	Time period for data collection: At least once during the measurement period Note: For reporting, Submission Criteria 1 and 2, described below, are combined for a single reported performance score on the combined measure population. If a patient has both diabetes and LVSD, reporting Submission Criteria #2 (CAD with diabetes) will count as appropriate reporting for this patient. Definition: Prescribed – May include prescription given to the patient for ACE inhibitor or ARB therapy at one or more visits in the measurement period OR patient already taking ACE inhibitor or ARB therapy as documented in current medication list. Numerator Note: Eligible clinicians who have given a prescription to the patient for or whose patient is currently taking a combination medication therapy, which contains either an ACE inhibitor or ARB (e.g.,	Time Period for Data Collection: At least once during the measurement period when seen in the outpatient setting OR at each hospital discharge Definition: Prescribed-Outpatient setting: prescription given to the patient for ACE inhibitor or ARB or ARNI therapy at one or more visits in the measurement period OR patient already taking ACE inhibitor or ARB or ARNI therapy as documented in current medication list. Prescribed-Inpatient setting: prescription given to the patient for ACE inhibitor or ARB or ARNI therapy at discharge OR ACE inhibitor or ARB or ARNI therapy to be continued after discharge as documented in the discharge medication list.  Numerator Note: To meet the intent of the measure, the numerator quality action must be performed at the encounter at which the active diagnosis of heart failure	Refer to http://www.qualitynet.org/dcs/Co ntentServer?c=Page&pagename= QnetPublic%2FPage%2FQnetTier4 &cid=1228773564870: • Section 1 - Data Dictionary   Alphabetical Data Dictionary - pages 1-17 through 1-18 plus pages 1-73 through 1-74. • Appendices   Appendix C - Medication Tables - pages Appendix C-6 through Appendix C- 7 plus pages Appendix C-11 through Appendix C-12. • Section 2 - Measurement Information   Section 2.1 - Acute Myocardial Infarction (AMI) - page AMI-3-1.	See attached for EHR specifications. For Claims/Administrative: Report CPT Category II 4009F Angiotensin converting enzyme (ACE) inhibitor or Angiotensin Receptor Blocker (ARB) therapy prescribed

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
angiotensin receptor neprilysin inhibitor [ARNI, sacubitril/valsartan], ACEI+diuretic, ARB+diuretic, ACEI+calcium channel blocker) would meet performance for this measure. FOR SUBMISSION CRITERIA 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF < 40% (without a diagnosis of diabetes) Report Quality Data Code G8935: Clinician prescribed angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy FOR SUBMISSION CRITERIA 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes Report Quality Data Code G8473: Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy prescribed	is documented. Eligible clinicians who have given a prescription for or whose patient is already taking an Angiotensin-Converting Enzyme Inhibitor (ACEI) or Angiotensin Receptor Blocker (ARB) would meet performance for this measure. Other combination therapies that consist of an ACEI plus diuretic, ARB + neprilysin inhibitor (ARNI), ARB plus diuretic, ACEI plus calcium channel blocker, ARB plus calcium channel blocker, or ARB plus calcium channel blocker, or ARB plus calcium channel blocker promance for this measure. For Submission Criteria 1 and Submission Criteria 2, report CPT Category II Code, 4010F: Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy prescribed or currently being taken (NOTE to NQF: Based on the language revision, PCPI is requesting updated coding and descriptor.)		

	0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
Denominat or Statement	All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period who also have diabetes OR current or prior LVEF <40%	All patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40%	AMI patients (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.00, 410.01, 410.10, 410.11, 410.20, 410.21, 410.30, 410.31, 410.40, 410.41, 410.50, 410.51, 410.60, 410.61, 410.70, 410.71, 410.80, 410.81, 410.90, 410.91); with chart documentation of a left ventricular ejection fraction (LVEF) < 40% or a narrative description of left ventricular systolic (LVS) function consistent with moderate or severe systolic dysfunction	All patients aged 18 years and older with the diagnosis of CKD (Stages 1-5, not receiving RRT) and proteinuria Definitions: Proteinuria:  1. >300mg of albumin in the urine per 24 hours OR  2. ACR >300 mcg/mg creatinine OR  3. Protein to creatinine ratio > 0.3 mg/mg creatinine RRT (Renal Replacement Therapy)-For the purposes of this measure, RRT includes hemodialysis, peritoneal dialysis, and kidney transplantation
Denominat or Details	Time period for data collection: 12 consecutive months Definition: LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. FOR SUBMISSION CRITERIA 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF < 40% Patients aged >= 18 years on date of encounter	Time Period for Data Collection: 12 consecutive months Denominator Note: LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. The LVSD may be determined by quantitative or qualitative assessment, which may be current or historical. Examples of a quantitative or qualitative assessment may include an echocardiogram: 1) that provides a numerical value	ICD-9-CM Principal Diagnosis codes: 410.00: Anterolateral wall, acute myocardial infarction-episode of care unspecified 410.01: Anterolateral wall, acute myocardial infarction-initial episode 410.10: Other anterior wall, acute myocardial infarction-episode of care unspecified 410.11: Other anterior wall, acute myocardial infarction-initial episode	See attached for EHR specifications. For Claims/Administrative: See coding tables attached for coding ( ICD-10-CM, CPT)

(CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.2, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.790, I25.791, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, Z95.1, Z95.5, Z98.61 AND Patient encounter during the performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305,	of LVSD or 2) that uses descriptive terms such as moderately or severely depressed left ventricular systolic function. Any current or prior ejection fraction study documenting LVSD can be used to identify patients.  To meet the denominator criteria, a patient must have an active diagnosis of heart failure at the time of the encounter which is used to qualify for the denominator and evaluate the numerator.  The encounter used to evaluate the numerator counts as 1 of the 2 encounters required for denominator inclusion. If the patient meets the heart failure diagnosis criterion, the diagnosis criterion, the diagnosis needs to be active only at the encounter being evaluated for the numerator action.  Submission Criteria 1: Patients who were prescribed ACE inhibitor or ARB therapy within a 12-month period when seen in the outpatient setting	410.20: Inferolateral wall, acute myocardial infarction-episode of care unspecified 410.21: Inferolateral wall, acute myocardial infarction-initial episode 410.30: Inferoposterior wall, acute myocardial infarction-episode of care unspecified 410.31: Inferoposterior wall, acute myocardial infarction-initial episode 410.40: Other inferior wall, acute myocardial infarction-episode of care unspecified 410.41: Other inferior wall, acute myocardial infarction-initial episode 410.50: Other lateral wall, acute myocardial infarction-episode of care unspecified 410.51: Other lateral wall, acute myocardial infarction-initial episode 410.60: True posterior wall, acute myocardial infarction-episode of care unspecified	

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350 WITHOUT Telehealth Modifier: GQ, GT, 95, POS 02 AND Two Denominator Eligible Visits AND Left Ventricular Ejection Fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function: G8934 FOR SUBMISSION CRITERIA 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes Patients aged >= 18 years on date of encounter AND Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9,	Patients aged >= 18 years on date of encounter  AND  Diagnosis for heart failure (ICD-10-CM): I11.0, I13.0, I13.2, I50.1, I50.20, I50.21, I50.22, I50.23, I50.30, I50.31, I50.32, I50.33, I50.40, I50.41, I50.42, I50.43, I50.814, I50.82, I50.83, I50.84, I50.89, I50.9  AND  Patient encounter during performance period – to be used for numerator evaluation (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350  WITHOUT  Telehealth Modifier: GQ, GT, 95, POS 02  AND	410.61: True posterior wall, acute myocardial infarction-initial episode 410.70: Subendocardial, acute myocardial infarction-episode of care unspecified 410.71: Subendocardial, acute myocardial infarction-initial episode 410.80: Other specified sites, acute myocardial infarction-episode of care unspecified 410.81: Other specified sites, acute myocardial infarction-initial episode 410.90: Unspecified site, acute myocardial infarction-episode of care unspecified 410.91: Unspecified site, acute myocardial infarction-initial episode 410.91: Unspecified site, acute myocardial infarction-initial episode LVSD - Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename= QnetPublic%2FPage%2FQnetTier4 &cid=1228773564870: • Section 1 - Data Dictionary   Alphabetical Data Dictionary   Pages 1-261 through 1-264.	

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
124.0,  24.1,  24.8,  24.9,  25.10,  25.110,  25.111,  25.118,  25.119,  25.2,  25.5,  25.6,  25.700,  25.701,  25.708,  25.709,  25.710,  25.711,  25.718,  25.719,  25.720,  25.721,  25.728,  25.729,  25.730,  25.731,  25.738,  25.739,  25.750,  25.751,  25.758,  25.759,  25.760,  25.761,  25.768,  25.769,  25.761,  25.768,  25.769,  25.790,  25.791,  25.812,  25.810,  25.811,  25.812,  25.82,  25.83,  25.89,  25.9,  25.9,  25.9,  25.9,  25.5,  25.83,  25.89,  25.	At least one additional patient encounter during performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99345, 99347, 99348, 99349, 99350 WITH OR WITHOUT Telehealth Modifier: GQ, GT, 95, POS 02 AND Left ventricular ejection fraction (LVEF) less than 40% or documentation of moderately or severely depressed left ventricular systolic function: 3021F Submission Criteria 2: Patients who were prescribed ACE inhibitor or ARB or ARNI therapy at each hospital discharge Patients aged >= 18 years on date of encounter		

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
E10.3511, E10.3512, E10.3513, E10.3519, E10.3521, E10.3522, E10.3523, E10.3529, E10.3531, E10.3532, E10.3532, E10.3533, E10.3539, E10.3541, E10.3542, E10.3543, E10.3549, E10.3554, E10.3554, E10.3559, E10.3559, E10.3559, E10.3559, E10.3591, E10.3592, E10.3593, E10.3599, E10.36, E10.37X1, E10.37X2, E10.37X3, E10.37X9, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.10, E11.11, E11.21, E11.22, E11.3213, E11.3211, E11.3212, E11.3213, E11.3219, E11.3291, E11.3292, E11.3293, E11.3299, E11.3311, E11.3312, E11.3313, E11.3319, E11.3399, E11.3411, E11.3412, E11.3413, E11.3419, E11.3412, E11.3413, E11.3419, E11.3499, E11.3413, E11.3419, E11.3499, E11.3511, E11.3512, E11.3513, E11.3529, E11.3521, E11.3523, E11.3529, E11.3531, E11.3523, E11.3529, E11.3531, E11.3532, E11.3529, E11.3531, E11.3532, E11.3529, E11.3531, E11.3532, E11.3533,	AND Diagnosis for heart failure (ICD-10-CM): I11.0, I13.0, I13.2, I50.1, I50.20, I50.21, I50.22, I50.23, I50.30, I50.31, I50.32, I50.33, I50.40, I50.41, I50.42, I50.43, I I50.814, I50.82, I50.83, I50.84, I50.89, I50.9 AND Patient encounter during performance period (CPT): 99238, 99239 AND Left ventricular ejection fraction (LVEF) less than 40% or documentation of moderately or severely depressed left ventricular systolic function: 3021F		

(CA Enz Ang (AR Ver	66 Coronary Artery Disease AD): Angiotensin Converting zyme (ACE) Inhibitor or giotensin Receptor Blocker RB) Therapy Diabetes or Left ntricular Systolic Dysfunction /EF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
E11	1.3539, E11.3541, E11.3542, 1.3543, E11.3549, E11.3551,			
	1.3552, E11.3553, E11.3559,			
	1.3591, E11.3592, E11.3593,			
	1.3599, E11.36, E11.37X1,			
	1.37X2, E11.37X3, E11.37X9,			
	1.39, E11.40, E11.41, E11.42,			
	1.43, E11.44, E11.49, E11.51,			
	1.52, E11.59, E11.610,			
	1.618, E11.620, E11.621,			
	1.622, E11.628, E11.630, 1.638, E11.641, E11.649,			
	1.65, E11.69, E11.8, E11.9,			
	3.00, E13.01, E13.10, E13.11,			
	3.21, E13.22, E13.29, E13.311,			
	3.319, E13.3211, E13.3212,			
	3.3213, E13.3219, E13.3291,			
	3.3292, E13.3293, E13.3299,			
	3.3311, E13.3312, E13.3313,			
	3.3319, E13.3391, E13.3392,			
E13	3.3393, E13.3399, E13.3411,			
E13	3.3412, E13.3413, E13.3419,			
E13	3.3491, E13.3492, E13.3493,			
	3.3499, E13.3511, E13.3512,			
E13	3.3513, E13.3519, E13.3521,			
	3.3522, E13.3523, E13.3529,			
	3.3531, E13.3532, E13.3533,			
	3.3539, E13.3541, E13.3542,			
	3.3543, E13.3549, E13.3551,			
	3.3552, E13.3553, E13.3559,			
E13	3.3591, E13.3592, E13.3593,			

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
E13.3599, E13.36, E13.37X1,E13.37X2,E13.37X3,E1 3.37X9,E13.39, E13.40, E13.41, E13.42, E13.43, E13.44, E13.49, E13.51, E13.52, E13.59, E13.610, E13.618, E13.620, E13.621, E13.622, E13.628, E13.630, E13.638, E13.641, E13.649, E13.65, E13.69, E13.8, E13.9, O24.011, O24.012, O24.013, O24.019, O24.02, O24.03, O24.111, O24.112, O24.113, O24.311, O24.312, O24.313, O24.319, O24.32, O24.33, O24.811, O24.812, O24.813, O24.819, O24.82, O24.83			
AND Patient encounter during the performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350			

	0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
	WITHOUT Telehealth Modifier: GQ, GT, 95, POS 02 AND Two Denominator Eligible Visits Note: The eligible clinician should submit data on one of the submission criteria, depending on the clinical findings. If the patient has CAD and LVSD (without a diagnosis of Diabetes), use Denominator Submission Criteria 1. If the patient has CAD and Diabetes, use Denominator Submission Criteria 2. If the patient has both diabetes and LVSD, the eligible professional may submit quality data for Submission Criteria 2 and this will count as appropriate submission for this patient.			
Exclusions	Denominator Exceptions: Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic	Denominator Exceptions:  Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have	Exclusions:  <18 years of age  Patients who have a length of stay greater than 120 days  Discharged to another hospital  Expired  Left against medical advice	ACE inhibitor or ARB therapy not prescribed during the measurement period, medical reason(s) documented (e.g., pregnancy, history of angioedema to ACEI, other allergy to ACEI and ARB, hyperkalemia or history of hyperkalemia while on ACEI or ARB

	0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
	or mitral valve, other medical reasons)  Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., patient declined, other patient reasons)  Documentation of system reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., lack of drug availability, other reasons attributable to the health care system)	experienced marked azotemia, allergy, intolerance, other medical reasons).  Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., patient declined, other patient reasons).  Documentation of system reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., other system reasons).	Discharged to home for hospice care     Discharged to a health care facility for hospice care     Patients with comfort measures only documented     Patients enrolled in clinical trials     Patients with a documented reason for no ACEI and no ARB at discharge	therapy, acute kidney injury due to ACEI or ARB therapy, other medical reasons ACE inhibitor or ARB therapy not prescribed during the measurement period, patient reason(s) documented (e.g., patient declined, other patient reasons)
Exclusion Details	Time period for data collection: During the encounter within the 12-month period Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient- specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. The AHA and ACC	Time Period for Data Collection: During the encounter within the 12-month period Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient	Refer to http://www.qualitynet.org/dcs/Co ntentServer?c=Page&pagename= QnetPublic%2FPage%2FQnetTier4 &cid=1228773564870: • Section 1 - Data Dictionary   Alphabetical Data Dictionary - pages 1-19 through 1-20, 1-96, 1- 106 through 1-108, 1-111 through 1-114, 1-123 through 1-127, I-209, 1-261 through 1-264, and 1-326 through 1-331. • Appendices   Appendix C - Medication Tables PDF - pages Appendix C-6 through Appendix C-7 plus pages Appendix C-11 through Appendix C-12, and	Append modifier to CPT II code 4009F- 1P Append modifier to CPT II code 4009F- 2P

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure 0066, exceptions may include medical reason(s) (e.g., allergy, intolerance, pregnancy, renal failure due to ACE Inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to the health care system) for not prescribing ACE inhibitor or ARB therapy. Although this methodology does	preferences. The PCPI exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) or Angiotensin Receptor-Neprilysin Inhibitor (ARNI) Therapy for Left Ventricular Systolic Dysfunction (LVSD), exceptions may include medical reason(s) (eg, hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance,	Appendix H - Miscellaneous Tables – page Appendix H-5.  • Section 2 - Measurement Information   Section 2.1 - Acute Myocardial Infarction (AMI) — pages AMI-4 plus AMI-3-1 through AMI-3-2.	

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
not require the external reporting of more detailed exception data, the AHA and ACC recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The AHA and ACC also advocates for the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.  Additional details: FOR SUBMISSION CRITERIA 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF<40% Report Quality Data Code G8936: Clinician documented that patient was not an eligible candidate for angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (e.g., allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic	other medical reasons), patient reason(s) (eg, patient declined, other patient reasons), or system reason(s) for not prescribing an ACE inhibitor or ARB or ARNI therapy. Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and auditreadiness. The PCPI also advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.  Append a modifier to CPT Category II Code: 4010F-1P: Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., hypotensive patients who are at immediate risk of cardiogenic		

	0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
	or mitral valve, other medical reasons) or (e.g., patient declined, other patient reasons) or (e.g., lack of drug availability, other reasons attributable to the health care system)  FOR SUBMISSION CRITERIA 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes  Report Quality Data Code G8474: Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy not prescribed for reasons documented by the clinician (e.g., allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons) or (e.g., patient declined, other patient reasons) or (e.g., lack of drug availability, other reasons attributable to the health care system)	shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons)  4010F-2P: Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., patient declined, other patient reasons)  4010F-3P: Documentation of system reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., other system reasons)		
Risk Adjustment	No risk adjustment or risk stratification 140560   107246   141015 140560   107246   141015	No risk adjustment or risk stratification 140560   135810 140560   135810	No risk adjustment or risk stratification 109921   141592   135810 109921   141592   135810	No risk adjustment or risk stratification 113315 113315

	0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
Stratificatio n	Consistent with CMS' Measures Management System Blueprint and national recommendations put forth by the IOM (now NASEM) and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer.	Consistent with CMS' Measures Management System Blueprint and recent national recommendations put forth by the IOM and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer.	N/A	We encourage the results of this measure to be stratified by race, ethnicity, primary language, and gender, and have included these variables as recommended data elements to be collected.
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	THERE ARE TWO SUBMISSION CRITERIA FOR THIS MEASURE:  1) Patients who are 18 years and older with a diagnosis of CAD with LVEF < 40% OR  2) Patients who are 18 years and older with a diagnosis of CAD who have diabetes Note: For reporting, Submission Criteria 1 and Submission Criteria 2 are combined for a single reported performance score on the combined measure population. If a patient has both diabetes and LVSD, reporting Submission Criteria #2 (CAD with	S.12. Type of score: Rate/proportion If other: S.13. Interpretation of Score (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score) Better quality = Higher score S.14. Calculation Algorithm/Measure Logic (Diagram or describe the calculation of the measure score as an ordered sequence of steps including identifying the target	Refer to http://www.qualitynet.org/dcs/Co ntentServer?c=Page&pagename= QnetPublic%2FPage%2FQnetTier4 &cid=1228773564870: Section 2 - Measurement Information   Section 2.1 - Acute Myocardial Infarction (AMI) - pages AMI-5 plus AMI-3-5 through AMI-3-6. 109921   141592   135810	Calculation algorithm is included in data dictionary/code table attachment (2a1.30). 113315

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
diabetes) will count as appropriate reporting for this patient. For the purposes of this measure, the single performance rate can be calculated as follows:  Performance Rate = (Numerator 1 + Numerator 2)/ [(Denominator 1 - Denominator Exceptions 1) + (Denominator 2 - Denominator Exceptions 2)]  Calculation algorithm for  Submission Criteria 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF<40%  1. Find the patients who meet the initial population (i.e., the general group of patients that a set of performance measures is designed to address).  2. From the patients within the initial population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases, the initial population and denominator are identical.	population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.)  This measure is comprised of two submission criteria but is intended to result in one reporting rate. The reporting rate is the aggregate of Submission Criteria 1 and Submission Criteria 2, resulting in a single performance rate. For the purposes of this measure, the single performance rate can be calculated as follows:  Performance Rate = (Numerator 1 + Numerator 2)/ [(Denominator 1 - Denominator Exceptions 1) + (Denominator 2 - Denominator Exceptions 1) = (Denominator 1 - Denominator 2 - Denominator Exceptions 1) = (Denominator 2 - Denominator Exceptions 2)]  Calculation algorithm for Submission Criteria 1: Patients who were prescribed ACE inhibitor or ARB or ARNI therapy within a 12-month period when seen in the outpatient setting		

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
3. From the patients within the denominator, find the patients who meet the numerator criteria (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the number of patients in the number of patients in the denominator.  4. From the patients who did not meet the numerator criteria, determine if the provider has documented that the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: medical reason(s) (e.g., allergy, intolerance, pregnancy, renal failure due to ACE Inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to the health care system) for not prescribing ACE inhibitor or ARB therapy)]. If the patient meets	1. Find the patients who meet the initial population (ie, the general group of patients that a set of performance measures is designed to address).  2. From the patients within the initial population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.  3. From the patients within the denominator, find the patients who meet the numerator criteria (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.  4. From the patients who did not meet the numerator criteria, determine if the provider has documented that		

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
any exception criteria, they should be removed from the denominator for performance calculation.  Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI. If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.  Calculation algorithm for Submission Criteria 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes  1. Find the patients who meet the initial population (i.e., the general group of patients that a set of performance measures is designed to address).  2. From the patients within the initial population criteria, find	the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: medical reason(s) (e.g., hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.		

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.  3. From the patients within the denominator, find the patients who meet the numerator criteria (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.  4. From the patients who did not meet the numerator criteria, determine if the provider has documented that the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: medical reason(s) (e.g., allergy, intolerance, pregnancy, renal failure due to ACE Inhibitor, diseases of the aortic	If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.  Calculation algorithm for Submission Criteria 2: Patients who were prescribed ACE inhibitor or ARB or ARNI therapy at each hospital discharge  1. Find the patients who meet the initial population (i.e., the general group of patients that a set of performance measures is designed to address).  2. From the patients within the initial population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.  3. From the patients within the denominator, find the patients who meet the numerator criteria (i.e., the group of patients in the denominator for		

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
or mitral valve, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to the health care system) for not prescribing ACE inhibitor or ARB therapy)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation.  Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI. If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure. 140560   107246   141015	whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.  4. From the patients who did not meet the numerator criteria, determine if the provider has documented that the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: medical reason(s) (e.g., hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation Although the exception cases		

	0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
		are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.		
		If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure. 140560   135810		
Submission items	5.1 Identified measures: 0137 : ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients	5.1 Identified measures: 0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular	5.1 Identified measures:  5a.1 Are specs completely harmonized?	5.1 Identified measures: 0066 : Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF <
	1662 : Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy 0081e : Heart Failure (HF):	Systolic Dysfunction (LVEF < 40%)  1662 : Angiotensin Converting Enzyme (ACE) Inhibitor or	5a.2 If not completely harmonized, identify difference, rationale, impact:	40%)  0081 : Heart Failure (HF): Angiotensin- Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB)
	Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin	Angiotensin Receptor Blocker (ARB) Therapy	5b.1 If competing, why superior or rationale for additive value: No	Therapy for Left Ventricular Systolic Dysfunction (LVSD)
	Receptor Blocker (ARB) or Angiotensin Receptor-Neprilysin Inhibitor (ARNI) Therapy for Left	0081e : Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) or	NQF-endorsed measures with same topic and target population. Related Measures: NQF #0551: Ace Inhibitor / Angiotensin	0551 : Ace Inhibitor / Angiotensin Receptor Blocker Use and Persistence Among Members with Coronary Artery Disease at High Risk for Coronary Events

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
Ventricular Systolic Dysfunction (LVSD)  0081: 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)  5a.1 Are specs completely harmonized? Yes  5a.2 If not completely harmonized, identify difference, rationale, impact: 0137 is specific to acute myocardial infarction patients. 1662 is specific to chronic kidney disease patients. And 0081/e are specific only to broader heart failure patients.	Angiotensin Receptor-Neprilysin Inhibitor (ARNI) Therapy for Left Ventricular Systolic Dysfunction (LVSD)  5a.1 Are specs completely harmonized? Yes  5a.2 If not completely harmonized, identify difference, rationale, impact: NQF 1662 is specific to patients with a diagnosis of chronic kidney disease who also have proteinuria. NQF 0066 is specific to patients with coronary artery disease who also have diabetes OR a current/prior LVEF of <40%. In both measures, the population of focus (ie, the denominator) is different. NQF 0081e is the eCQM version of this measure.	Receptor Blocker Use and Persistence Among Members with Coronary Artery Disease at High Risk for Coronary Events, NQF #0594: Post MI: ACE inhibitor or ARB therapy	therapy 0610: Heart Failure - Use of ACE Inhibitor (ACEI) or Angiotensin Receptor Blocker (ARB) Therapy 0619: Diabetes with Hypertension or Proteinuria - Use of an ACE Inhibitor or ARB 0621: Non-Diabetic Nephropathy - Use of ACE Inhibitor or ARB Therapy  5a.1 Are specs completely harmonized?  5a.2 If not completely harmonized, identify difference, rationale, impact:  5b.1 If competing, why superior or rationale for additive value: Our measure is specified at the clinician level, but measure results can be aggregated at a higher level of measurement.
5b.1 If competing, why superior or rationale for additive value: This measure addresses a distinct target population and/or quality action from other related measures, as described above. The measures are	5b.1 If competing, why superior or rationale for additive value:		We have developed and will maintain specifications for multiple data sources, including Electronic Health Records (EHRs) and Claims-Based Reporting. Our specifications for EHRs are developed in accordance with the

0066 Coronary Artery Disease (CAD): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0081 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)	0137 ACEI or ARB for left ventricular systolic dysfunction Acute Myocardial Infarction (AMI) Patients	1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
complementary to form a well-rounded view of the quality of care for patients with CAD.			terminology standards (eg, SNOMED, RxNorm, LOINC) named in the Meaningful Use Program (CMS EHR Incentive Program).  The data source for ActiveHealth measures is what they call "level 2 clinically enriched data" (including data from claims & pharmacy). Our measure is specified for use in administrative claims (using CPT II codes) as well as integration into EHRs. The implementation of measures that are specified using clinically enriched data is significantly limiting in that it would only apply to those groups/settings with access to that type of information (ie, pharmacy data).  NQF staff have noted that the ActiveHealth measures are in use by health plans — a 3 million patient database system. By comparison, our measures are in CMS's PQRS program providing an incentive payment to eligible professionals who satisfactorily report data on quality measures for services furnished to 46 million Medicare beneficiaries.

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## Comparison of NQF #0066, NQF #0073, NQF #0076, and NQF #0465

	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
Steward	American Heart Association	National Committee for Quality Assurance	MN Community Measurement	Society for Vascular Surgery
Description	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease (CAD) seen within a 12-month period who were prescribed aspirin or clopidogrel	The percentage of patients 18 to 75 years of age who were discharged alive with acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) during the 12 months prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year and who had the following during the measurement year:  - Blood pressure control (BP): reported as under control <140/90 mm Hg.	The percentage of patients 18-75 years of age who had a diagnosis of ischemic vascular disease (IVD) and whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following: • Blood pressure less than 140/90 mmHg • On a statin medication, unless allowed contraindications or exceptions are present • Non-tobacco user • On daily aspirin or anti- platelet medication, unless allowed contraindications or exceptions are present	Percentage of patients undergoing carotid endarterectomy (CEA) who are taking an anti-platelet agent (aspirin or clopidogrel or equivilant such as aggrenox/tiglacor etc) within 48 hours prior to surgery and are prescribed this medication at hospital discharge following surgery
Туре	Process	Outcome	Composite	Process
Data Source	Registry Data Quality Payment Program – MIPS Quality Program.  No data collection instrument provided No data dictionary	Claims, Electronic Health Records, Paper Medical Records NA Attachment 0073_IVD_Blood_Pressure_Co ntrol_Value_Sets- 635634189557555751.xlsx	Electronic Health Records, Paper Medical Records An excel template with formatted columns for data fields is provided. Almost all the medical groups in MN (99.9%) extract the information from their EMR. Other options have been historically available: Registries can be used as a	Registry Data VQI or other clinical registries that provides data for preoperative and discharge medications for patients undergoing carotid endarterectomy (CPT 35301, ICD 9 38.12 or ICD 10: 2014 ICD-10-PCS 03CH0ZZ Extirpation of Matter from

	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
			source of information to create the data file; however groups must ensure that all of their eligible patients are included. Paper abstraction forms are provided for those clinics who wish to use them as an interim step to creating their data file.  All data is uploaded in electronic format (.csv file) to a HIPAA secure, encrypted and password protected data portal.  Available at measure-specific web page URL identified in S.1 Attachment MNCM 0076_Optimal_Vascular_Care_Specs_Fields_12-2019.xlsx	Right Common Carotid Artery, Open Approach 2014 ICD-10-PCS 03CJ0ZZ Extirpation of Matter from Left Common Carotid Artery, Open Approach 2014 ICD-10-PCS 03CK0ZZ Extirpation of Matter from Right Internal Carotid Artery, Open Approach 2014 ICD-10-PCS 03CL0ZZ Extirpation of Matter from Left Internal Carotid Artery, Open Approach Left Internal Carotid Artery, Open Approach Available in attached appendix at A.1 No data dictionary
Level	Clinician : Individual	Clinician : Group/Practice, Clinician : Individual	Clinician : Group/Practice	Facility, Clinician : Group/Practice, Clinician : Individual
Setting	Home Care, Outpatient Services, Post-Acute Care	Outpatient Services	Outpatient Services	Inpatient/Hospital, Outpatient Services
Numerator Statement	Patients who were prescribed aspirin or clopidogrel	Patients whose most recent blood pressure is adequately controlled during the measurement year. For a patient's BP to be adequately controlled, both the systolic and the diastolic BP must meet the desired threshold of <140/90 mm Hg.	The number of patients in the denominator whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:  The most recent blood pressure in the measurement period has a systolic value of	Patients over age 18 undergoing carotid endarterectomy who received anti-platlet agents such as aspirin or aspirin-like agents, or P2y12 antagonists within 48 hours prior to the initiation of surgery AND are prescribed this medication at hospital discharge following surgery.

	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
			less than 140 mmHg AND a diastolic value of less than 90 mmHg  On a statin medication, unless allowed contraindications or exceptions are present  Patient is not a tobacco user  On daily aspirin or antiplatelet medication, unless allowed contraindications or exceptions are present	
Numerator Details	Time period for data collection: At least once during the measurement period Definition: Prescribed - May include prescription given to the patient for aspirin or clopidogrel at one or more visits in the measurement period OR patient already taking aspirin or clopidogrel as documented in current medication list. Report CPT Category II code 4086F: Aspirin or clopidogrel prescribed	ADMINISTRATIVE CLAIMS Use automated data to identify the most recent BP reading taken during an outpatient visit (Outpatient Value Set) or a nonacute inpatient encounter (Nonacute Inpatient Value Set) during the measurement year.  The patient is numerator compliant if the BP is <140/90 mm Hg. The patient is not compliant if the BP is > or = 140/90 mm Hg, if there is no BP reading during the measurement year or if the reading is incomplete (e.g., the systolic or diastolic level is missing). If there are multiple BPs on the same date of service, use the lowest	In order to be numerator compliant all four components must be met  * Blood pressure less than 140/90 mmHg AND  * On a statin medication, unless allowed contraindications or exceptions are present AND  * Non-tobacco user AND  * On daily aspirin or antiplatelet medication, unless allowed contraindications or exceptions are present BLOOD PRESSURE COMPONENT Blood Pressure Date [Date (mm/dd/yyyy)] AND BP Systolic [Numeric] AND BP Diastolic [Numeric]	Numerator coding, These are fields that are collected via the data form for the VQI registry, which is approved for PQRS: Gxxx1: Documentation that oral antiplatelet therapy was given within 48 hours prior to surgerical incision Gxxx2: No documentation that oral antiplatelet was given within 48 hours prior to the initiation of surgery Gxxx3: Oral antiplatelet therapy prescribed at hospital discharge Gxxx4: Oral antiplatelet therapy NOT prescribed at hospital discharge, Gxxx5 does not apply

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
	systolic and lowest diastolic BP on that date as the representative BP. Organizations that use CPT Category II codes to identify numerator compliance for this indicator must search for all codes in the following value sets and use the most recent codes during the measurement year to determine numerator compliance for both systolic and diastolic levels. See the corresponding excel document for the following value sets: - Systolic Less Than 140 Value Set - Systolic Greater Than/Equal To 140 Value Set - Diastolic Less Than 80 Value Set - Diastolic Greater Than/Equal To 90 Value Set - Outpatient Value Set - Nonacute Inpatient Value Set - MEDICAL RECORD To determine if a patient is adequately controlled, the	Numerator component calculation: numerator component compliant is BP during the measurement year AND Systolic < 140 AND Diastolic < 90. BP Date Enter the date of the most recent blood pressure result during the measurement period.  • A test result from a provider outside of the reporting medical group is allowed if the result is documented in the reporting medical group's patient record and is the most recent test result during the measurement period.  • Do not include BP readings: o Taken during an acute inpatient stay or an ED visit. o Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole). o Obtained the same	Gxxx5: Patient expired, left against medical advice, discharged to hospice, or transferred to another acute care hospital or federal hospital
	, , , , , , , ,	day as a major diagnostic or	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
	representative blood pressure must be identified. Follow the steps below.  Step 1  - Identify the most recent blood pressure reading noted during the measurement year.  Do not include readings that meet the following criteria:  - Taken during an acute inpatient stay or an ED visit.  - Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).  - Taken the same day as major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy).  - Reported by or taken by the patient  - Documentation of "VS within normal limits" or "vital signs normal".  Step 2  - Identify the lowest systolic and lowest diastolic reading from the most recent blood	surgical procedure (e.g., EKG/ECG, stress test, administration of IV contrast for a radiology procedure, endoscopy).  O Reported by or taken by the patient.  Leave BLANK if a blood pressure was not obtained during the measurement period.  BP Systolic Enter the value of the most recent systolic blood pressure result during the measurement period.  If more than one value is recorded on the most recent date, the lowest value may be submitted. It does NOT need to be from the same reading submitted in Column Z (BP Diastolic).  NOTE: The systolic blood pressure is the upper number in the recorded fraction. For example, the systolic value for a blood pressure of 124/72 mmHg is 124.  Leave BLANK if a blood pressure was not obtained during the measurement period.	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
	pressure notation in the medical record. If there are multiple readings for a single date, use the lowest systolic and the lowest diastolic reading on that date as the representative blood pressure. The systolic and diastolic results do not need to be from the same reading. The patient is not numerator compliant if the BP does not meet the specified threshold or is missing, or if there is no BP reading during the measurement year or if the reading is incomplete (i.e., the systolic or diastolic level is missing).	Enter the value of the most recent diastolic blood pressure result during the measurement period.  If more than one value is recorded on the most recent date, the lowest value may be submitted. It does NOT need to be from the same reading as submitted in (BP Systolic).  NOTE: The diastolic blood pressure is the lower number in the recorded fraction. For example, the diastolic value for a blood pressure of 124/72 mmHg is 72.  Leave BLANK if a blood pressure was not obtained during the measurement period. CHOLESTEROL MANAGEMENT STATIN COMPONENT LDL Date [Date (mm/dd/yyyy)] AND LDL Value [Numeric] For calculating exceptions to statin use based on very low LDL (< 40 for cardiovascular disease and < 70 for patients with diabetes)	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		Enter the date of the most recent LDL test result between 01/01/2015 and 12/31/2019.  • A test result from a provider outside of the reporting medical group is allowed if the result is documented in the reporting medical group's patient record and is the most recent test result within the allowable time period.  • If the LDL result is too high to calculate, still enter the LDL test date if it is the most recent test result within the allowable time period.  • LDL values within the last five years will be used to calculate potential exceptions to being on a statin medication.  • Leave BLANK if an LDL test was not performed between 01/01/2015 and 12/31/2019.  Enter the value of the most recent LDL test result between 01/01/2015 and 12/31/2019.  • Leave BLANK if an LDL test was not performed	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		during the allowable time period, or if the most recent test result was too high to calculate.  Statin Medication [Numeric] AND  Statin Medication Date [Date (mm/dd/yyyy)] AND/OR  Station Medication Exception [Numeric] AND  Station Medication Exception Date [Date (mm/dd/yyyy)]  Numeric] AND  Station Medication Exception Date [Date (mm/dd/yyyy)]  Numerator component calculation: numerator component compliant if on a statin (prescribed/ ordered) or low LDL value (see above) or documented contraindication/exception is present.  Statin Medication:  Enter the code that corresponds to whether the patient was prescribed a statin medication or if a statin medication was active on the patient's medication list during the measurement period.  Please see Appendix A for a list of statin medications.  1 = Yes, patient was prescribed a statin	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		medication, or a statin medication was indicated as active on the patient's medication list during the measurement period.  2 = No, patient was not prescribed a statin medication and a statin medication was not indicated as active on the patient's medication list during the measurement period.  • The following exceptions to statin medication use will be identified by the Data Portal based on the submitted LDL values:  o Patients with ischemic vascular disease aged 21 to 75 years and an LDL result less than 40 mg/dL o Patients aged 40 – 75 years with an LDL result less than 70 mg/dL o Patients aged 21 – 39 years with an LDL less than 190 mg/dL Statin Medication Date Enter the date of the most recent statin prescription, order or review on an active	Endarterectomy
		medications list that included	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		a statin during the measurement period.  If a statin was not prescribed, ordered, or reviewed as an active medication during the measurement period, leave BLANK.  Station Medication Exception If the patient was NOT prescribed or did not have a statin medication active on their medication list during the measurement period (Column AA = 2), enter the value that corresponds to any of the following contraindications or exceptions:  1 = Pregnancy at any time during the measurement period  2 = Active liver disease (liver failure, cirrhosis, hepatitis)  3 = Rhabdomyolysis  4 = End stage renal disease on dialysis  5 = Heart failure  6 = Other provider documented reason: breastfeeding during the	
		measurement period	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		7 = Other provider documented reason: woman of childbearing age not actively taking birth control during the measurement period 8 = Other provider documented reason: allergy to statin 9 = Drug interaction with a listed medication taken during the measurement period (valid drug-drug interactions include HIV protease inhibitors, nefazodone, cyclosporine, gemfibrozil, and danazol). 10 = Other provider documented reason: intolerance (with supporting documentation of trying a statin at least once within the last five years). Additionally, Myopathy and Myositis (CHOL-05) Value Set may be used to document intolerance to statins.  If none of the above contraindications or exceptions are documented, leave BLANK.  NOTE: Items 1 – 5 above can be defined by diagnosis codes that may be	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
	Control	used in data collection. Value Sets include: Pregnancy V/Z Codes (PREG-01), Pregnancy Diagnosis Codes (PREG-02), Liver Disease (CHOL-01), Rhabdomyolysis (CHOL-02), ESRD on Dialysis (CHOL-03), and Heart Failure (CHOL-04) Statin Medication Exception Date:  If the patient has a documented contraindication or exception enter the date of the contraindication or exception.  If only the month and year are known, enter the first day of the month.  ASPIRIN/ANTIPLATELET COMPONENT  Aspirin or Anti-platelet Medication [Numeric] AND Aspirin or Anti-platelet Date [Date (mm/dd/yyyy)] AND/OR	
		Aspirin or Anti-platelet Exception [Numeric] AND Aspirin or Anti-platelet	
		Exception Date [Date (mm/dd/yyyy)]	
		Numerator component calculation: numerator component compliant if indicated on daily aspirin or	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		anti-platelet medication (prescribed/ ordered) or documented contraindication/exception is present.  Aspirin or Anti-platelet Medication Enter the code that corresponds to whether the patient is prescribed a daily aspirin product or anti-platelet medication or if an aspirin product or anti-platelet medication was active on the patient's medication list at any time during the measurement period.  Please see Appendix B for methods to identify appropriate aspirin products or anti-platelet medications.	
		1 = Yes, patient was prescribed a daily aspirin product or antiplatelet medication, or one was indicated as active on the patient's medication list during the measurement period.  2 = No, patient was not prescribed a daily aspirin product or antiplatelet medication and one was not indicated as active on the	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		patient's medication list during the measurement period.  • Aspirin/narcotic combination medications do not qualify as a daily aspirin product.  Aspirin or Anti-platelet Medication Date Enter the date of the most recent daily aspirin product or anti-platelet medication prescription, order or review of an active medication list that included a daily aspirin product or anti-platelet medication during the measurement period.  * If a daily aspirin product or anti-platelet medication was not prescribed, ordered or reviewed as an active medication during the measurement period, leave blank.  Aspirin or Anti-platelet Medication Exception For patients who were not prescribed or taking a daily aspirin product or anti-platelet medication during the measurement period, enter the code that corresponds to	Endarterectomy
		any of the following	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		contraindications or exceptions:  1 = Prescribed anti-coagulant medication during the measurement period  2 = History of gastrointestinal bleeding  3 = History of intracranial bleeding  4 = Bleeding disorder  5 = Other provider documented reason: allergy to aspirin or anti-platelets  6 = Other provider documented reason: use of non-steroidal anti-inflammatory agents  7 = Other provider documented reason: documented reason: documented risk for drug interaction  8 = Other provider documented reason: uncontrolled hypertension (systolic blood pressure greater than 180 mmHg and/or diastolic blood pressure greater than 110 mmHg)  9 = Other provider documented reason: gastroesophageal reflux disease (GERD)	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		If none of the above contraindications or exceptions are documented, leave BLANK.  NOTE: Items 1 and 2 above can be defined by diagnosis codes that may be used in data collection. Value Sets include: GI Bleed (ASA-01) and Intracranial Bleed (ASA-02).  Aspirin or Anti-platelet Exception Date  If the patient has a documented contraindication or exception enter the date of the contraindication or exception. If only the month and year are known, enter the first day of the month.  TOBACCO COMPONENT Tobacco Status Documentation Date [Date (mm/dd/yyyy)] AND Tobacco Status [Numeric] Numerator component calculation: numerator component compliant if tobacco status within the last two years and status is tobacco-free. Tobacco Status Documentation Date:	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		Enter the most recent date that the patient's tobacco status was documented during the measurement period or year prior.  If the patient's tobacco status is not documented or the date of the documentation cannot be determined, leave BLANK.  Tobacco Status: Enter the code that corresponds to the patient's most recent tobacco status during the measurement period or year prior.  1 = Tobacco free (patient does not use tobacco; patient was a former user and is not a	
		current user)  2 = No documentation  3 = Current tobacco user (tobacco includes any amount of cigarettes, cigars, pipes or smokeless tobacco)  * If the date of the tobacco status documentation is not documented in the patient record, enter 2.  * E-cigarettes are not considered tobacco products. A blank field will create an ERROR upon submission.	

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	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
Denominator Statement	All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period	Patients 18 to 75 years of age by the end of the measurement year who were discharged alive for AMI, CABG or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.	Patients ages 18 years or older at the start of the measurement period AND less than 76 years at the end of the measurement period who have a diagnosis of ischemic vascular disease (Ischemic Vascular Disease Value Set) with any contact during the current or prior measurement period OR had ischemic vascular disease (Ischemic Vascular Disease Value Set) present on an active problem list at any time during the measurement period.  Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease)  AND  At least one established patient office visit (Established Pt Diabetes & Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.	Patients over age 18 undergoing carotid endarterectomy.
Denominator Details	Time period for data collection: 12 consecutive months	Use the codes listed in the AMI Value Set, CABG Value Set or PCI Value Set to identify AMI, PCI and CABG. AMI and	Please also refer to all code lists included in the data dictionary attached in S.2b.	This is a patient-level measure that is anticipated to be reported a minimum of once per reporting period. To

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
Patients aged >/= 18 years on date of encounter  AND  Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.2, I25.5, I25.6, I25.700, I25.701, I25.701, I25.701, I25.701, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.761, I25.768, I25.769, I25.790, I25.791, I25.793, I25.790, I25.791, I25.793, I25.793, I25.793, I25.793, I25.793, I25.793, I25.794, I25.812, I25.82, I25.83, I25.89, I25.9, I25.81, I25.812, I25.82, I25.83, I25.89, I25.9, I25.9, I25.9, I25.90, I25.91, I25.90, I25	CABG cases should be from inpatient claims only. All cases of PCI should be included, regardless of setting (e.g., inpatient, outpatient, ED). Identify patients as having IVD who met at least one of the two criteria below, during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.  - At least one outpatient visit (Outpatient Value Set) with an IVD diagnosis (IVD Value Set), OR  - At least one acute inpatient visit (Acute Inpatient Value Set) with an IVD diagnosis (IVD Value Set) See the corresponding excel document for the following value sets:  - Acute Inpatient Value Set  - Outpatient Value Set  - Outpatient Value Set  - CABG Value Set  - PCI Value Set  - MEDICAL RECORD	Patients ages 18 years or older at the start of the measurement period AND less than 76 years at the end of the measurement period who have a diagnosis of ischemic vascular disease (Ischemic Vascular Disease Value Set) with any contact during the current or prior measurement period OR had ischemic vascular disease (Ischemic Vascular Disease Value Set) present on an active problem list at any time during the measurement period.  Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease)  AND  At least one established patient office visit (Established Pt Diabetes & Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.  Eligible Specialties: Family Medicine, Internal Medicine, Geriatric Medicine, Cardiology	report this measure use the appropriate G-codes for carotid endarterectomy. It is anticipated that physicians providing the procedure of carotid endarterectomy will report this measure. To report, physician must include:  BOTH Gxxx1 OR Gxxx2  AND Gxxx3 OR Gxxx4 OR  Gxxx5  OR Gxxx6 OR Gxxx7  Numerator coding: Gxxx1: Documentation that oral antiplatelet therapy was given within 48 hours prior to surgerical incision Gxxx2: No documentation that oral antiplatelet was given within 48 hours prior to the initiation of surgery Gxxx3: Oral antiplatelet therapy prescribed at hospital discharge Gxxx4: Oral antiplatelet therapy NOT prescribed at hospital discharge, Gxxx5 does not apply

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350 WITHOUT Telehealth Modifier: GQ, GT, 95, POS 02	Documentation of IVD in the medical record includes:  - IVD  - Ischemic heart disease  - Angina  - Coronary atherosclerosis  - Coronary artery occlusion  - Cardiovascular disease  - Occlusion or stenosis of precerebral arteries (including basilar, carotid and vertebral arteries)  - Atherosclerosis of renal artery  - Atherosclerosis of native arteries of the extremities  - Chronic total occlusion of artery of the extremities  - Arterial embolism and thrombosis  - Atheroembolism.	Eligible Providers: Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurses (APRN)	Gxxx5: Patient expired, left against medical advice, discharged to hospice, or transferred to another acute care hospital or federal hospital Exclusion coding: Gxxx6: Medical reasons for not prescribing antiplatelet therapy: patient allergy to both ASA and clopidogrel; patient admitted on heparin; patient admitted on coumadin/warfarin; patient has active bleeding Gxxx7: Patient admitted from emergency department or patient is a direct admit or patient has other cardiac procedures done during same operation as the CEA Denominator Coding: CPT code 35301 OR ICD-9 code 38.12 2014 ICD-10-PCS 03CH0ZZ Extirpation of Matter from Right Common Carotid Artery, Open Approach 2014 ICD-10-PCS 03CJ0ZZ Extirpation of Matter from Left Common Carotid Artery, Open Approach

	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy 2014 ICD-10-PCS 03CK0ZZ
				Extirpation of Matter from Right Internal Carotid Artery, Open Approach 2014 ICD-10-PCS 03CL0ZZ Extirpation of Matter from Left Internal Carotid Artery, Open Approach
Exclusions	Denominator exceptions  Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons)  Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)  Documentation of system reason(s) for not prescribing aspirin or clopidogrel (e.g., lack of drug availability, other reasons attributable to the health care system)	None	The following exclusions are allowed to be applied to the eligible population: permanent nursing home residents, receiving hospice or palliative care services, or died prior to the end of the measurement period.	Patients with known intolerance to anti-platlet agents such as aspirin or aspirin-like agents, or P2y12 antagonists, or those on heparin or other intravenous anti-coagulants; patients with active bleeding or undergoing urgent or emergent operations or endarterectomy combined with cardiac surgery. Patients with known intolerance to anti-platlet agents such as aspirin or aspirin-like agents, or P2y12 antagonists, or those on or other intravenous anti-coagulants; patients with active bleeding or undergoing urgent or emergent operations or endarterectomy combined with cardiac surgery.

	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
Exclusion Details	Time period for data collection: During the encounter within the 12-month period Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. The AHA and ACC exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the	N/A	* Patient was a permanent nursing home resident at any time during the measurement period  * Patient was in hospice or receiving palliative care at any time during the measurement period  * Patient died prior to the end of the measurement period	Exclusion coding: Gxxx6: Medical reasons for not prescribing antiplatelet therapy: patient allergy to both ASA and clopidogrel; patient admitted on heparin; patient admitted on coumadin/warfarin; patient has active bleeding Gxxx7: Patient admitted from emergency department or patient is a direct admit or patient has other cardiac procedures done during same operation as the CEA

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
measure exception language			
of instances that may			
constitute an exception and			
are intended to serve as a			
guide to clinicians. For			
measure Coronary Artery			
Disease (CAD): Antiplatelet			
Therapy, exceptions may			
include medical reason(s)			
(e.g., allergy, intolerance,			
receiving other thienopyridine			
therapy, receiving warfarin			
therapy, bleeding coagulation			
disorders, other medical			
reasons), patient reason(s)			
(e.g., patient declined, other			
patient reasons), or system			
reason(s) (e.g., lack of drug			
availability, other reasons			
attributable to the health care			
system) for not prescribing			
aspirin or clopidogrel.			
Although this methodology			
does not require the external			
reporting of more detailed			
exception data, the AHA and			
ACC recommend that			
physicians document the			
specific reasons for exception			
in patients' medical records			
for purposes of optimal			
patient management and			
audit-readiness. The AHA and			
ACC also advocate the			
systematic review and			

	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
	analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.  Additional details: Append a modifier to CPT Category II code: 4086F-1P: Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons) 4086F-2P: Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons) 4086F-3P: Documentation of system reason(s) for not prescribing aspirin or clopidogrel (e.g., lack of drug availability, other reasons attributable to the health care system)			
Risk Adjustment	No risk adjustment or risk stratification	No risk adjustment or risk stratification	Statistical risk model 112459   148276	No risk adjustment or risk stratification

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	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
	140560  107246 140560  107246	116000  123834  140881  141015 116000  123834  140881  141015	112459  148276	109878   121550 109878   121550
Stratification	Consistent with CMS' Measures Management System Blueprint and national recommendations put forth by the IOM (now NASEM) and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer	NA NA	The measure for the ischemic vascular disease population is not currently stratified when publicly reported on our consumer website, MN HealthScores. The data is, however, stratified by insurance product in our 2019 Health Care Disparities Reports by insurance type and race/ethnicity/language and country of origin. https://mncm.org/wp-content/uploads/2020/01/20 18-Disparities-Report-Final.pdf https://mncm.org/wp-content/uploads/2020/01/20 18-Disparities-Report-By-RELC.pdf These reports note gaps in outcomes for ischemic vascular disease patients in public programs versus other purchasers (6.6%) and disparities by race and ethnicity (as much as 12% for Black or African American and American Indian or Alaskan Natives)	

	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score	Ratio better quality = higher score	Rate/proportion better quality = higher score
Algorithm	Calculating the performance rate:  1. Define the initial population. The initial population is identified through a common set of characteristics that define the overall group of patients – or other unit of measurement – targeted for evaluation  2. Define the denominator by identifying the subset of the initial population that meets the denominator criteria. Note: in some cases, the initial population and denominator are identical  3. Determine the numerator by identifying the subset of the denominator are identical  4. From the patients who did not meet the numerator criteria, determine if the provider has documented whether each patient represents an exception. Subtract from the denominator those patients that meet the conditions for a	Step 1: Determine the denominator Patients 18 to 75 years of age by the end of the measurement year AND who were discharged alive for AMI, CABG or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.  Step 2: Determine the numerator Patients whose most recent blood pressure is adequately controlled (<140/90 mm Hg) during the measurement year.  116000   123834   140881   141015	This measure is calculated by submitting a file of individual patient values (e.g. blood pressure, tobacco status, etc) to a HIPAA secure data portal. Programming within the data portal determines if each patient is a numerator case and then a rate is calculated for each clinic site. Please also refer to the measure calculation algorithms submitted within the data dictionary for this measure. If any component of the numerator is noncompliant for any one of the four components, then the patient is numerator noncompliant for the composite patient level all-or none optimal vascular care measure. Numerator logic is as follows: Blood Pressure date in the measurement year? If no, is numerator noncompliant for this component. If yes, assess next variable.  BP Systolic < 140? If no, is numerator noncompliant for	The proportion of patients who do recieve antiplatelets as is recommended 109878   121550

	067 Coronary Artery Disease CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
alt are de ca (i.d wi be ald to 5. pe A p nu wi do re	enominator exception; Ithough the exception cases re removed from the enominator for the measure alculation, the exception rate e.e., percentage of patients with valid exceptions) should e calculated and reported long with performance rates or highlight variations in care . Calculate the erformance rate patient not meeting the umerator criteria and without a valid and ocumented exception epresents a quality failure. 40560   107246		this component. If yes, assess next variable.  BP Diastolic < 90? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component.  Note: BP needs to occur during the measurement year AND most recent BP systolic less than 140 AND BP diastolic less than 90  Assess next component.  Cholesterol Statin Use Component:  Is the patient on a statin medication? If yes, and most recent date is in the measurement year, is numerator compliant for this component. If no, assess next variable.  For patients not on a statin the following variables are used to assess numerator compliance related to contraindications or exceptions to statin use:  Is the patient age 18 to 20? If yes, numerator compliant (free-pass), if no, assess next variable.	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		Patients age 21 to 75. Is their most recent LDL in the last five years less than 40? If Yes, numerator compliant (freepass), if no, assess next variable.  Does the patient have a valid contraindication/ exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, ends stage renal disease on dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with documentation of trying a statin at least once in the last 5 years)? If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.  Note: Patient is either on a statin (prescribed/ ordered) during the measurement year or has a valid exception either by age, presence or absence of ischemic vascular disease, low untreated LDL or valid contraindication/ exception.  Assess next component: Tobacco-Free Component:	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		Is Tobacco Status = 1 (Tobacco Free) and Tobacco Assessment Date a valid date? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component. Assess next component.  Daily Aspirin/ Anti-platelet Component: Is the patient on daily aspirin or an antiplatelet? If yes, and date of most recent aspirin/ anti-platelet is in the measurement year is numerator compliant, if no, assess next variable.  Does the patient have a valid contraindication/ exception to aspirin anti-platelet use defined as one of the following: anti-coagulant medication, history of gastrointestinal bleed, history of intracranial bleed, allergy, or physician documented reasons related to: risk of drug interaction, use of NSAIDS, uncontrolled HTN or gastro-intestinal reflux disease. If yes, is numerator compliant for this component.	
		If no, fail this numerator	

	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
			component and remains in the denominator.  Note: Patients are either on daily aspirin (indicated/prescribed/ ordered) or an anti-platelet prescribed/ ordered) during the measurement year or has a valid contraindication/exception.  If all of the above numerator components are in compliance, then the patient calculated as a numerator case for the optimal vascular care measure. 112459   148276	
Submission items	5.1 Identified measures: 0465 : Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy  5a.1 Are specs completely harmonized? Yes	5.1 Identified measures:  5a.1 Are specs completely harmonized?  5a.2 If not completely harmonized, identify difference, rationale, impact:	5.1 Identified measures: 0067 : Coronary Artery Disease (CAD): Antiplatelet Therapy 0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet 0073: Ischemic Vascular Disease (IVD): Blood Pressure Control	5.1 Identified measures:  5a.1 Are specs completely harmonized?  5a.2 If not completely harmonized, identify difference, rationale, impact:
	5a.2 If not completely harmonized, identify difference, rationale, impact: The patient population of 0465 is adults undergoing carotid endarterectomy, whereas the patient	5b.1 If competing, why superior or rationale for additive value: NA Related Measures: None	5a.1 Are specs completely harmonized? No  5a.2 If not completely harmonized, identify difference, rationale, impact:	5b.1 If competing, why superior or rationale for additive value:

0067 Coronary Artery Diseas (CAD): Antiplatelet Therapy	e 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
population of 067 is adults with coronary artery disease.  5b.1 If competing, why superior or rationale for additive value: Not applicab		There are some differences noted in the denominator definitions, source data and settings of care. #0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet AND #0073 Ischemic Vascular Disease (IVD): Blood Pressure Control are most closely related to the components of our measure, however this measure focuses on the inpatient setting and only patients discharged with acute myocardial infarction, coronary bypass graft or percutaneous coronary interventions. #0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy focuses only on patients with coronary artery disease; however, from specifications available through QPS not able to compare diagnosis code definitions. This measure, #0076 Optimal Vascular Care is more inclusive with a denominator definition of ischemic vascular disease (atherosclerosis of coronary and peripheral arteries) #0543 was removed from the related list because	

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control	0076 Optimal Vascular Care	0465 Perioperative Anti platelet Therapy for Patients undergoing Carotid Endarterectomy
		although related, the measure's endorsement was removed in 2015.  5b.1 If competing, why superior or rationale for additive value: There are	
		other similar measures that address three of the four components separately, but no currently endorsed measure exists that is a patient level all-or-none composite measure.	

# Comparison of NQF #0076, NQF #0018, NQF #0067, NQF #0068 and NQF #0073

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
Stewa rd	MN Community Measurement	National Committee for Quality Assurance	American Heart Association	National Committee for Quality Assurance	National Committee for Quality Assurance
Descri ption	The percentage of patients 18-75 years of age who had a diagnosis of ischemic vascular disease (IVD) and whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:	The percentage of adults 18-85 years of age who had a diagnosis of hypertension (HTN) and whose blood pressure was adequately controlled (<140/90 mm Hg) during the measurement year.	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease (CAD) seen within a 12-month period who were prescribed aspirin or clopidogrel	The percentage of patients 18 years of age and older who were discharged from an inpatient setting with an acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary intervention (PCI) during the 12 months prior to the measurement year, or who had a diagnosis of	The percentage of patients 18 to 75 years of age who were discharged alive with acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) during the 12 months prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
	Blood pressure less than 140/90 mmHg     On a statin medication, unless allowed contraindications or exceptions are present     Non-tobacco user     On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present			ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year and who had documentation of routine use of aspirin or another antiplatelet during the measurement year.	the measurement year and the year prior to the measurement year and who had the following during the measurement year: - Blood pressure control (BP): reported as under control <140/90 mm Hg.
Type	Composite	Outcome: Intermediate Clinical Outcome	Process	Process	Outcome
Data Source	Electronic Health Records, Paper Medical Records An excel template with formatted columns for data fields is provided. Almost all the medical groups in MN (99.9%) extract the information from their EMR. Other options have been historically available: Registries can be used as a source of information to create the data file; however groups must ensure that all of their eligible patients are included.	Claims, Electronic Health Data, Electronic Health Records, Paper Medical Records This measure is based on administrative claims and medical record documentation collected in the course of providing care to health plan patients. NCQA collects Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from health plans via NCQA's online data submission system.	Registry Data Quality Payment Program – MIPS Quality Program.  No data collection instrument provided No data dictionary	Claims, Electronic Health Records, Other, Paper Medical Records N/A No data collection instrument provided Attachment 0068_IVD_Value_Set- 636898260704331246.xlsx	Claims, Electronic Health Records, Paper Medical Records NA Attachment 0073_IVD_Blood_Pressure_Co ntrol_Value_Sets- 635634189557555751.xlsx

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
	Paper abstraction forms are provided for those clinics who wish to use them as an interim step to creating their data file.  All data is uploaded in electronic format (.csv file) to a HIPAA secure, encrypted and password protected data portal.  Available at measure-specific web page URL identified in S.1  Attachment MNCM0076_Optimal_Vascula r_Care_Specs_Fields_1 2-2019.xlsx	No data collection instrument provided Attachment 0018_CBP_Value_Sets_Fa II_2019- 637002741932672877.xls x			
Level	Clinician : Group/Practice	Health Plan	Clinician : Individual	Clinician : Group/Practice, Clinician : Individual	Clinician : Group/Practice, Clinician : Individual
Settin g	Outpatient Services	Outpatient Services	Home Care, Outpatient Services, Post-Acute Care	Outpatient Services	Outpatient Services
Nume rator State ment	The number of patients in the denominator whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:  • The most recent blood pressure in the measurement period	Patients whose most recent blood pressure level was <140/90 mm Hg during the measurement year.	Patients who were prescribed aspirin or clopidogrel	Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year.	Patients whose most recent blood pressure is adequately controlled during the measurement year. For a patient's BP to be adequately controlled, both the systolic and the diastolic BP must meet the desired threshold of <140/90 mm Hg.

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
	has a systolic value of less than 140 mmHg AND a diastolic value of less than 90 mmHg On a statin medication, unless allowed contraindications or exceptions are present Patient is not a tobacco user On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present				
Nume rator Details	In order to be numerator compliant all four components must be met * Blood pressure less than 140/90 mmHg AND * On a statin medication, unless allowed contraindications or exceptions are present AND * Non-tobacco user AND * On daily aspirin or anti-platelet	There are two data sources and approaches used for collecting data reporting the numerator for this measure: Administrative Claims and Medical Record Review ADMINISTRATIVE CLAIMS Use codes (See code value sets located in question S.2b.) to identify the most recent BP reading taken during an outpatient visit, a nonacute inpatient encounter, or remote	Time period for data collection: At least once during the measurement period Definition: Prescribed - May include prescription given to the patient for aspirin or clopidogrel at one or more visits in the measurement period OR patient already taking aspirin or clopidogrel as documented in current medication list. Report CPT Category II code 4086F: Aspirin or clopidogrel prescribed	ADMINISTRATIVE Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year. Oral antiplatelet therapy consists of: aspirin, clopidogrel, combination of aspirin and extended release dipyridamole, prasugrel, ticagrelor or ticlopidine. Anticoagulant medications consist of: Apixaban, Argatroban, Bivalirudin, Dabigatran, Dalteparin, Desirudin, Edoxaban, Enoxaparin, Fondaparinux,	ADMINISTRATIVE CLAIMS Use automated data to identify the most recent BP reading taken during an outpatient visit (Outpatient Value Set) or a nonacute inpatient encounter (Nonacute Inpatient Value Set) during the measurement year. The patient is numerator compliant if the BP is <140/90 mm Hg. The patient is not compliant if the BP is > or = 140/90 mm Hg, if there is no BP reading during the measurement year or if the reading is incomplete (e.g., the systolic or diastolic level is missing). If there are multiple

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medication, unless allowed contraindications or exceptions are present BLOOD PRESSURE COMPONENT Blood Pressure Date [Date (mm/dd/yyyy)] AND BP Systolic [Numeric] AND BP Diastolic [Numeric] Numerator component calculation: numerator component compliant is BP during the measurement year AND Systolic < 140 AND Diastolic < 90. BP Date Enter the date of the most recent blood pressure result during the measurement period.  • A test result from a provider outside of the reporting medical group is allowed if the result is documented in the reporting medical group's patient record and is the most recent	monitoring event during the measurement year. The blood pressure reading must occur on or after the date when the second diagnosis of hypertension (identified using the event/diagnosis criteria).  The patient is numerator compliant if the blood pressure is <140/90 mm Hg. The patient is not compliant if the blood pressure is >=140/90 mm Hg, if there is no blood pressure reading during the measurement year or if the reading is incomplete (e.g., the systolic or diastolic level is missing). If there are multiple blood pressure readings on the same date of service, use the lowest systolic and lowest diastolic blood pressure on that date as the presentative blood pressure.  Organizations that use CPT Category II codes to identify numerator compliance for this indicator must search for		Heparin, Lepirudin, Rivaroxaban, Tinzaparin, or Warfarin MEDICAL RECORD Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year. At a minimum, documentation in the medical record must include a note indicating the date when aspirin or another antiplatelet was prescribed or documentation of prescription from another treating physician.	BPs on the same date of service, use the lowest systolic and lowest diastolic BP on that date as the representative BP.  Organizations that use CPT Category II codes to identify numerator compliance for this indicator must search for all codes in the following value sets and use the most recent codes during the measurement year to determine numerator compliance for both systolic and diastolic levels.  See the corresponding excel document for the following value sets:  - Systolic Less Than 140 Value Set  - Diastolic Greater Than/Equal To 140 Value Set  - Diastolic Greater Than/Equal To 90 Value Set  - Diastolic Greater Than/Equal To 90 Value Set  - Outpatient Value Set  - Nonacute Inpatient Value Set  - MEDICAL RECORD  To determine if a patient is adequately controlled, the representative blood pressure

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
test result during the measurement period.  • Do not include BP readings:  O Taken during an acute inpatient stay or an ED visit.  O Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).  O Obtained the same day as a major diagnostic or surgical procedure (e.g., EKG/ECG, stress test, administration of IV contrast for a radiology procedure, endoscopy).  O Reported by or taken by the patient.  • Leave BLANK if a blood pressure was not obtained during the measurement period.  BP Systolic Enter the value of the most recent systolic blood pressure result	all codes in the following value sets and use the most recent codes during the measurement year to determine numerator compliance for both systolic and diastolic levels.  VALUE SET / NUMERATOR COMPLIANCE Systolic Less Than 140 Value Set / Systolic compliant Systolic Greater Than or Equal to 140 Value Set / Systolic not compliant Diastolic Less Than 80 Value Set / Diastolic compliant Diastolic 80-89 Value Set / Diastolic Greater Than or Equal to 90 Value Set / Diastolic Greater Than or Equal to 90 Value Set / Diastolic not compliant See attached code value sets.  MEDICAL RECORD REVIEW The number of patients in the denominator whose most recent blood pressure (both systolic and diastolic) is			must be identified. Follow the steps below.  Step 1  - Identify the most recent blood pressure reading noted during the measurement year.  Do not include readings that meet the following criteria:  - Taken during an acute inpatient stay or an ED visit.  - Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).  - Taken the same day as major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy).  - Reported by or taken by the patient  - Documentation of "VS within normal limits" or "vital signs normal".  Step 2  - Identify the lowest systolic and lowest diastolic reading from the most recent blood pressure notation in the medical record. If there are

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
during the measurement period.  • If more than one value is recorded on the most recent date, the lowest value may be submitted. It does NOT need to be from the same reading submitted in Column Z (BP Diastolic).  • NOTE: The systolic blood pressure is the upper number in the recorded fraction. For example, the systolic value for a blood pressure of 124/72 mmHg is 124.  • Leave BLANK if a blood pressure was not obtained during the measurement period.  BP Diastolic Enter the value of the most recent diastolic blood pressure result during the measurement period.  • If more than one value is recorded on the most recent date, the lowest value may be submitted. It does NOT need to be from	adequately controlled during the measurement year. For a patient's blood pressure to be controlled the systolic and diastolic blood pressure must be <140/90 mm hg (adequate control). To determine if a member's blood pressure is adequately controlled, the representative blood pressure must be identified.  All eligible blood pressure measurements recorded in the record must be considered. If an organization cannot find the medical record, the patient remains in the measure denominator and is considered noncompliant for the numerator.  Use the following guidance to find the appropriate medical record to review.  Identify the patient's PCP.  If the patient had more than one PCP for the time-period, identify the			multiple readings for a single date, use the lowest systolic and the lowest diastolic reading on that date as the representative blood pressure. The systolic and diastolic results do not need to be from the same reading.  The patient is not numerator compliant if the BP does not meet the specified threshold or is missing, or if there is no BP reading during the measurement year or if the reading is incomplete (i.e., the systolic or diastolic level is missing).

0076 Optimal Vascular	0018 Controlling High	0067 Coronary Artery Disease	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease
Care	Blood Pressure	(CAD): Antiplatelet Therapy		(IVD): Blood Pressure Control
the same reading as submitted in (BP Systolic).  • NOTE: The diastolic blood pressure is the lower number in the recorded fraction. For example, the diastolic value for a blood pressure of 124/72 mmHg is 72.  • Leave BLANK if a blood pressure was not obtained during the measurement period. CHOLESTEROL MANAGEMENT STATIN COMPONENT LDL Date [Date (mm/dd/yyyy)] AND LDL Value [Numeric] For calculating exceptions to statin use based on very low LDL (< 40 for cardiovascular disease and < 70 for patients with diabetes) Enter the date of the most recent LDL test result between 01/01/2015 and 12/31/2019.  • A test result from a provider outside of the	PCP who most recently provided care to the patient.  - If the patient did not visit a PCP for the timeperiod or does not have a PCP, identify the practitioner who most recently provided care to the patient.  - If a practitioner other than the patient's PCP manages the hypertension, the organization may use the medical record of that practitioner.  Identify the most recent blood pressure reading noted during the measurement year.  The blood pressure reading noted diagnosis of hypertension (identified using the event/diagnosis criteria) occurred.  Do not include BP readings:  - Taken during an acute inpatient stay or an ED visit.  - Taken on the same day as a diagnostic test or			

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
reporting medical group is allowed if the result is documented in the reporting medical group's patient record and is the most recent test result within the allowable time period.  • If the LDL result is too high to calculate, still enter the LDL test date if it is the most recent test result within the allowable time period.  • LDL values within the last five years will be used to calculate potential exceptions to being on a statin medication.  • Leave BLANK if an LDL test was not performed between 01/01/2015 and 12/31/2019.  Enter the value of the most recent LDL test result between 01/01/2015 and 12/31/2019.	diagnostic or therapeutic procedure that requires a change in diet or change in medication on or one day before the day of the test or procedure, with the exception of fasting blood tests.  Reported by or taken by the patient.  BP readings from remote monitoring devices that are digitally stored and transmitted to the provider may be included. There must be documentation in the medical record that clearly states the reading was taken by an electronic device, and results were digitally stored and transmitted to the provider and interpreted by the provider.  Identify the lowest systolic and lowest diastolic BP reading from the most recent BP		or Another Antiplatelet	
<ul> <li>Leave BLANK if an LDL test was not performed during the allowable time period, or if the most recent test result</li> </ul>	notation in the medical record. If multiple readings were recorded for a single date, use the lowest systolic and			

0076 Optim Care	al Vascular	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
was too high calculate.  Statin Media [Numeric] A Statin Media [Date (mm/d AND/OR Station Media Exception [Nand Media Exception D (mm/dd/yyy Numerator calculation: component if on a statin (prescribed/or low LDL vabove) or docontraindication is presesure Statin Media Enter the cocorresponds whether the was prescrib medication on the patie medication the measure period.	cation ND cation Date dd/yyyy)] lication lumeric] lication ate [Date ry)] component numerator compliant i ordered) alue (see ocumented ation/excep int. cation: de that is to e patient bed a statin or if a statin was active int's list during	lowest diastolic BP on that date as the representative BP. The systolic and diastolic results do not need to be from the same reading. The patient is not compliant if the BP reading is =140/90 mm Hg or is missing, or if there is no BP reading during the measurement year or if the reading is incomplete (e.g., the systolic or diastolic level is missing).			

0076 Opt Care	imal Vascular	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
for a list of medication	ons.				
prescribe	eatient was and a statin on, or a statin on was				
the patie medication	on list during				
period.	urement atient was not				
prescribe medication	d a statin on and a statin on was not				
indicated the patie	as active on nt's				
medication the meast period.	on list during urement				
	owing ns to statin on use will be				
identified Portal ba	I by the Data sed on the d LDL values:				
O Patient ischemic	s with vascular				
years and	ged 21 to 75 I an LDL result 40 mg/dL				
O Patient years wit	s aged 40 – 75 h an LDL result 70 mg/dL				

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
o Patients aged 21 – 39				
years with an LDL less				
than 190 mg/dL				
Statin Medication Date				
Enter the date of the				
most recent statin				
prescription, order or				
review on an active				
medications list that				
included a statin during				
the measurement				
period.				
If a statin was not				
prescribed, ordered, or				
reviewed as an active				
medication during the measurement period,				
leave BLANK.				
Station Medication				
Exception				
If the patient was NOT				
prescribed or did not				
have a statin				
medication active on				
their medication list				
during the				
measurement period				
(Column AA = 2), enter				
the value that				
corresponds to any of				
the following				
contraindications or				
exceptions:				

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
1 = Pregnancy at any time during the measurement period 2 = Active liver disease (liver failure, cirrhosis, hepatitis) 3 = Rhabdomyolysis 4 = End stage renal disease on dialysis 5 = Heart failure 6 = Other provider documented reason: breastfeeding during the measurement period 7 = Other provider documented reason: woman of childbearing age not actively taking birth control during the measurement period 8 = Other provider				
documented reason: allergy to statin 9 = Drug interaction				
with a listed medication taken during the				
measurement period (valid drug-drug interactions include HIV protease inhibitors, nefazodone, cyclosporine,				

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
gemfibrozil, and			·	
danazol).				
10 = Other provider				
documented reason:				
intolerance (with				
supporting				
documentation of				
trying a statin at least				
once within the last five				
years). Additionally,				
Myopathy and Myositis				
(CHOL-05) Value Set				
may be used to				
document intolerance				
to statins.				
<ul> <li>If none of the above</li> </ul>				
contraindications or				
exceptions are				
documented, leave				
BLANK.				
• NOTE: Items 1 − 5				
above can be defined				
by diagnosis codes that				
may be used in data				
collection. Value Sets				
include: Pregnancy V/Z				
Codes (PREG-01),				
Pregnancy Diagnosis				
Codes (PREG-02), Liver				
Disease (CHOL-01),				
Rhabdomyolysis (CHOL-				
02), ESRD on Dialysis				
(CHOL-03), and Heart Failure (CHOL-04)				
ranure (CHOL-04)				

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
Statin Medication Exception Date: If the patient has a documented contraindication or exception enter the date of the contraindication or exception.  • If only the month and year are known, enter the first day of the month.  ASPIRIN/ANTIPLATELET COMPONENT Aspirin or Anti-platelet Medication [Numeric] AND Aspirin or Anti-platelet Date [Date				
(mm/dd/yyyy)] AND/OR Aspirin or Anti-platelet Exception [Numeric] AND Aspirin or Anti-platelet Exception Date [Date (mm/dd/yyyy)] Numerator component calculation: numerator component compliant if indicated on daily aspirin or anti-platelet				

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
(prescribed/ ordered) or documented contraindication/excep tion is present. Aspirin or Anti-platelet Medication Enter the code that corresponds to whether the patient is prescribed a daily aspirin product or antiplatelet medication or if an aspirin product or anti-platelet medication was active on the patient's medication list at any time during the measurement period. Please see Appendix B for methods to identify appropriate aspirin products or antiplatelet medications.				
1 = Yes, patient was prescribed a daily aspirin product or antiplatelet medication, or one was indicated as active on the patient's medication list during the measurement period.				

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
2 = No, patient was not				
prescribed a daily				
aspirin product or				
antiplatelet medication				
and one was not				
indicated as active on				
the patient's				
medication list during				
the measurement				
period.				
<ul><li>Aspirin/narcotic</li></ul>				
combination				
medications do not				
qualify as a daily aspirin				
product.				
Aspirin or Anti-platelet				
Medication Date				
Enter the date of the				
most recent daily				
aspirin product or anti-				
platelet medication				
prescription, order or				
review of an active				
medication list that				
included a daily aspirin				
product or anti-platelet				
medication during the				
measurement period.				
* If a daily aspirin				
product or anti-platelet				
medication was not				
prescribed, ordered or				
reviewed as an active				
medication during the				

0076 Optimal Vaso Care	ular 0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
	Blood Pressure  od, telet ion vere in telet the od, t v of or - ion od		Disease (IVD): Use of Aspirin	
anti-platelets 6 = Other provider documented reaso use of non-steroid anti-inflammatory agents	on: al			

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
7 = Other provider documented reason: documented risk for drug interaction 8 = Other provider documented reason: uncontrolled hypertension (systolic blood pressure greater than 180 mmHg and/or diastolic blood pressure greater than 110				
mmHg) 9 = Other provider documented reason: gastroesophageal reflux disease (GERD)				
If none of the above contraindications or exceptions are documented, leave BLANK.				
NOTE: Items 1 and 2 above can be defined by diagnosis codes that may be used in data collection. Value Sets include: GI Bleed (ASA- 01) and Intracranial				
Bleed (ASA-02). Aspirin or Anti-platelet Exception Date If the patient has a documented contraindication or				

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
exception enter the				
date of the				
contraindication or				
exception. If only the				
month and year are				
known, enter the first				
day of the month.				
TOBACCO				
COMPONENT				
Tobacco Status				
Documentation Date				
[Date (mm/dd/yyyy)]				
AND				
Tobacco Status				
[Numeric]				
Numerator component				
calculation: numerator				
component compliant				
if tobacco status within				
the last two years and status is tobacco-free.				
Tobacco Status  Documentation Date:				
Enter the most recent				
date that the patient's tobacco status was				
documented during the				
measurement period or				
year prior.				
If the patient's tobacco				
status is not				
documented or the				
date of the				
documentation cannot				

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
	be determined, leave				
	BLANK.				
	Tobacco Status:				
	Enter the code that				
	corresponds to the				
	patient's most recent				
	tobacco status during				
	the measurement				
	period or year prior.				
	1 = Tobacco free				
	(patient does not use				
	tobacco; patient was a				
	former user and is not				
	a current user)				
	2 = No documentation				
	3 = Current tobacco				
	user (tobacco includes				
	any amount of				
	cigarettes, cigars, pipes				
	or smokeless tobacco)				
	* If the date of the				
	tobacco status				
	documentation is not				
	documented in the				
	patient record, enter 2.				
	* E-cigarettes are not				
	considered tobacco				
	products.				
	A blank field will create				
	an ERROR upon				
	submission.				
Deno	Patients ages 18 years	Patients 18-85 years of	All patients aged 18 years and	Patients 18 years or older by	Patients 18 to 75 years of age
minat	or older at the start of	age who had at least two	older with a diagnosis of	the end of the measurement	by the end of the
or	the measurement	visits on different dates		year discharged from an	measurement year who were

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
State ment	period AND less than 76 years at the end of the measurement period who have a diagnosis of ischemic vascular disease (Ischemic Vascular Disease Value Set) with any contact during the current or prior measurement period OR had ischemic vascular disease (Ischemic Vascular Disease Value Set) present on an active problem list at any time during the measurement period. Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease) AND At least one established patient office visit (Established Pt Diabetes & Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.	of service with a diagnosis of hypertension during the measurement year or the year prior to the measurement year.	coronary artery disease seen within a 12-month period	inpatient setting with an AMI, CABG, or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.	discharged alive for AMI, CABG or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
Deno minat or Details	Please also refer to all code lists included in the data dictionary attached in S.2b. Patients ages 18 years or older at the start of the measurement period AND less than 76 years at the end of the measurement period who have a diagnosis of ischemic vascular disease (Ischemic Vascular Disease Value Set) with any contact during the current or prior measurement period OR had ischemic vascular disease (Ischemic Vascular Disease Value Set) present on an active problem list at any time during the measurement period. Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease) AND At least one established patient office visit (Established Pt	Patients who had continuous enrollment in the measurement year. No more than one gap in continuous enrollment of up to 45 days during the measurement year. If the patient has Medicaid, then no more than a 1-month gap in coverage.  Patients are identified for the denominator using claim/encounter data.  Patients who had at least two visits on different dates of service with a diagnosis of hypertension during the measurement year or the year prior to the measurement year. Visit type need not be the same for the two visits. Any of the following combinations meet criteria:  Outpatient visit with any diagnosis of hypertension  A telephone visit with any diagnosis of hypertension	Time period for data collection: 12 consecutive months Patients aged >/= 18 years on date of encounter AND Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.24, I21.9, I21.25, I22.8, I22.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.2, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.729, I25.730, I25.731, I25.738, I25.739, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.760, I25.761, I25.768, I25.769, I25.790, I25.791, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, I25.810, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, I25.9, I25.9, I25.93, I25.93	ADMINISTRATIVE Patients are identified for the eligible population in two ways: by event or by diagnosis. The organization must use both methods to identify the eligible population, but a patient only needs to be identified by one method to be included in the measure.  Event. Any of the following during the year prior to the measurement year meet criteria:  - MI. Discharged from an inpatient setting with an MI (MI Value Set)*. Use both facility and professional claims to identify MI.  -CABG. Discharged from an inpatient setting with a CABG (CABG Value Set)*. Use both facility and professional claims to identify CABG.  -PCI. Patients who had a PCI (PCI Value Set)* in any setting.  Diagnosis. Patients who meet at least one of the following criteria during both the measurement year and the year prior to the measurement year. Criteria	Use the codes listed in the AMI Value Set, CABG Value Set or PCI Value Set to identify AMI, PCI and CABG. AMI and CABG cases should be from inpatient claims only. All cases of PCI should be included, regardless of setting (e.g., inpatient, outpatient, ED). Identify patients as having IVD who met at least one of the two criteria below, during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years At least one outpatient visit (Outpatient Value Set) with an IVD diagnosis (IVD Value Set), OR - At least one acute inpatient visit (Acute Inpatient Value Set) with an IVD diagnosis (IVD Value Set) See the corresponding excel document for the following value sets: - Acute Inpatient Value Set - Outpatient Value Set - Outpatient Value Set - AMI Value Set - CABG Value Set - PCI Value Set

0076 Optimal Vascular	0018 Controlling High	0067 Coronary Artery Disease	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease
Care	Blood Pressure	(CAD): Antiplatelet Therapy		(IVD): Blood Pressure Control
Diabetes & Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period. Eligible Specialties: Family Medicine, Internal Medicine, Geriatric Medicine, Cardiology Eligible Providers: Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurses (APRN)	- An online assessment with any diagnosis of hypertension  Only one of the two visits may be a telephone visit, an online assessment or an outpatient telehealth visit. Identify outpatient telehealth visits by the presence of a telehealth modifier or the presence of a telehealth POS code associated with the outpatient visit.  See attached code value sets.	99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350 WITHOUT Telehealth Modifier: GQ, GT, 95, POS 02	need not be the same across both years.  -At least one outpatient visit (Outpatient Value Set)* with an IVD diagnosis (IVD Value Set)*, or  -At least one acute inpatient encounter (Acute Inpatient Value Set)* with an IVD diagnosis (IVD Value Set)*.  *Due to the extensive volume of codes associated with identifying the denominator for this measure, we are attaching a separate file with code value sets. See code value sets located in question S.2b.   MEDICAL RECORD  Documentation of IVD in the medical record includes:  - IVD  - Ischemic heart disease  - Angina  - Coronary atherosclerosis  - Coronary artery occlusion  - Cardiovascular disease  - Occlusion or stenosis of precerebral arteries (including basilar, carotid and vertebral arteries)	MEDICAL RECORD Documentation of IVD in the medical record includes: - IVD - Ischemic heart disease - Angina - Coronary atherosclerosis - Coronary artery occlusion - Cardiovascular disease - Occlusion or stenosis of precerebral arteries (including basilar, carotid and vertebral arteries) - Atherosclerosis of renal artery - Atherosclerosis of native arteries of the extremities - Chronic total occlusion of artery of the extremities - Arterial embolism and thrombosis - Atheroembolism.

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
Exclusi	The following exclusions are allowed to be applied to the eligible population: permanent nursing home residents, receiving hospice or palliative care services, or died prior to the end of the measurement period.	This measure excludes adults in hospice. It also excludes adults with advanced illness and frailty, as well as Medicare adults 65 years of age and older enrolled in an I-SNP or living longterm in institutional settings.  Additionally, this measure excludes patients with evidence of end-stage renal disease, dialysis, nephrectomy, or kidney transplant on or prior to the December 31 of the measurement year. It also excludes	Denominator exceptions  Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons)  Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)  Documentation of system reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)	- Atherosclerosis of renal artery - Atherosclerosis of native arteries of the extremities - Chronic total occlusion of artery of the extremities - Arterial embolism and thrombosis - Atheroembolism. Note: Use paper logs, patient registries or electronic medical records (EMRs) to identify the denominator, then use the medical record to confirm patient eligibility. Patients who had documentation of use of anticoagulant medications during the measurement year. Exclude patients using hospice services any time during the measurement period.	None

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
		female patients with a diagnosis of pregnancy during the measurement year, and patients who had a nonacute inpatient admission during the measurement year.	clopidogrel (e.g., lack of drug availability, other reasons attributable to the health care system)		
Exclusi on Details	* Patient was a permanent nursing home resident at any time during the measurement period * Patient was in hospice or receiving palliative care at any time during the measurement period * Patient died prior to the end of the measurement period	ADMINISTRATIVE CLAIMS Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the service began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data. Exclude adults who meet any of the following criteria:  - Medicare members 66 years of age and older as of December 31 of the measurement year who meet either of the following: Enrolled in an Institutional SNP (I-SNP) any time during the measurement year.	Time period for data collection: During the encounter within the 12-month period Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient- specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. The AHA and ACC exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure,	Exclude patients using hospice services (G9723) any time during the measurement period. Patients who had documentation of use of anticoagulant medications during the measurement year. ANTICOAGULANT MEDICATIONS - Apixaban - Argatroban - Bivalirudin - Dabigatran - Dalteparin - Desirudin - Edoxaban - Enoxaparin - Fondaparinux - Heparin - Lepirudin - Rivaroxaban - Tinzaparin - Warfarin	N/A

0076 Opti Care		018 Controlling High ood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
	ins dui year LTI Me File the part dui year lead of the call fra illin me fol add to 1.7 cla fra me 2.7 dui year the (cco over A vis ED	Living long-term in an stitution any time uring the measurement ear as identified by the I flag in the Monthly embership Detail Data le. Use the run data of e file to determine if a stient had an LTI flag uring the measurement ear.  Members 66-80 years of ge as of December 31 of e measurement year II product lines) with eailty and advanced mess. Patients must eet BOTH of the Illowing frailty and dvanced illness criteriate be excluded:  At least one eaim/encounter for eailty during the measurement year.  Any of the following uring the measurement ear or the year prior to e measurement year ount services that occur ver both years):  At least two outpatient ests, observation visits, ovisits, nonacute patient encounters or	there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure Coronary Artery Disease (CAD): Antiplatelet Therapy, exceptions may include medical reason(s) (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to the health care system) for not prescribing aspirin or clopidogrel. Although this methodology does not require the external reporting of more detailed exception data, the AHA and ACC recommend that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The AHA and ACC		

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
	nonacute inpatient discharges (instructions below) on different dates of service, with an advanced illness diagnosis. Visit type need not be the same for the two visits. To identify a nonacute inpatient discharge:  1. Identify all acute and nonacute inpatient stays.  2. Confirm the stay was for nonacute care based on the presence of a nonacute code on the claim.  3. Identify the discharge date for the stay.  At least one acute inpatient encounter with an advanced illness diagnosis.  At least one acute inpatient discharge with an advanced illness diagnosis. To identify an acute inpatient discharge:  1. Identify all acute and nonacute inpatient stays.  2. Exclude nonacute inpatient stays.	also advocate the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.  Additional details: Append a modifier to CPT Category II code: 4086F-1P: Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons) 4086F-2P: Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons) 4086F-3P: Documentation of system reason(s) for not prescribing aspirin or clopidogrel (e.g., lack of drug availability, other reasons attributable to the health care system)		

0076 Optimal Vascular	0018 Controlling High	0067 Coronary Artery Disease	0068 Ischemic Vascular	0073 Ischemic Vascular Disease
Care	Blood Pressure	(CAD): Antiplatelet Therapy	Disease (IVD): Use of Aspirin or Another Antiplatelet	(IVD): Blood Pressure Control
	3. Identify the discharge			
	date for the stay.			
	A dispensed dementia			
	medication.			
	DEMENTIA MEDICATIONS			
	DESCRIPTION /			
	PRESCRIPTION			
	Cholinesterase inhibitors			
	/ Donepezil;			
	Galantamine;			
	Rivastigmine			
	Miscellaneous central			
	nervous system agents /			
	Memantine			
	- Members 81 years of			
	age and older as of			
	December 31 of the			
	measurement year (all			
	product lines) with frailty			
	during the measurement			
	year.			
	Exclude patients with			
	evidence of end-stage			
	renal disease, dialysis,			
	nephrectomy, or kidney			
	transplant on or prior to			
	December 31 of the			
	measurement year,			
	female patients with a			
	diagnosis of pregnancy			
	during the measurement			
	year, and patients who had a nonacute inpatient			
	admission during the			
	measurement year. To			

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
		identify nonacute inpatient admissions:  1. Identify all acute and nonacute inpatient stays.  2. Confirm the stay was for nonacute care based on the presence of a nonacute code on the claim.  3. Identify the admission date for the stay.  See attached code value sets.  MEDICAL RECORD REVIEW  Exclusionary evidence in the medical record must include a note indicating diagnosis of pregnancy or evidence of a nonacute inpatient admission during the measurement year, or evidence of ESRD, dialysis, nephrectomy or kidney transplant any time during the patient's history through December 31 of the measurement year.			
Risk Adjust ment	Statistical risk model 112459   148276 112459   148276	No risk adjustment or risk stratification	No risk adjustment or risk stratification 140560   107246 140560   107246	No risk adjustment or risk stratification 116000   123834   140881 116000   123834   140881	No risk adjustment or risk stratification 116000   123834   140881   141015

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
		116000  123834  135810  140881  117446  141015 116000  123834  135810  140881  117446  141015			116000  123834  140881  141015
Stratification	The measure for the ischemic vascular disease population is not currently stratified when publicly reported on our consumer website, MN HealthScores. The data is, however, stratified by insurance product in our 2019 Health Care Disparities Reports by insurance type and race/ethnicity/languag e and country of origin. https://mncm.org/wpcontent/uploads/2020/01/2018-Disparities-Report-Final.pdf https://mncm.org/wpcontent/uploads/2020/01/2018-Disparities-Report-By-RELC.pdf These reports note gaps in outcomes for ischemic vascular disease patients in public programs versus	N/A	Consistent with CMS' Measures Management System Blueprint and national recommendations put forth by the IOM (now NASEM) and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer	N/A	NA
	disease patients in public programs versus other purchasers				

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
	(6.6%) and disparities by race and ethnicity (as much as 12% for Black or African American and American Indian or Alaskan Natives)				
Type Score	Ratio better quality = higher score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorit	This measure is calculated by submitting a file of individual patient values (e.g. blood pressure, tobacco status, etc) to a HIPAA secure data portal. Programming within the data portal determines if each patient is a numerator case and then a rate is calculated for each clinic site. Please also refer to the measure calculation algorithms submitted within the data dictionary for this measure. If any component of the numerator is noncompliant for any one of the four components, then the patient is numerator	STEP 1: Determine the eligible population. To do so, identify adults who meet all specified criteria AGES: 18-75 years as of December 31 of the measurement year EVENT/DIAGNOSIS: Identify patients with hypertension in two ways: by claim/encounter data and by medical record data. SEE responses in S.6 and S.7 for eligible population and denominator criteria and details. STEP 2: Exclude patients who meet the exclusion criteria. SEE responses in S.8 and S.9 for denominator exclusion criteria and details. STEP 3: Determine the number of patients in the eligible population who	Calculating the performance rate:  1. Define the initial population. The initial population is identified through a common set of characteristics that define the overall group of patients – or other unit of measurement – targeted for evaluation  2. Define the denominator by identifying the subset of the initial population that meets the denominator criteria. Note: in some cases, the initial population and denominator are identical  3. Determine the numerator by identifying the subset of the denominator that meets the numerator criteria  4. From the patients who did not meet the numerator criteria, determine if the provider has documented whether each	Step 1: Determine the denominator Patients 18 years of age or older by the end of the measurement year AND who were discharged from an inpatient setting for an AMI, CABG or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year. Step 2: Exclude patients who meet the exclusion criteria Patients on anticoagulant therapy. Step 3: Determine the numerator Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year.	Step 1: Determine the denominator Patients 18 to 75 years of age by the end of the measurement year AND who were discharged alive for AMI, CABG or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.  Step 2: Determine the numerator Patients whose most recent blood pressure is adequately controlled (<140/90 mm Hg) during the measurement year. 116000  123834  140881  141015

0076 Optimal Vascu Care	lar 0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
noncompliant for the composite patient leall-or none optimal vascular care measure Numerator logic is a follows: Blood Pressure Component: Is Blood Pressure dain the measurement year? If no, is numerator noncompliant for the component. If yes, assess next variable. BP Systolic < 140? If is numerator noncompliant for the component. If yes, assess next variable. BP Diastolic < 90? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component. Note: BP needs to occur during the measurement year AND most recent BP systolic less than 140 AND BP diastolic less than 90	reading during the measurement year through the search of administrative data systems or medical record data.  STEP 4: Identify the lowest systolic and lowest diastolic blood pressure reading from the most recent blood pressure notation in the medical record.  STEP 5: Determine whether the result was <140/90 mm Hg.  STEP 6: Calculate the rate by dividing the numerator (STEP 5) by the denominator (after exclusions) (STEP 2).  116000  123834  135810  140881  117446  141015	patient represents an exception. Subtract from the denominator those patients that meet the conditions for a denominator exception; although the exception cases are removed from the denominator for the measure calculation, the exception rate (i.e., percentage of patients with valid exceptions) should be calculated and reported along with performance rates to highlight variations in care  5. Calculate the performance rate A patient not meeting the numerator criteria and without a valid and documented exception represents a quality failure. 140560   107246	Step 4: Calculate the rate by dividing the numerator (Step 3) by the denominator (after exclusions) (Step 2). 116000   123834   140881	

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
· ·	Blood Pressure		Disease (IVD): Use of Aspirin	
their most recent LDL in the last five years less than 40? If Yes, numerator compliant (free-pass), if no, assess next variable.				
Does the patient have a valid contraindication/				

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
exception to statin use				
defined as one of the				
following: pregnancy,				
active liver disease,				
rhabdomyolysis, ends				
stage renal disease on				
dialysis, heart failure,				
breastfeeding, allergy				
to statin, drug-drug				
interaction with statin,				
or intolerance with				
documentation of				
trying a statin at least				
once in the last 5				
years)? If yes, is				
numerator compliant				
for this component. If				
no, fail this numerator				
component and				
remains in the				
denominator.				
Note: Patient is either				
on a statin (prescribed/				
ordered) during the				
measurement year or				
has a valid exception				
either by age, presence				
or absence of ischemic				
vascular disease, low				
untreated LDL or valid				
contraindication/				
exception.				
Assess next				
component.				

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
Tobacco-Free			of Another Antiplateict	
Component:				
Is Tobacco Status = 1				
(Tobacco Free) and				
Tobacco Assessment				
Date a valid date? If				
yes, is numerator				
compliant for this				
component. If no, is				
numerator				
noncompliant for this				
component. Assess				
next component.				
Daily Aspirin/ Anti-				
platelet Component:				
Is the patient on daily				
aspirin or an				
antiplatelet? If yes, and				
date of most recent				
aspirin/ anti-platelet is				
in the measurement				
year is numerator compliant, if no, assess				
next variable.				
Does the patient have a valid contraindication/				
exception to aspirin				
anti-platelet use				
defined as one of the				
following: anti-				
coagulant medication,				
history of				
gastrointestinal bleed,				
history of intracranial				
bleed, allergy, or				

	0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
	physician documented reasons related to: risk of drug interaction, use of NSAIDS, uncontrolled HTN or gastro-intestinal reflux disease. If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.  Note: Patients are either on daily aspirin (indicated/ prescribed/ ordered) or an antiplatelet prescribed/ ordered) during the measurement year or has a valid contraindication/ exception.  If all of the above numerator components are in compliance, then the patient calculated as a numerator case for the optimal vascular care measure. 112459   148276				
Submi ssion items	5.1 Identified measures: 0067 : Coronary Artery	5.1 Identified measures: 0061 : Comprehensive Diabetes Care: Blood	5.1 Identified measures: 0465 : Perioperative Anti-platelet Therapy for Patients	5.1 Identified measures: 0142 : Aspirin prescribed at discharge for AMI	<ul><li>5.1 Identified measures:</li><li>5a.1 Are specs completely harmonized?</li></ul>

0076 Optimal Care	Vascular 0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
Disease (CAD) Antiplatelet Ti 0068: Ischem Vascular Disea Use of Aspirin Another Antip 0073: Ischem Vascular Disea Blood Pressur  5a.1 Are spece completely harmonized?  5a.2 If not cor harmonized, i difference, rat impact: There differences no the denomina definitions, so and settings of #0068 Ischem Vascular Disea Use of Aspirin Another Antip AND #0073 Isc	Pressure Control (<140/90 mm Hg) 2602 : Controlling High Blood Pressure for Peop with Serious Mental Illness 2606 : Diabetes Care for People with Serious Mental Illness: Blood Pressure Control (<140/90 mm Hg)  No 5a.1 Are specs completely harmonized Yes  Are some ted in tor urce data f care. ic control but are either focused on different population, use different chemic see (IVD):  Pressure Control (<140/90 mm Hg)  Sa.2 If not completely harmonized, identify difference, rationale, impact: There are severa related measures that assess blood pressure control but are either focused on different population, use different shemic	undergoing Carotid Endarterectomy  5a.1 Are specs completely harmonized? Yes  5a.2 If not completely harmonized, identify difference, rationale, impact: The patient population of 0465 is adults undergoing carotid endarterectomy, whereas the patient population of 067 is adults with coronary artery disease.  5b.1 If competing, why superior or rationale for additive value: Not applicable.		5a.2 If not completely harmonized, identify difference, rationale, impact:  5b.1 If competing, why superior or rationale for additive value: NA Related Measures: None
Vascular Disea Blood Pressur are most close related to the components of measure, how measure focu- inpatient setti	than NQF 0018.  Measure 0061 is NQF endorsed as a single measure that uses healt plan reported data to assess the percentage o		from an inpatient setting with an acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary intervention (PCI) during the 12 months prior to the	

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
only patients	age with diabetes (type 1		measurement year, AND	
discharged with acute	and type 2) whose most		patients who had a diagnosis	
myocardial infarction,	recent blood pressure		of ischemic vascular disease	
coronary bypass graft	level is <140/90 mm Hg.		(IVD) during the	
or percutaneous	Measure 2602 is NQF		measurement year and the	
coronary interventions.	endorsed as a single		year prior to the	
#0067 Chronic Stable	measure that uses health		measurement year, who had	
Coronary Artery	plan reported data to		documentation of the routine	
Disease: Antiplatelet	assess the percentage of		use of aspirin or another	
Therapy focuses only	patients 18-85 years of		antiplatelet during the	
on patients with	age with serious mental		measurement year. NQF 0068	
coronary artery	illness who had a		uses administrative claims,	
disease; however, from	diagnosis of hypertension		electronic clinical data,	
specifications available	and whose blood		electronic health record data,	
through QPS not able	pressure was adequately		and paper medical records	
to compare diagnosis	controlled during the		from the ambulatory care	
code definitions. This	measurement year.		setting, providing a wide array	
measure, #0076	Measure 2606 is NQF		of options for how data can	
Optimal Vascular Care	endorsed as a single		be collected and reported.	
is more inclusive with a	measure that uses health		The following is a description	
denominator definition	plan reported data to		of the differences and the	
of ischemic vascular	assess the percentage of		impact on interpretability and	
disease (atherosclerosis	patients 18-75 years of		data collection burden	
of coronary and	age with a serious mental		between NQF 0068 and each	
peripheral arteries)	illness and diabetes (type		related measure listed in 5.1a:	
#0543 was removed	1 and type 2) whose most		NQF 0142 – ASPIRIN	
from the related list	recent blood pressure		PRESCRIBED AT DISCHARGE	
because although	reading during the		FOR AMI	
related, the measure's	measurement year is		This measure assesses the	
endorsement was	<140/90 mm Hg.		percentage of AMI patients,	
removed in 2015.	Measure 0076 is NQF		18 years and older, who are	
	endorsed as a composite		prescribed aspirin at hospital	
5b.1 If competing, why	measure (all or nothing)		discharge. The measure	
superior or rationale	that uses physician		population only includes	
for additive value:	reported data to assess		patients who have had an	
ioi additive value.	the percentage of adult		patients who have had an	

There are other similar measures that address three of the four components separately, but no currently endorsed measure exists that is a ischemic vascular disease patients, 18-75 years of age, who have optimally managed modifiable risk factors including blood pressure and three other indicators. Measure indicators. Measure AMI, whereas NQF 0068 includes patients who have had an AMI, CABG or PCI procedure, and patients who have diagnoses consistent with ischemic vascular disease. NQF 0142 focuses	essure Control
patient level all-or- none composite measure.  0729 is NQF endorsed as a composite measure (all or nothing) that uses physician reported data to assess the percentage of adult diabetes patients, 18-75 years of age, who have optimally managed modifiable risk factors including blood pressure and four other indicators.  HARMONIZED MEASURE ELEMENTS: All measures described above focus on a blood pressure target of <140/90 mm Hg. UNHARMONIZED MEASURE ELEMENTS: - Data Source and Level of Accountability: Measures 0018, 0061, 2602, and 2606 are collected through administrative claims and/or medical record review using health plan reported data. Measures 0076 and 0729 are collected different entities  only on aspirin prescribed at discharge while NCF 0068 focuses on documentation of the use of any antiplatelet medication during the measurement year. NQF 0142 the use of any antiplatelet medication during the measurement year. NQF 0142 the use of any antiplatelet medication during the measurement year. NQF 0142 the use of any antiplatelet medication discharge while NQF 0068 for the use of any antiplatelet medication discharge while NQF 0068 for the use of any antiplatelet medication during the measure indicators. NQF 0142 includes focuse on documentation of the use of any antiplatelet medication during the measure indicators. NQF 0142 includes focuse on documentation of the use of any antiplatelet medication discharge while NQF 0048 for any inplate NQF 0142 includes and inspiration of any particle of any	

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
	through medical record abstraction and reported at the physician level of accountability Population Focus: Measure 0018 is focused on the general population of people with hypertension while the other measures focus on either diabetes, serious mental illness with diabetes, or serious mental illness with hypertension Age Range: Measures 0018 and 2602 focus on adults 18-85 while the other measures focus on adults 18-75. IMPACT ON INTERPRETABILITY?AND DATA COLLECTION BURDEN:? The differences between measures 0018, 0061, 2602, and 2606 do not have an impact on interpretability of?publicly?reported rates or an impact on data collection burden as the measures are focused on different populations. The differences between 0018, 0076, and 0729 also do not have an		Additionally, both use value sets of codes to identify patients with AMI that do not conflict.  NQF 0067 – CHRONIC STABLE CORONARY ARTERY DISEASE: ANTIPLATELET THERAPY This measure assesses the percentage of patients aged 18 years and older with a diagnosis of coronary artery disease (CAD) who were seen by a physician within a 12-month period and who were prescribed aspirin or clopidogrel. The focus of this measure is very similar to NQF 0068 in that it assesses the routine use of antiplatelet therapy in a twelve-month period for patients with CAD. However, NQF 0068 includes more antiplatelet medications than just aspirin or clopidogrel and includes a broader population of patients with cardiovascular disease than just those with CAD.  Although NQF 0067 and NQF 0068 are both physician-level measures that are specified to collect data from administrative claims, electronic clinical data,	

0076 Optimal Vascula	r 0018 Controlling High	0067 Coronary Artery Disease	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease
Care	Blood Pressure	(CAD): Antiplatelet Therapy		(IVD): Blood Pressure Control
	impact on interpretability of publicly reported rates or an impact on data collection burden because the data for each measure is collected from different data sources by different entities.  5b.1 If competing, why superior or rationale for additive value: NA		electronic health record data, and paper medical records from the ambulatory care setting, the impact on interpretability of publically-reported rates or added burden of data collection should be minimal because NQF 0067 is currently only reported through registry data. Additionally, NQF 0067 is focused on only on patients with CAD, while NQF 0068 is focused on a broader population of patients with cardiovascular disease who would benefit from the use of antiplatelet medications.  NQF 0076 – OPTIMAL VASCULAR CARE  This composite measure assesses the percentage of adult patients ages 18 to 75 who have ischemic vascular disease with optimally-managed modifiable risk factors (blood pressure, tobacco-free status, daily aspirin use) at their most recent visit with a physician during the measurement year. While the focus populations for NQF 0076 and NQF 0068 are very similar, NQF 0076 is a composite that	

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
			includes assessment of blood pressure control and tobacco use status. NQF 0068 assesses the routine use of aspirin or other antiplatelet medications while NQF 0076 focuses only on aspirin use. NQF 0076 does not use administrative claims though it does use electronic clinical data, electronic health record data, and paper medical records from the ambulatory care setting, which is similar to NQF 0068. Despite the similarities, there should be minimal impact on interpretability of publically-reported rates or added burden of data collection between the two measures since NQF 0076 is a composite of multiple indicators while NQF 0068 is focused only on antiplatelet therapy.  NQF 2452 – PERCUTANEOUS CORONARY INTERVENTION (PCI): POST-PROCEDURAL OPTIMAL MEDICAL THERAPY (NOTE: UNABLE TO SELECT IN 5.a1)	
			NQF 2452 is a composite measure that assesses the percentage of patients undergoing PCI who receive	

0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
		prescriptions for all medications (aspirin, P2Y12 and statins) for which they are eligible for at discharge. The measure population for NQF 2452 is patients undergoing PCI while NQF 0068 includes patient who have had an AMI, CABG or PCI procedure, and patients who have diagnoses consistent with ischemic vascular disease. NQF 2452 assesses the prescription of aspirin, P2Y12 agents, and statins at discharge; NQF 0068 assesses documentation of use of antiplatelet medications during the measurement year. NQF 2452 is a physician-level measure that uses data from registries while NQF 0068 is a physician-level measure that uses administrative claims, electronic clinical data, electronic health record data, and paper medical records from the ambulatory care setting.  There is no impact on interpretability of publically-reported rates or added burden of data collection because the focus of each measure is different and the	

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
			antiplatelet medications during the measurement year. NQF 0964 is a facility- level measure that uses data from registries while NQF	

0076 Optimal Vascular Care	0018 Controlling High Blood Pressure	0067 Coronary Artery Disease (CAD): Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073 Ischemic Vascular Disease (IVD): Blood Pressure Control
			measure that uses administrative claims, electronic clinical data, electronic health record data, and paper medical records from the ambulatory care setting.  There is no impact on interpretability of publically-reported rates or added burden of data collection because the focus of each measure is different, the accountable entity is different and the data for each measure is collected from different data sources by different entities.  ANSWER FOR SECTION 5b.1	
			Our current measure, NQF 0068, has a long history of use and is implemented in four national programs: PQRS, EHR Incentive Program, CMS ACO Shared Savings Program, and the Heart/Stroke Recognition Program.	

### Comparison of NQF #0290 and NQF #0288

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
Steward	Centers for Medicare and Medicaid Services	Centers for Medicare and Medicaid Services

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
Description	This measure calculates the median time from emergency department arrival to time of transfer to another facility for acute coronary intervention.	This measure calculates the percentage of Emergency Department (ED) acute myocardial infarction (AMI) patients with ST-segment elevation on the electrocardiogram (ECG) closest to arrival time receiving fibrinolytic therapy during the ED stay and having a time from ED arrival to fibrinolysis of 30 minutes or less. The measure is calculated using chartabstracted data, on a rolling, quarterly basis and is publicly reported, in aggregate, for one calendar year. The measure has been publicly reported, annually, by CMS as a component of its Hospital Outpatient Quality Reporting (HOQR) Program since 2012.
Туре	Process	Process
Data Source	Electronic Health Records, Paper Medical Records An electronic data collection tool is made available from vendors or facilities can download the free CMS Abstraction & Reporting Tool (CART). Paper tools for manual abstraction, which are posted on www.QualityNet.org, are also available for the CART tool. These tools are posted on www.QualityNet.org.	Claims (Only), Other, Paper Records An electronic data collection tool is made available from vendors or facilities can download the free CMS Abstraction & Reporting Tool (CART). Paper tools for manual abstraction, which are posted on www.QualityNet.org, are also available for the CART tool. These tools are posted on www.QualityNet.org.
	Available at measure-specific web page URL identified in S.1 Attachment 0290_Annual_Update_Code_Set2019xlsx	Available at measure-specific web page URL identified in S.1 Attachment NQF_0288_MeasureCodeSet.xlsx
Level	Facility	Facility, Other
Setting	Emergency Department and Services	Hospital
Numerator Statement	This measure is reported as a continuous variable statement: Time (in minutes) from emergency department arrival to transfer to another facility for acute coronary intervention.	The number of ED AMI patients whose time from ED arrival to fibrinolysis is 30 minutes or less.
Numerator Details	NQF #0290 is a continuous measure; therefore, the numerator and denominator details contained in Section S.5 and S.7 are the same.  The following data elements are used to define the measure population:  • E/M Code  • ICD-10-CM Principal Diagnosis Code  • Initial ECG Interpretation  • Transfer for Acute Coronary Intervention	The numerator is defined by six evaluation and management (E/M) codes and 18 ICD-10-CM diagnosis codes included in the value set for this measure; these detailed lists can be found in the Excel workbook provided for Section S2b.  The numerator includes patients age 18 or older who have ST-elevation on the ECG closest to ED arrival and who receive fibrinolytic therapy within 30 minutes or less of ED arrival. There are no numerator exceptions.

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
	The measure population includes patients with a diagnosis of acute myocardial infarction (AMI) and ST-segment elevation on the electrocardiogram (ECG) performed closest to emergency department (ED) arrival who are transferred from the ED to a short-term general hospital for inpatient care, or to a federal healthcare facility specifically for an acute coronary intervention (ACI). Patients are included in the measure population if:  • Initial ECG Interpretation is equal to "Yes"; and  • Fibrinolytic Administration is equal to "No"; and  • Transfer for Acute Coronary Intervention is equal to "[1]  There was documentation the patient was transferred from this facility's emergency department to another facility specifically for acute coronary intervention."  Median times to transfer within a three-month period are aggregated, on a rolling basis, for AMI patients who are transferred for ACI.	
Denominator Statement	This measure is reported as a continuous variable statement: Time (in minutes) from emergency department arrival to transfer to another facility for acute coronary intervention.	The number of ED AMI patients with ST-segment elevation on ECG who received fibrinolytic therapy.
Denominator Details	NQF #0290 is a continuous measure; therefore, the numerator and denominator details contained in Section S.5 and S.7 are the same. The following data elements are used to define the measure population:  • E/M Code • ICD-10-CM Principal Diagnosis Code • Initial ECG Interpretation • Transfer for Acute Coronary Intervention  The measure population includes patients with a diagnosis of acute myocardial infarction (AMI) and ST-segment elevation on the electrocardiogram (ECG) performed closest to emergency department (ED) arrival who are transferred from the ED to a short-term general hospital for inpatient care, or to a federal healthcare facility specifically for an acute coronary intervention (ACI). Patients are included in the measure population if:	The denominator is defined by six evaluation and management (E/M) codes and 18 ICD-10-CM diagnosis codes included in the value set for this measure; these detailed lists can be found in the Excel workbook provided for Section S2b.  The denominator includes patients who are discharged or transferred to a short-term general hospital for inpatient care or to a Federal healthcare facility, who have ST-segment elevation on the ECG performed closest to ED arrival, and who receive fibrinolytic therapy.

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
	<ul> <li>Initial ECG Interpretation is equal to "Yes"; and</li> <li>Fibrinolytic Administration is equal to "No"; and</li> <li>Transfer for Acute Coronary Intervention is equal to "[1]</li> <li>There was documentation the patient was transferred from this facility's emergency department to another facility specifically for acute coronary intervention."</li> </ul>	
Exclusions	<ul> <li>Excluded Populations:</li> <li>Patients less than 18 years of age; or</li> <li>Patients receiving fibrinolytic therapy administration.</li> </ul>	Patients are excluded who are less than 18 years of age. Additionally, patients who are not administered fibrinolytic therapy within 30 minutes AND had a Reason for Delay in Fibrinolytic Therapy, as defined in the Data Dictionary, are also excluded.
Exclusion Details	The following data elements are used to define the measure exclusions:  • Birthdate  • Fibrinolytic Therapy Administration	Cases are excluded for any patients that meet any of the following criteria:  Patients less than 18 years of age.  Patients who did not receive Fibrinolytic Administration within 30 minutes (Fibrinolytic Administration Date and Fibrinolytic Administration Time (in minutes) minus Outpatient Encounter Date and Arrival Time (in minutes) is greater than 30 minutes) AND had a Reason for Delay in Fibrinolytic Therapy, as defined in the Data Dictionary.
Risk Adjustment	No risk adjustment or risk stratification 109921  138817  138553  141592  146188  113612  141015  151003  150979 109921  138817  138553  141592  146188  113612  141015  151003  150979	No risk adjustment or risk stratification 109921   138817   138553   141592 109921   138817   138553   141592
Stratification		Not applicable; this measure does not stratify its results.
Type Score	Continuous variable better quality = lower score	Other (specify): Percentage better quality = higher score
Algorithm	Measure algorithm is available in the attached Measure Information Form. Measure algorithm is as follows:  1. Start. Run all cases that are included in the AMI Hospital Outpatient Population Algorithm and pass the edits defined in the Data Processing Flow through this measure. Proceed to Initial ECG Interpretation.  2. Check Initial ECG Interpretation.	This measure calculates the percentage of ED AMI patients with ST-segment elevation on the ECG closest to arrival time receiving fibrinolytic therapy during the ED stay and having a time from ED arrival to fibrinolysis of 30 minutes or less. The patient population is determined from two algorithms; the AMI Hospital Outpatient Population algorithm as well as the NQF #0288 measure-specific algorithm. The measure is calculated

#### 0290: Median Time to Transfer to Another Facility for Acute 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival **Coronary Intervention** based on four consecutive quarters of hospital outpatient a. If Initial ECG Interpretation is missing, the case will proceed to a claims data, as follows: Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Check E/M Code; if on Table 1.0 (in the Excel workbook Transmission section. provided for Section S2b), proceed b. If Initial ECG Interpretation equals No, the case will proceed to a Check Discharge Code; include patients with discharge Measure Category Assignment of B. Return to Transmission Data code of 4a or 4d Processing Flow: Clinical in the Data Transmission section. 3. Calculate Patient Age (Outpatient Encounter Date c. If Initial ECG Interpretation equals Yes, the case will proceed to Birthdate) Fibrinolytic Administration. 4. Check Patient Age; if >= 18, proceed 3. Check Fibrinolytic Administration. Check ICD-10-CM Principal Diagnosis Code; if on Table a. If Fibrinolytic Administration is missing, the case will proceed to 1.1 (in the Excel workbook provided for Section S2b), proceed to a Measure Category Assignment of X and will be rejected. Return the measure-specific algorithm to Transmission Data Processing Flow: Clinical in the Data Check Initial ECG Interpretation; if "Yes," proceed Transmission section. 7. Check Fibrinolytic Administration; if "Yes," proceed, b. If Fibrinolytic Administration equals Yes, the case will proceed to record as the denominator a Measure Category Assignment of B. Return to Transmission Data 8. Check Fibrinolytic Administration Date; if a Non-Unable Processing Flow: Clinical in the Data Transmission section. to Determine (UTD) value, proceed c. If Fibrinolytic Administration equals No, the case will proceed to Check Fibrinolytic Administration Time; if a Non-UTD Transfer for Acute Coronary Intervention. value, proceed 4. Check Transfer for Acute Coronary Intervention. 10. Check Arrival Time; if a Non-UTD value, proceed a. If Transfer for Acute Coronary Intervention is missing, the case 11. Calculate Time to Fibrinolysis (Fibrinolytic will proceed to a Measure Category Assignment of X and will be Administration Time minus Arrival Time) rejected. Return to Transmission Data Processing Flow: Clinical in Check Time to Fibrinolysis; if >= 0 min and <= 30 min, the Data Transmission section. record as the numerator. If > 30 min and = 360 min, proceed b. If Transfer for Acute Coronary Intervention equals 2 or 3, the Check Reason for Delay in Fibrinolytic Therapy; if "Yes," case will proceed to a Measure Category Assignment of B. Return patient is excluded from measure population. If "No," record in to Transmission Data Processing Flow: Clinical in the Data the denominator. Aggregate denominator and numerator Transmission section. counts by Medicare provider number c. If Transfer for Acute Coronary Intervention equals 1, the case Measure = numerator counts / denominator counts will proceed to ED Departure Date. [The value should be recorded as a percentage] 109921 5. Check ED Departure Date. 138817 | 138553 | 141592 a. If ED Departure Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
<ul> <li>b. If ED Departure Date equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.</li> <li>c. If ED Departure Date equals Non-UTD Value, the case will proceed to ED Departure Time.</li> </ul>	
6. Check ED Departure Time.  a. If ED Departure Time is missing, the case will proceed to a  Measure Category Assignment of X and will be rejected. Return to	
Transmission Data Processing Flow: Clinical in the Data Transmission section.  b. If ED Departure Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data	
Processing Flow: Clinical in the Data Transmission section.  c. If ED Departure Time equals Non-UTD Value, the case will proceed to Arrival Time.  7. Check Arrival Time.	
<ul> <li>a. If Arrival Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.</li> <li>b. If Arrival Time equals Non-UTD Value, the case will proceed to</li> </ul>	
the Measurement Value.  8. Calculate the Measurement Value. Time in minutes is equal to the ED Departure Date and ED Departure Time (in minutes) minus the Outpatient Encounter Date and Arrival Time (in minutes).	
9. Check the Measurement Value. a. If Measurement Value is less than 0 minutes, the case will proceed to a Measure Category Assignment of X and will be	
rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.  b. If Measurement Value is greater than or equal to 0 minutes, the case will proceed to Reason for Not Administering Fibrinolytic Therapy.	
10. Check Reason for Not Administering Fibrinolytic Therapy.	

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
	<ul> <li>a. If Reason for Not Administering Fibrinolytic Therapy is missing, the case will proceed to a Measure Category Assignment of X and the case will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.</li> <li>b. If Reason for Not Administering Fibrinolytic Therapy equals 1, 2, or 3, the case will proceed to a Measure Category Assignment of D1, the OP-3a Overall Rate. Initialize the Measure Category Assignment for OP-3b and OP-3c equal to B. Do not change the Measure Category Assignment that was already calculated for the overall rate of OP-3a. Proceed to Reason for Not Administering Fibrinolytic Therapy.</li> </ul>	
	<ul> <li>11. Check Reason for Not Administering Fibrinolytic Therapy.</li> <li>a. If Reason for Not Administering Fibrinolytic Therapy equals 1 or</li> <li>2, the case will proceed to a Measure Category Assignment of D2, the OP-3c Quality Improvement Rate. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.</li> <li>b. If Reason for Not Administering Fibrinolytic Therapy equals 3, the case will proceed to a Measure Category Assignment of D, the OP-3b Reporting Rate. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.</li> <li>Submission Threshold</li> </ul>	
	In order to reduce the burden on hospitals that treat a low number of patients but otherwise meet the submission requirements for a particular quality measure, hospitals that have five or fewer cases in a quarter (both Medicare and non-Medicare) for any measure set (i.e., Stroke) will not be required to submit patient level data for the entire measure set for that quarter. (Hospital Outpatient Quality Reporting Specifications Manual, Release Notes Version: 13.0a) 109921   138817   138553   141592   146188   113612   141015   151003   150979	
Submission items	5.1 Identified measures: 0288 : Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival  5a.1 Are specs completely harmonized? Yes	5.1 Identified measures: 0290 : Median Time to Transfer to Another Facility for Acute Coronary Intervention 0163 : Primary PCI received within 90 minutes of hospital arrival 5a.1 Are specs completely harmonized? No

0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
Sa.2 If not completely harmonized, identify difference, rationale, impact: NQF #0290 and NQF #0288 are both in the Hospital OQR Program. These measures have the same initial patient population – patients with AMI and ST-segment elevation on the ECG performed closest to hospital arrival. While the target populations are the same, the focus of the measures is different. NQF #0288 focuses on the timely administration of fibrinolytic therapy and NQF# 0290 focuses on the timely transfer of patients who require a PCI. These two measures share several key data elements (i.e., Initial ECG Interpretation, Fibrinolytic Administration, and Arrival Time). The specifications for these two measures are generally aligned, where possible.  5b.1 If competing, why superior or rationale for additive value: No competing measures that address both the same measure focus and target population as NQF #0290 were identified.	5a.2 If not completely harmonized, identify difference, rationale, impact: NQF #0288 and NQF #0290 are both in the HOQR Program, and NQF #0163 is included in the Hospital Inpatient Quality Reporting (HIQR) Program as an electronically specified clinical quality measure (eCQM). The two measures use the same initial patient population – patients with AMI and ST-segment elevation on the ECG performed closest to emergency department arrival who are transferred from the emergency department to a short-term general hospital for inpatient care, or to a Federal healthcare facility. While the target populations are the same, the focus of the two measures is different. NQF #0288 focuses on the timely administration of fibrinolytic therapy and the focus of NQF #0290 is the timely transfer of patients who require PCI. Although NQF #0163 (used in the HIQR Program) is similar to NQF #0288 (HOQR), the two measures serve different target populations and purposes: NQF #0288 focuses on timely administration of fibrinolytic therapy, while NQF #0163 focuses on the timely initiation of PCI for a patient who arrives at a PCI-capable hospital. All three measures share a number of key data elements (i.e., Initial ECG Interpretation, Fibrinolytic Administration, and Arrival Time). The specifications for the three measures are generally aligned, where possible.

### **Appendix E2: Related and Competing Measures (narrative)**

### Comparison of NQF #0066, NQF #0081, NQF #0137, and NQF #1662

0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%) 0081 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)

0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

#### Steward

0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

**American Heart Association** 

0081 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)

**PCPI** Foundation

0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI)
Patients

Centers for Medicare & Medicaid Services

1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB)
Therapy

**Renal Physicians Association** 

### Description

0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period who also have diabetes OR a current or prior LVEF < 40% who were prescribed ACE inhibitor or ARB therapy

0081 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)

Percentage of patients aged 18 years and older with a diagnosis of heart failure (HF) with a current or prior left ventricular ejection fraction (LVEF) < 40% who were prescribed ACE inhibitor or ARB or ARNI therapy either within a 12-month period when seen in the outpatient setting OR at each hospital discharge

### 0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

Percentage of acute myocardial infarction (AMI) patients with left ventricular systolic dysfunction (LVSD) who are prescribed an ACEI or ARB at hospital discharge. For purposes of this measure, LVSD is defined as chart documentation of a left ventricular ejection fraction (LVEF) less than 40% or a narrative description of left ventricular systolic (LVS) function consistent with moderate or severe systolic dysfunction.

## 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

Percentage of patients aged 18 years and older with a diagnosis of CKD (Stages 1-5, not receiving RRT) and proteinuria who were prescribed ACE inhibitor or ARB therapy within a 12-month period

### Type

0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

**Process** 

0081 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)

**Process** 

0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI)
Patients

Process

1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB)
Therapy

**Process** 

#### Data Source

0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

Registry Data Quality Payment Program – MIPS Quality Program.

No data collection instrument provided No data dictionary

0081 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)

Registry Data Not applicable

No data collection instrument provided Attachment NQF0081\_I9toI10\_conversion\_2019Apr09.xlsx

### 0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

Claims (Only), Paper Records Centers for Medicare & Medicaid Services (CMS) Abstraction & Reporting Tool (CART). Vendor tools also available.

**URL** No data dictionary

## 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

Claims, Electronic Health Records, Other, Paper Medical Records, Registry Data N/A Attachment ACE or ARB data file - 2015.pdf

### Level

0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

Clinician: Individual

0081 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)

Clinician: Group/Practice, Clinician: Individual

0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI)
Patients

Facility, Other, Population: Regional and State

1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB)
Therapy

Clinician: Group/Practice, Clinician: Individual

### Setting

0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

Home Care, Outpatient Services, Post-Acute Care

0081 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)

Home Care, Inpatient/Hospital, Other, Outpatient Services Domiciliary, Nursing Facility

0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI)
Patients

Hospital

1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB)
Therapy

Home Care, Other, Outpatient Services, Post-Acute Care Domiciliary, Rest Home, or Custodial Care Services

### **Numerator Statement**

# 0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

Patients who were prescribed ACE inhibitor or ARB therapy

# 0081 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)

Patients who were prescribed ACE inhibitor or ARB or ARNI therapy either within a 12-month period when seen in the outpatient setting OR at each hospital discharge

### 0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

AMI patients who are prescribed an ACEI or ARB at hospital discharge

## 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

Patients who were prescribed ACE inhibitor or ARB therapy within a 12-month period

\*The above list of medications/drug names is based on clinical guidelines and other evidence. The specified drugs were selected based on the strength of evidence for their clinical effectiveness. This list of selected drugs may not be all-inclusive or current. Physicians and other health care professionals should refer to the FDA's web site page entitled "Drug Safety Communications" for up-to-date drug recall and alert information when prescribing medications.

### **Definitions:**

Prescribed – May include prescription given to the patient for ACE Inhibitor or ARB therapy OR patient already taking ACE Inhibitor or ARB therapy as documented in the current medication list

#### **Numerator Details**

# 0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

Time period for data collection: At least once during the measurement period

Note: For reporting, Submission Criteria 1 and 2, described below, are combined for a single reported performance score on the combined measure population. If a patient has both diabetes and LVSD, reporting Submission Criteria #2 (CAD with diabetes) will count as appropriate reporting for this patient.

#### Definition:

Prescribed – May include prescription given to the patient for ACE inhibitor or ARB therapy at one or more visits in the measurement period OR patient already taking ACE inhibitor or ARB therapy as documented in current medication list.

Numerator Note: Eligible clinicians who have given a prescription to the patient for or whose patient is currently taking a combination medication therapy, which contains either

an ACE inhibitor or ARB (e.g., angiotensin receptor neprilysin inhibitor [ARNI, sacubitril/valsartan], ACEI+diuretic, ARB+diuretic, ACEI+calcium channel blocker) would meet performance for this measure.

FOR SUBMISSION CRITERIA 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF < 40% (without a diagnosis of diabetes)

Report Quality Data Code G8935: Clinician prescribed angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy

FOR SUBMISSION CRITERIA 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes

Report Quality Data Code G8473: Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy prescribed

# 0081 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)

Time Period for Data Collection: At least once during the measurement period when seen in the outpatient setting OR at each hospital discharge

#### Definition:

Prescribed-Outpatient setting: prescription given to the patient for ACE inhibitor or ARB or ARNI therapy at one or more visits in the measurement period OR patient already taking ACE inhibitor or ARB or ARNI therapy as documented in current medication list.

Prescribed-Inpatient setting: prescription given to the patient for ACE inhibitor or ARB or ARNI therapy at discharge OR ACE inhibitor or ARB or ARNI therapy to be continued after discharge as documented in the discharge medication list.

### **Numerator Note:**

To meet the intent of the measure, the numerator quality action must be performed at the encounter at which the active diagnosis of heart failure is documented. Eligible clinicians who have given a prescription for or whose patient is already taking an Angiotensin-Converting Enzyme Inhibitor (ACEI) or Angiotensin Receptor Blocker (ARB) would meet performance for this measure. Other combination therapies that consist of an ACEI plus diuretic, ARB + neprilysin inhibitor (ARNI), ARB plus diuretic, ACEI plus calcium channel blocker, ARB plus calcium channel blocker, or ARB plus calcium channel blocker plus diuretic would also meet performance for this measure.

For Submission Criteria 1 and Submission Criteria 2, report CPT Category II Code, 4010F: Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy prescribed or currently being taken

(NOTE to NQF: Based on the language revision, PCPI is requesting updated coding and descriptor.)

### 0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

Refer to

http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2 FQnetTier4&cid=1228773564870:

• Section 1 - Data Dictionary | Alphabetical Data Dictionary – pages 1-17 through 1-18 plus pages 1-73 through 1-74.

- Appendices | Appendix C Medication Tables pages Appendix C-6 through Appendix C-7 plus pages Appendix C-11 through Appendix C-12.
- Section 2 Measurement Information | Section 2.1 Acute Myocardial Infarction (AMI) page AMI-3-1.

## 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

See attached for EHR specifications.

For Claims/Administrative:

Report CPT Category II 4009F Angiotensin converting enzyme (ACE) inhibitor or Angiotensin Receptor Blocker (ARB) therapy prescribed

### **Denominator Statement**

# 0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period who also have diabetes OR current or prior LVEF <40%

# 0081 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)

All patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40%

### 0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

AMI patients (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.00, 410.01, 410.10, 410.11, 410.20, 410.21, 410.30, 410.31, 410.40, 410.41, 410.50, 410.51, 410.60, 410.61, 410.70, 410.71, 410.80, 410.81, 410.90, 410.91); with chart documentation of a left ventricular ejection fraction (LVEF) < 40% or a narrative description of left ventricular systolic (LVS) function consistent with moderate or severe systolic dysfunction

## 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

All patients aged 18 years and older with the diagnosis of CKD (Stages 1-5, not receiving RRT) and proteinuria

Definitions:

Proteinuria:

- 1. >300mg of albumin in the urine per 24 hours OR
- 2. ACR >300 mcg/mg creatinine OR
- 3. Protein to creatinine ratio > 0.3 mg/mg creatinine

RRT (Renal Replacement Therapy)-For the purposes of this measure, RRT includes hemodialysis, peritoneal dialysis, and kidney transplantation

### **Denominator Details**

0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

Time period for data collection: 12 consecutive months

Definition:

LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction.

FOR SUBMISSION CRITERIA 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF < 40%

Patients aged >= 18 years on date of encounter

AND

Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.2, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.760, I25.791, I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, Z95.1, Z95.5, Z98.61

AND

Patient encounter during the performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

WITHOUT

Telehealth Modifier: GQ, GT, 95, POS 02

AND

Two Denominator Eligible Visits

AND

Left Ventricular Ejection Fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function: G8934

FOR SUBMISSION CRITERIA 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes

Patients aged >= 18 years on date of encounter

AND

Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.2, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.790, I25.791, I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, Z95.1, Z95.5, Z98.61

AND

Diagnosis for diabetes (ICD-10-CM): E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.321, E10.329, E10.331, E10.339, E10.341, E10.349, E10.351, E10.359, E10.3211, E10.3212, E10.3213, E10.3219, E10.3291, E10.3292, E10.3293, E10.3299, E10.3311, E10.3312, E10.3313, E10.3319, E10.3391, E10.3392, E10.3393, E10.3399, E10.3411, E10.3412, E10.3413, E10.3419, E10.3491, E10.3492, E10.3493, E10.3499, E10.3511, E10.3512, E10.3513, E10.3519, E10.3521, E10.3522, E10.3523, E10.3529, E10.3531, E10.3532, E10.3533, E10.3539, E10.3541, E10.3542, E10.3543, E10.3549, E10.3551, E10.3552, E10.3553, E10.3559, E10.3591, E10.3592, E10.3593, E10.3599, E10.36, E10.37X1, E10.37X2, E10.37X3, E10.37X9, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.10, E11.11, E11.21, E11.22, E11.29, E11.311, E11.319, , E11.3211, E11.3212, E11.3213, E11.3219, E11.3291, E11.3292, E11.3293, E11.3299, E11.3311, E11.3312, E11.3313, E11.3319, E11.3391, E11.3392, E11.3393, E11.3399, E11.3411, E11.3412, E11.3413, E11.3419, E11.3491, E11.3492, E11.3493, E11.3499, E11.3511, E11.3512, E11.3513, E11.3519, E11.3521, E11.3522, E11.3523, E11.3529, E11.3531, E11.3532, E11.3533, E11.3539, E11.3541, E11.3542, E11.3543, E11.3549, E11.3551, E11.3552, E11.3553, E11.3559, E11.3591, E11.3592, E11.3593, E11.3599, E11.36, E11.37X1, E11.37X2, E11.37X3, E11.37X9, E11.39, E11.40, E11.41, E11.42, E11.43, E11.44, E11.49, E11.51, E11.52, E11.59, E11.610, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, E13.00, E13.01, E13.10, E13.11, E13.21, E13.22, E13.29, E13.311, E13.319, E13.3211, E13.3212, E13.3213, E13.3219, E13.3291, E13.3292, E13.3293, E13.3299, E13.3311, E13.3312, E13.3313, E13.3319, E13.3391, E13.3392, E13.3393, E13.3399, E13.3411, E13.3412, E13.3413, E13.3419, E13.3491, E13.3492, E13.3493, E13.3499, E13.3511, E13.3512, E13.3513, E13.3519, E13.3521, E13.3522, E13.3523, E13.3529, E13.3531, E13.3532, E13.3533, E13.3539, E13.3541, E13.3542, E13.3543, E13.3549, E13.3551, E13.3552, E13.3553, E13.3559, E13.3591, E13.3592, E13.3593, E13.3599, E13.36, E13.37X1,E13.37X2,E13.37X3,E13.37X9,E13.39, E13.40, E13.41, E13.42, E13.43, E13.44, E13.49, E13.51, E13.52, E13.59, E13.610, E13.618, E13.620, E13.621, E13.622, E13.628, E13.630, E13.638, E13.641, E13.649, E13.65, E13.69, E13.8, E13.9, O24.011, O24.012, O24.013, O24.019, O24.02, O24.03, O24.111, O24.112, 024.113, 024.119, 024.12, 024.13, 024.311, 024.312, 024.313, 024.319, 024.32, 024.33, 024.811, 024.812, 024.813, 024.819, 024.82, 024.83

### AND

Patient encounter during the performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

WITHOUT
Telehealth Modifier: GQ, GT, 95, POS 02

AND

Two Denominator Eligible Visits

Note: The eligible clinician should submit data on one of the submission criteria, depending on the clinical findings. If the patient has CAD and LVSD (without a diagnosis of Diabetes), use Denominator Submission Criteria 1. If the patient has CAD and Diabetes, use Denominator Submission Criteria 2. If the patient has both diabetes and LVSD, the eligible

professional may submit quality data for Submission Criteria 2 and this will count as appropriate submission for this patient.

0081 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)

Time Period for Data Collection: 12 consecutive months

**Denominator Note:** 

LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. The LVSD may be determined by quantitative or qualitative assessment, which may be current or historical. Examples of a quantitative or qualitative assessment may include an echocardiogram: 1) that provides a numerical value of LVSD or 2) that uses descriptive terms such as moderately or severely depressed left ventricular systolic function. Any current or prior ejection fraction study documenting LVSD can be used to identify patients.

To meet the denominator criteria, a patient must have an active diagnosis of heart failure at the time of the encounter which is used to qualify for the denominator and evaluate the numerator

The encounter used to evaluate the numerator counts as 1 of the 2 encounters required for denominator inclusion. If the patient meets the heart failure diagnosis criterion, the diagnosis needs to be active only at the encounter being evaluated for the numerator action.

Submission Criteria 1: Patients who were prescribed ACE inhibitor or ARB therapy within a 12-month period when seen in the outpatient setting

Patients aged >= 18 years on date of encounter

AND

Diagnosis for heart failure (ICD-10-CM): I11.0, I13.0, I13.2, I50.1, I50.20, I50.21, I50.22, I50.23, I50.30, I50.31, I50.32, I50.33, I50.40, I50.41, I50.42, I50.43, I50.814, I50.82, I50.83, I50.84, I50.89, I50.9

AND

Patient encounter during performance period – to be used for numerator evaluation (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

WITHOUT

Telehealth Modifier: GQ, GT, 95, POS 02

AND

At least one additional patient encounter during performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

WITH OR WITHOUT

Telehealth Modifier: GQ, GT, 95, POS 02

AND

Left ventricular ejection fraction (LVEF) less than 40% or documentation of moderately or severely depressed left ventricular systolic function: 3021F

Submission Criteria 2: Patients who were prescribed ACE inhibitor or ARB or ARNI therapy at each hospital discharge

Patients aged >= 18 years on date of encounter

AND

Diagnosis for heart failure (ICD-10-CM): I11.0, I13.0, I13.2, I50.1, I50.20, I50.21, I50.22, I50.23, I50.30, I50.31, I50.32, I50.33, I50.40, I50.41, I50.42, I50.43, I I50.814, I50.82, I50.83, I50.84, I50.89, I50.9

AND

Patient encounter during performance period (CPT): 99238, 99239

AND

Left ventricular ejection fraction (LVEF) less than 40% or documentation of moderately or severely depressed left ventricular systolic function: 3021F

## 0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

ICD-9-CM Principal Diagnosis codes:

410.00: Anterolateral wall, acute myocardial infarction-episode of care unspecified

410.01: Anterolateral wall, acute myocardial infarction-initial episode

410.10: Other anterior wall, acute myocardial infarction-episode of care unspecified

410.11: Other anterior wall, acute myocardial infarction-initial episode

410.20: Inferolateral wall, acute myocardial infarction-episode of care unspecified

410.21: Inferolateral wall, acute myocardial infarction-initial episode

410.30: Inferoposterior wall, acute myocardial infarction-episode of care unspecified

410.31: Inferoposterior wall, acute myocardial infarction-initial episode

410.40: Other inferior wall, acute myocardial infarction-episode of care unspecified

410.41: Other inferior wall, acute myocardial infarction-initial episode

410.50: Other lateral wall, acute myocardial infarction-episode of care unspecified

410.51: Other lateral wall, acute myocardial infarction-initial episode

410.60: True posterior wall, acute myocardial infarction-episode of care unspecified

410.61: True posterior wall, acute myocardial infarction-initial episode

410.70: Subendocardial, acute myocardial infarction-episode of care unspecified

410.71: Subendocardial, acute myocardial infarction-initial episode

410.80: Other specified sites, acute myocardial infarction-episode of care unspecified

410.81: Other specified sites, acute myocardial infarction-initial episode

410.90: Unspecified site, acute myocardial infarction-episode of care unspecified

410.91: Unspecified site, acute myocardial infarction-initial episode

LVSD - Refer to

http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2 FQnetTier4&cid=1228773564870:

• Section 1 - Data Dictionary | Alphabetical Data Dictionary – pages 1-261 through 1-264.

## 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

See attached for EHR specifications.

For Claims/Administrative: See coding tables attached for coding (ICD-10-CM, CPT)

#### **Exclusions**

# 0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

**Denominator Exceptions:** 

Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons)

Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., patient declined, other patient reasons)

Documentation of system reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., lack of drug availability, other reasons attributable to the health care system)

# 0081 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)

**Denominator Exceptions:** 

Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons).

Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., patient declined, other patient reasons).

Documentation of system reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., other system reasons).

## 0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

**Exclusions:** 

- •<18 years of age
- Patients who have a length of stay greater than 120 days
- Discharged to another hospital
- Expired
- Left against medical advice
- Discharged to home for hospice care
- Discharged to a health care facility for hospice care
- Patients with comfort measures only documented
- Patients enrolled in clinical trials

• Patients with a documented reason for no ACEI and no ARB at discharge

## 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

ACE inhibitor or ARB therapy not prescribed during the

measurement period, medical reason(s) documented (e.g., pregnancy, history of angioedema to ACEI, other allergy to ACEI and ARB, hyperkalemia or history of hyperkalemia while on ACEI or ARB therapy, acute kidney injury due to ACEI or ARB therapy, other medical reasons

ACE inhibitor or ARB therapy not prescribed during the measurement period, patient reason(s) documented (e.g., patient declined, other patient reasons)

### **Exclusion Details**

# 0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

Time period for data collection: During the encounter within the 12-month period Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. The AHA and ACC exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure 0066, exceptions may include medical reason(s) (e.g., allergy, intolerance, pregnancy, renal failure due to ACE Inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to the health care system) for not prescribing ACE inhibitor or ARB therapy. Although this methodology does not require the external reporting of more detailed exception data, the AHA and ACC recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The AHA and ACC also advocates for the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.

#### Additional details:

FOR SUBMISSION CRITERIA 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF<40% Report Quality Data Code G8936: Clinician documented that patient was not an eligible candidate for angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (e.g., allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons) or (e.g., patient declined, other patient reasons) or (e.g., lack of drug availability, other reasons attributable to the health care system)

FOR SUBMISSION CRITERIA 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes

Report Quality Data Code G8474: Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy not prescribed for reasons documented by the clinician (e.g., allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons) or (e.g., patient declined, other patient reasons) or (e.g., lack of drug availability, other reasons attributable to the health care system)

### 0081 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)

Time Period for Data Collection: During the encounter within the 12-month period Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. The PCPI exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) or Angiotensin Receptor-Neprilysin Inhibitor (ARNI) Therapy for Left Ventricular Systolic Dysfunction (LVSD), exceptions may include medical reason(s) (eg, hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons), or system reason(s) for not prescribing an ACE inhibitor or ARB or ARNI therapy. Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.

Append a modifier to CPT Category II Code:

4010F-1P: Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons)

4010F-2P: Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., patient declined, other patient reasons)

4010F-3P: Documentation of system reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., other system reasons)

### 0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

Refer to

http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2 FQnetTier4&cid=1228773564870:

- Section 1 Data Dictionary | Alphabetical Data Dictionary pages 1-19 through 1-20, 1-96, 1-106 through 1-108, 1-111 through 1-114, 1-123 through 1-127, I-209, 1-261 through 1-264, and 1-326 through 1-331.
- Appendices | Appendix C Medication Tables PDF pages Appendix C-6 through Appendix C-7 plus pages Appendix C-11 through Appendix C-12, and Appendix H Miscellaneous Tables page Appendix H-5.
- Section 2 Measurement Information | Section 2.1 Acute Myocardial Infarction (AMI) pages AMI-4 plus AMI-3-1 through AMI-3-2.

## 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

Append modifier to CPT II code 4009F-1P Append modifier to CPT II code 4009F-2P

### Risk Adjustment

# 0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

No risk adjustment or risk stratification

140560 | 107246 | 141015 140560 | 107246 | 141015

# 0081 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)

No risk adjustment or risk stratification

140560 | 135810 140560 | 135810

### 0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

No risk adjustment or risk stratification 109921 | 141592 | 135810

109921 | 141592 | 135810

## 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

No risk adjustment or risk stratification

113315

113315

### Stratification

0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

Consistent with CMS' Measures Management System Blueprint and national recommendations put forth by the IOM (now NASEM) and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer.

0081 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)

Consistent with CMS' Measures Management System Blueprint and recent national recommendations put forth by the IOM and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer.

0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI)
Patients

N/A

1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB)
Therapy

We encourage the results of this measure to be stratified by race, ethnicity, primary language, and gender, and have included these variables as recommended data elements to be collected.

### Type Score

0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

Rate/proportion better quality = higher score

0081 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)

Rate/proportion better quality = higher score

0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI)
Patients

Rate/proportion better quality = higher score

1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB)
Therapy

Rate/proportion better quality = higher score

### Algorithm

0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

THERE ARE TWO SUBMISSION CRITERIA FOR THIS MEASURE:

- 1) Patients who are 18 years and older with a diagnosis of CAD with LVEF < 40% OR
- 2) Patients who are 18 years and older with a diagnosis of CAD who have diabetes

  Note: For reporting, Submission Criteria 1 and Submission Criteria 2 are combined for a
  single reported performance score on the combined measure population. If a patient has
  both diabetes and LVSD, reporting Submission Criteria #2 (CAD with diabetes) will count as
  appropriate reporting for this patient. For the purposes of this measure, the single
  performance rate can be calculated as follows:

Performance Rate = (Numerator 1 + Numerator 2)/ [(Denominator 1 - Denominator Exceptions 1) + (Denominator 2 - Denominator Exceptions 2)]

Calculation algorithm for Submission Criteria 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF<40%

- 1. Find the patients who meet the initial population (i.e., the general group of patients that a set of performance measures is designed to address).
- 2. From the patients within the initial population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases, the initial population and denominator are identical.
- 3. From the patients within the denominator, find the patients who meet the numerator criteria (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.
- 4. From the patients who did not meet the numerator criteria, determine if the provider has documented that the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: medical reason(s) (e.g., allergy, intolerance, pregnancy, renal failure due to ACE Inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to the health care system) for not prescribing ACE inhibitor or ARB therapy)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation.

Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.

Calculation algorithm for Submission Criteria 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes

- 1. Find the patients who meet the initial population (i.e., the general group of patients that a set of performance measures is designed to address).
- 2. From the patients within the initial population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
- 3. From the patients within the denominator, find the patients who meet the numerator criteria (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.
- 4. From the patients who did not meet the numerator criteria, determine if the provider has documented that the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: medical reason(s) (e.g., allergy, intolerance, pregnancy, renal failure due to ACE Inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to the health care system) for not prescribing ACE inhibitor or ARB therapy)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation.

Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure. 140560 | 107246 | 141015

0081 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)

S.12. Type of score:

Rate/proportion

If other:

S.13. Interpretation of Score (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)

Better quality = Higher score

S.14. Calculation Algorithm/Measure Logic (Diagram or describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.)

This measure is comprised of two submission criteria but is intended to result in one reporting rate. The reporting rate is the aggregate of Submission Criteria 1 and Submission Criteria 2, resulting in a single performance rate. For the purposes of this measure, the single performance rate can be calculated as follows:

Performance Rate = (Numerator 1 + Numerator 2)/ [(Denominator 1 - Denominator Exceptions 1) + (Denominator 2 - Denominator Exceptions 2)]

Calculation algorithm for Submission Criteria 1: Patients who were prescribed ACE inhibitor or ARB or ARNI therapy within a 12-month period when seen in the outpatient setting

- 1. Find the patients who meet the initial population (ie, the general group of patients that a set of performance measures is designed to address).
- 2. From the patients within the initial population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
- 3. From the patients within the denominator, find the patients who meet the numerator criteria (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.
- 4. From the patients who did not meet the numerator criteria, determine if the provider has documented that the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: medical reason(s) (e.g., hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation. -- Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.

Calculation algorithm for Submission Criteria 2: Patients who were prescribed ACE inhibitor or ARB or ARNI therapy at each hospital discharge

- 1. Find the patients who meet the initial population (i.e., the general group of patients that a set of performance measures is designed to address).
- 2. From the patients within the initial population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
- 3. From the patients within the denominator, find the patients who meet the numerator criteria (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.
- 4. From the patients who did not meet the numerator criteria, determine if the provider has documented that the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: medical reason(s) (e.g., hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation. --

Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure. 140560 | 135810

# 0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

Refer to

http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2 FQnetTier4&cid=1228773564870: Section 2 - Measurement Information | Section 2.1 - Acute Myocardial Infarction (AMI) – pages AMI-5 plus AMI-3-5 through AMI-3-6. 109921 | 141592 | 135810

# 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

Calculation algorithm is included in data dictionary/code table attachment (2a1.30). 113315

#### Submission items

# 0066 Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

5.1 Identified measures: 0137 : ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

1662 : Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

0081e: 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)

0081: 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)

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: 0137 is specific to acute myocardial infarction patients. 1662 is specific to chronic kidney disease patients. And 0081/e are specific only to broader heart failure patients.

5b.1 If competing, why superior or rationale for additive value: This measure addresses a distinct target population and/or quality action from other related measures, as described above. The measures are complementary to form a well-rounded view of the quality of care for patients with CAD.

# 0081 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)

5.1 Identified measures: 0066 : Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

1662 : Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

0081e: 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)

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: NQF 1662 is specific to patients with a diagnosis of chronic kidney disease who also have proteinuria. NQF 0066 is specific to patients with coronary artery disease who also have diabetes OR a current/prior LVEF of <40%. In both measures, the population of focus (ie, the denominator) is different. NQF 0081e is the eCQM version of this measure.

5b.1 If competing, why superior or rationale for additive value:

# 0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value: No NQF-endorsed measures with same topic and target population.

Related Measures: NQF #0551: Ace Inhibitor / Angiotensin Receptor Blocker Use and Persistence Among Members with Coronary Artery Disease at High Risk for Coronary Events, NQF #0594: Post MI: ACE inhibitor or ARB therapy

# 1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy

5.1 Identified measures: 0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

0081 : Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)

0551 : Ace Inhibitor / Angiotensin Receptor Blocker Use and Persistence Among Members with Coronary Artery Disease at High Risk for Coronary Events

0594 : Post MI: ACE inhibitor or ARB therapy

0610 : Heart Failure - Use of ACE Inhibitor (ACEI) or Angiotensin Receptor Blocker (ARB) Therapy

0619: Diabetes with Hypertension or Proteinuria - Use of an ACE Inhibitor or ARB

0621: Non-Diabetic Nephropathy - Use of ACE Inhibitor or ARB Therapy

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value: Our measure is specified at the clinician level, but measure results can be aggregated at a higher level of measurement.

We have developed and will maintain specifications for multiple data sources, including Electronic Health Records (EHRs) and Claims-Based Reporting. Our specifications for EHRs are developed in accordance with the terminology standards (eg, SNOMED, RxNorm, LOINC) named in the Meaningful Use Program (CMS EHR Incentive Program).

The data source for ActiveHealth measures is what they call "level 2 clinically enriched data" (including data from claims & pharmacy). Our measure is specified for use in administrative claims (using CPT II codes) as well as integration into EHRs. The implementation of measures that are specified using clinically enriched data is significantly limiting in that it would only apply to those groups/settings with access to that type of information (ie, pharmacy data).

NQF staff have noted that the ActiveHealth measures are in use by health plans – a 3 million patient database system. By comparison, our measures are in CMS's PQRS program providing an incentive payment to eligible professionals who satisfactorily report data on quality measures for services furnished to 46 million Medicare beneficiaries.

# Comparison of NQF #0066, NQF #0073, NQF #0076, and NQF #0465

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

0076 Optimal Vascular Care

0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

#### Steward

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

**American Heart Association** 

#### 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

National Committee for Quality Assurance

#### **0076 Optimal Vascular Care**

MN Community Measurement

#### 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

Society for Vascular Surgery

# Description

#### 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease (CAD) seen within a 12-month period who were prescribed aspirin or clopidogrel

## 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

The percentage of patients 18 to 75 years of age who were discharged alive with acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary

interventions (PCI) during the 12 months prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year and who had the following during the measurement year:

- Blood pressure control (BP): reported as under control <140/90 mm Hg.

#### **0076 Optimal Vascular Care**

The percentage of patients 18-75 years of age who had a diagnosis of ischemic vascular disease (IVD) and whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:

- Blood pressure less than 140/90 mmHg
- On a statin medication, unless allowed contraindications or exceptions are present
- Non-tobacco user
- On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

# 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

Percentage of patients undergoing carotid endarterectomy (CEA) who are taking an antiplatelet agent (aspirin or clopidogrel or equivilant such as aggrenox/tiglacor etc) within 48 hours prior to surgery and are prescribed this medication at hospital discharge following surgery

# Type

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

**Process** 

#### 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Outcome

# **0076 Optimal Vascular Care**

Composite

#### 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

**Process** 

# Data Source

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Registry Data Quality Payment Program – MIPS Quality Program.

No data collection instrument provided No data dictionary

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Claims, Electronic Health Records, Paper Medical Records NA
Attachment 0073 IVD Blood Pressure Control Value Sets-635634189557555751.xlsx

#### **0076 Optimal Vascular Care**

Electronic Health Records, Paper Medical Records An excel template with formatted columns for data fields is provided. Almost all the medical groups in MN (99.9%) extract the information from their EMR. Other options have been historically available: Registries can be used as a source of information to create the data file; however groups must ensure

that all of their eligible patients are included. Paper abstraction forms are provided for those clinics who wish to use them as an interim step to creating their data file.

All data is uploaded in electronic format (.csv file) to a HIPAA secure, encrypted and password protected data portal.

Available at measure-specific web page URL identified in S.1 Attachment MNCM\_-0076 Optimal Vascular Care Specs Fields 12-2019.xlsx

# 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

Registry Data VQI or other clinical registries that provides data for preoperative and discharge medications for patients undergoing carotid endarterectomy (CPT 35301, ICD 9 38.12 or ICD 10:

2014 ICD-10-PCS 03CH0ZZ Extirpation of Matter from Right Common Carotid Artery, Open Approach

2014 ICD-10-PCS 03CJ0ZZ Extirpation of Matter from Left Common Carotid Artery, Open Approach

2014 ICD-10-PCS 03CK0ZZ Extirpation of Matter from Right Internal Carotid Artery, Open Approach

2014 ICD-10-PCS 03CL0ZZ Extirpation of Matter from Left Internal Carotid Artery, Open Approach

Available in attached appendix at A.1 No data dictionary

#### Level

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Clinician: Individual

#### 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Clinician: Group/Practice, Clinician: Individual

# **0076 Optimal Vascular Care**

Clinician: Group/Practice

# 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

Facility, Clinician: Group/Practice, Clinician: Individual

# Setting

#### 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Home Care, Outpatient Services, Post-Acute Care

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

**Outpatient Services** 

#### **0076 Optimal Vascular Care**

**Outpatient Services** 

# 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

Inpatient/Hospital, Outpatient Services

#### **Numerator Statement**

#### 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Patients who were prescribed aspirin or clopidogrel

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Patients whose most recent blood pressure is adequately controlled during the measurement year. For a patient's BP to be adequately controlled, both the systolic and the diastolic BP must meet the desired threshold of <140/90 mm Hg.

# **0076 Optimal Vascular Care**

The number of patients in the denominator whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:

- The most recent blood pressure in the measurement period has a systolic value of less than 140 mmHg AND a diastolic value of less than 90 mmHg
- On a statin medication, unless allowed contraindications or exceptions are present
- Patient is not a tobacco user
- On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

#### 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

Patients over age 18 undergoing carotid endarterectomy who received anti-platlet agents such as aspirin or aspirin-like agents, or P2y12 antagonists within 48 hours prior to the initiation of surgery AND are prescribed this medication at hospital discharge following surgery.

#### **Numerator Details**

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Time period for data collection: At least once during the measurement period

Definition: Prescribed - May include prescription given to the patient for aspirin or clopidogrel at one or more visits in the measurement period OR patient already taking aspirin or clopidogrel as documented in current medication list. Report CPT Category II code 4086F: Aspirin or clopidogrel prescribed

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

# ADMINISTRATIVE CLAIMS

Use automated data to identify the most recent BP reading taken during an outpatient visit (Outpatient Value Set) or a nonacute inpatient encounter (Nonacute Inpatient Value Set) during the measurement year.

The patient is numerator compliant if the BP is <140/90 mm Hg. The patient is not compliant if the BP is > or = 140/90 mm Hg, if there is no BP reading during the measurement year or if the reading is incomplete (e.g., the systolic or diastolic level is missing). If there are multiple BPs on the same date of service, use the lowest systolic and lowest diastolic BP on that date as the representative BP.

Organizations that use CPT Category II codes to identify numerator compliance for this indicator must search for all codes in the following value sets and use the most recent codes during the measurement year to determine numerator compliance for both systolic and diastolic levels.

See the corresponding excel document for the following value sets:

- Systolic Less Than 140 Value Set
- Systolic Greater Than/Equal To 140 Value Set
- Diastolic Less Than 80 Value Set
- Diastolic 80-89 Value Set
- Diastolic Greater Than/Equal To 90 Value Set
- Outpatient Value Set
- Nonacute Inpatient Value Set

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#### MEDICAL RECORD

To determine if a patient is adequately controlled, the representative blood pressure must be identified. Follow the steps below.

#### Step 1

- Identify the most recent blood pressure reading noted during the measurement year.

Do not include readings that meet the following criteria:

- Taken during an acute inpatient stay or an ED visit.
- Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).
- Taken the same day as major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy).
- Reported by or taken by the patient
- Documentation of "VS within normal limits" or "vital signs normal".

#### Step 2

- Identify the lowest systolic and lowest diastolic reading from the most recent blood pressure notation in the medical record. If there are multiple readings for a single date, use the lowest systolic and the lowest diastolic reading on that date as the representative blood pressure. The systolic and diastolic results do not need to be from the same reading.

The patient is not numerator compliant if the BP does not meet the specified threshold or is missing, or if there is no BP reading during the measurement year or if the reading is incomplete (i.e., the systolic or diastolic level is missing).

#### **0076 Optimal Vascular Care**

In order to be numerator compliant all four components must be met

- \* Blood pressure less than 140/90 mmHg AND
- \* On a statin medication, unless allowed contraindications or exceptions are present AND
- \* Non-tobacco user AND
- \* On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

#### **BLOOD PRESSURE COMPONENT**

Blood Pressure Date [Date (mm/dd/yyyy)] AND

BP Systolic [Numeric] AND

BP Diastolic [Numeric]

Numerator component calculation: numerator component compliant is BP during the measurement year AND Systolic < 140 AND Diastolic < 90.

**BP** Date

Enter the date of the most recent blood pressure result during the measurement period.

- A test result from a provider outside of the reporting medical group is allowed if the result is documented in the reporting medical group's patient record and is the most recent test result during the measurement period.
- Do not include BP readings:
- o Taken during an acute inpatient stay or an ED visit.
- o Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).
- o Obtained the same day as a major diagnostic or surgical procedure (e.g., EKG/ECG, stress test, administration of IV contrast for a radiology procedure, endoscopy).
- o Reported by or taken by the patient.
- Leave BLANK if a blood pressure was not obtained during the measurement period. BP Systolic

Enter the value of the most recent systolic blood pressure result during the measurement period.

- If more than one value is recorded on the most recent date, the lowest value may be submitted. It does NOT need to be from the same reading submitted in Column Z (BP Diastolic).
- NOTE: The systolic blood pressure is the upper number in the recorded fraction. For example, the systolic value for a blood pressure of 124/72 mmHg is 124.
- Leave BLANK if a blood pressure was not obtained during the measurement period.
   BP Diastolic

Enter the value of the most recent diastolic blood pressure result during the measurement period.

- If more than one value is recorded on the most recent date, the lowest value may be submitted. It does NOT need to be from the same reading as submitted in (BP Systolic).
- NOTE: The diastolic blood pressure is the lower number in the recorded fraction. For example, the diastolic value for a blood pressure of 124/72 mmHg is 72.
- Leave BLANK if a blood pressure was not obtained during the measurement period.

CHOLESTEROL MANAGEMENT STATIN COMPONENT

LDL Date [Date (mm/dd/yyyy)] AND

LDL Value [Numeric]

For calculating exceptions to statin use based on very low LDL (< 40 for cardiovascular disease and < 70 for patients with diabetes)

Enter the date of the most recent LDL test result between 01/01/2015 and 12/31/2019.

- A test result from a provider outside of the reporting medical group is allowed if the result is documented in the reporting medical group's patient record and is the most recent test result within the allowable time period.
- If the LDL result is too high to calculate, still enter the LDL test date if it is the most recent test result within the allowable time period.

- LDL values within the last five years will be used to calculate potential exceptions to being on a statin medication.
- Leave BLANK if an LDL test was not performed between 01/01/2015 and 12/31/2019.

Enter the value of the most recent LDL test result between 01/01/2015 and 12/31/2019.

• Leave BLANK if an LDL test was not performed during the allowable time period, or if the most recent test result was too high to calculate.

Statin Medication [Numeric] AND

Statin Medication Date [Date (mm/dd/yyyy)] AND/OR

Station Medication Exception [Numeric] AND

Station Medication Exception Date [Date (mm/dd/yyyy)]

Numerator component calculation: numerator component compliant if on a statin (prescribed/ ordered) or low LDL value (see above) or documented contraindication/exception is present.

Statin Medication:

Enter the code that corresponds to whether the patient was prescribed a statin medication or if a statin medication was active on the patient's medication list during the measurement period.

Please see Appendix A for a list of statin medications.

- 1 = Yes, patient was prescribed a statin medication, or a statin medication was indicated as active on the patient's medication list during the measurement period.
- 2 = No, patient was not prescribed a statin medication and a statin medication was not indicated as active on the patient's medication list during the measurement period.
- The following exceptions to statin medication use will be identified by the Data Portal based on the submitted LDL values:
- o Patients with ischemic vascular disease aged 21 to 75 years and an LDL result less than 40 mg/dL
- o Patients aged 40 75 years with an LDL result less than 70 mg/dL
- o Patients aged 21 39 years with an LDL less than 190 mg/dL

**Statin Medication Date** 

Enter the date of the most recent statin prescription, order or review on an active medications list that included a statin during the measurement period.

• If a statin was not prescribed, ordered, or reviewed as an active medication during the measurement period, leave BLANK.

Station Medication Exception

If the patient was NOT prescribed or did not have a statin medication active on their medication list during the measurement period (Column AA = 2), enter the value that corresponds to any of the following contraindications or exceptions:

- 1 = Pregnancy at any time during the measurement period
- 2 = Active liver disease (liver failure, cirrhosis, hepatitis)
- 3 = Rhabdomyolysis
- 4 = End stage renal disease on dialysis
- 5 = Heart failure

- 6 = Other provider documented reason: breastfeeding during the measurement period
- 7 = Other provider documented reason: woman of childbearing age not actively taking birth control during the measurement period
- 8 = Other provider documented reason: allergy to statin
- 9 = Drug interaction with a listed medication taken during the measurement period (valid drug-drug interactions include HIV protease inhibitors, nefazodone, cyclosporine, gemfibrozil, and danazol).
- 10 = Other provider documented reason: intolerance (with supporting documentation of trying a statin at least once within the last five years). Additionally, Myopathy and Myositis (CHOL-05) Value Set may be used to document intolerance to statins.
- If none of the above contraindications or exceptions are documented, leave BLANK.
- NOTE: Items 1 5 above can be defined by diagnosis codes that may be used in data collection. Value Sets include: Pregnancy V/Z Codes (PREG-01), Pregnancy Diagnosis Codes (PREG-02), Liver Disease (CHOL-01), Rhabdomyolysis (CHOL-02), ESRD on Dialysis (CHOL-03), and Heart Failure (CHOL-04)

Statin Medication Exception Date:

If the patient has a documented contraindication or exception enter the date of the contraindication or exception.

• If only the month and year are known, enter the first day of the month.

#### ASPIRIN/ANTIPLATELET COMPONENT

Aspirin or Anti-platelet Medication [Numeric] AND

Aspirin or Anti-platelet Date [Date (mm/dd/yyyy)] AND/OR

Aspirin or Anti-platelet Exception [Numeric] AND

Aspirin or Anti-platelet Exception Date [Date (mm/dd/yyyy)]

Numerator component calculation: numerator component compliant if indicated on daily aspirin or anti-platelet medication (prescribed/ ordered) or documented contraindication/exception is present.

Aspirin or Anti-platelet Medication

Enter the code that corresponds to whether the patient is prescribed a daily aspirin product or anti-platelet medication or if an aspirin product or anti-platelet medication was active on the patient's medication list at any time during the measurement period.

Please see Appendix B for methods to identify appropriate aspirin products or antiplatelet medications.

- 1 = Yes, patient was prescribed a daily aspirin product or antiplatelet medication, or one was indicated as active on the patient's medication list during the measurement period.
- 2 = No, patient was not prescribed a daily aspirin product or antiplatelet medication and one was not indicated as active on the patient's medication list during the measurement period.
- Aspirin/narcotic combination medications do not qualify as a daily aspirin product.

Aspirin or Anti-platelet Medication Date

Enter the date of the most recent daily aspirin product or anti-platelet medication prescription, order or review of an active medication list that included a daily aspirin product or anti-platelet medication during the measurement period.

\* If a daily aspirin product or anti-platelet medication was not prescribed, ordered or reviewed as an active medication during the measurement period, leave blank.

Aspirin or Anti-platelet Medication Exception

For patients who were not prescribed or taking a daily aspirin product or anti-platelet medication during the measurement period, enter the code that corresponds to any of the following contraindications or exceptions:

- 1 = Prescribed anti-coagulant medication during the measurement period
- 2 = History of gastrointestinal bleeding
- 3 = History of intracranial bleeding
- 4 = Bleeding disorder
- 5 = Other provider documented reason: allergy to aspirin or anti-platelets
- 6 = Other provider documented reason: use of non-steroidal anti-inflammatory agents
- 7 = Other provider documented reason: documented risk for drug interaction
- 8 = Other provider documented reason: uncontrolled hypertension (systolic blood pressure greater than 180 mmHg and/or diastolic blood pressure greater than 110 mmHg)
- 9 = Other provider documented reason: gastroesophageal reflux disease (GERD)

If none of the above contraindications or exceptions are documented, leave BLANK.

NOTE: Items 1 and 2 above can be defined by diagnosis codes that may be used in data collection. Value Sets include: GI Bleed (ASA-01) and Intracranial Bleed (ASA-02).

Aspirin or Anti-platelet Exception Date

If the patient has a documented contraindication or exception enter the date of the contraindication or exception. If only the month and year are known, enter the first day of the month.

#### **TOBACCO COMPONENT**

Tobacco Status Documentation Date [Date (mm/dd/yyyy)] AND

Tobacco Status [Numeric]

Numerator component calculation: numerator component compliant if tobacco status within the last two years and status is tobacco-free.

**Tobacco Status Documentation Date:** 

Enter the most recent date that the patient's tobacco status was documented during the measurement period or year prior.

If the patient's tobacco status is not documented or the date of the documentation cannot be determined, leave BLANK.

**Tobacco Status:** 

Enter the code that corresponds to the patient's most recent tobacco status during the measurement period or year prior.

- 1 = Tobacco free (patient does not use tobacco; patient was a former user and is not a current user)
- 2 = No documentation
- 3 = Current tobacco user (tobacco includes any amount of cigarettes, cigars, pipes or smokeless tobacco)

- \* If the date of the tobacco status documentation is not documented in the patient record, enter 2.
- \* E-cigarettes are not considered tobacco products.

A blank field will create an ERROR upon submission.

# 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

Numerator coding, These are fields that are collected via the data form for the VQI registry, which is approved for PQRS:

Gxxx1: Documentation that oral antiplatelet therapy was given within 48 hours prior to surgerical incision

Gxxx2: No documentation that oral antiplatelet was given within 48 hours prior to the initiation of surgery

Gxxx3: Oral antiplatelet therapy prescribed at hospital discharge

Gxxx4: Oral antiplatelet therapy NOT prescribed at hospital discharge, Gxxx5 does not apply

Gxxx5: Patient expired, left against medical advice, discharged to hospice, or transferred to another acute care hospital or federal hospital

#### **Denominator Statement**

#### 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Patients 18 to 75 years of age by the end of the measurement year who were discharged alive for AMI, CABG or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.

#### **0076 Optimal Vascular Care**

Patients ages 18 years or older at the start of the measurement period AND less than 76 years at the end of the measurement period who have a diagnosis of ischemic vascular disease (Ischemic Vascular Disease Value Set) with any contact during the current or prior measurement period OR had ischemic vascular disease (Ischemic Vascular Disease Value Set) present on an active problem list at any time during the measurement period.

Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease)

AND

At least one established patient office visit (Established Pt Diabetes & Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.

#### 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

Patients over age 18 undergoing carotid endarterectomy.

#### **Denominator Details**

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Time period for data collection: 12 consecutive months

Patients aged >/= 18 years on date of encounter

AND

Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.2, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.760, I25.791, I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, Z95.1, Z95.5, Z98.61

AND

Patient encounter during the performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

WITHOUT

Telehealth Modifier: GQ, GT, 95, POS 02

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Use the codes listed in the AMI Value Set, CABG Value Set or PCI Value Set to identify AMI, PCI and CABG. AMI and CABG cases should be from inpatient claims only. All cases of PCI should be included, regardless of setting (e.g., inpatient, outpatient, ED).

Identify patients as having IVD who met at least one of the two criteria below, during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.

- At least one outpatient visit (Outpatient Value Set) with an IVD diagnosis (IVD Value Set), OR
- At least one acute inpatient visit (Acute Inpatient Value Set) with an IVD diagnosis (IVD Value Set)

See the corresponding excel document for the following value sets:

- Acute Inpatient Value Set
- Outpatient Value Set
- IVD Value Set
- AMI Value Set
- CABG Value Set
- PCI Value Set

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MEDICAL RECORD

Documentation of IVD in the medical record includes:

- IVD
- Ischemic heart disease

- Angina
- Coronary atherosclerosis
- Coronary artery occlusion
- Cardiovascular disease
- Occlusion or stenosis of precerebral arteries (including basilar, carotid and vertebral arteries)
- Atherosclerosis of renal artery
- Atherosclerosis of native arteries of the extremities
- Chronic total occlusion of artery of the extremities
- Arterial embolism and thrombosis
- Atheroembolism.

#### **0076 Optimal Vascular Care**

Please also refer to all code lists included in the data dictionary attached in S.2b.

Patients ages 18 years or older at the start of the measurement period AND less than 76 years at the end of the measurement period who have a diagnosis of ischemic vascular disease (Ischemic Vascular Disease Value Set) with any contact during the current or prior measurement period OR had ischemic vascular disease (Ischemic Vascular Disease Value Set) present on an active problem list at any time during the measurement period.

Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease)

AND

At least one established patient office visit (Established Pt Diabetes & Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.

Eligible Specialties:

Family Medicine, Internal Medicine, Geriatric Medicine, Cardiology

Eligible Providers:

Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurses (APRN)

#### 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

This is a patient-level measure that is anticipated to be reported a minimum of once per reporting period. To report this measure use the appropriate G-codes for carotid endarterectomy. It is anticipated that physicians providing the procedure of carotid endarterectomy will report this measure. To report, physician must include:

**BOTH** 

--Gxxx1 OR Gxxx2

AND

--Gxxx3 OR Gxxx4 OR Gxxx5

OR

--Gxxx6 OR Gxxx7

Numerator coding:

Gxxx1: Documentation that oral antiplatelet therapy was given within 48 hours prior to surgerical incision

Gxxx2: No documentation that oral antiplatelet was given within 48 hours prior to the initiation of surgery

Gxxx3: Oral antiplatelet therapy prescribed at hospital discharge

Gxxx4: Oral antiplatelet therapy NOT prescribed at hospital discharge, Gxxx5 does not apply

Gxxx5: Patient expired, left against medical advice, discharged to hospice, or transferred to another acute care hospital or federal hospital

Exclusion coding:

Gxxx6: Medical reasons for not prescribing antiplatelet therapy: patient allergy to both ASA and clopidogrel; patient admitted on heparin; patient admitted on coumadin/warfarin; patient has active bleeding

Gxxx7: Patient admitted from emergency department or patient is a direct admit or patient has other cardiac procedures done during same operation as the CEA

**Denominator Coding:** 

CPT code 35301

OR

ICD-9 code 38.12

2014 ICD-10-PCS 03CH0ZZ Extirpation of Matter from Right Common Carotid Artery, Open Approach

2014 ICD-10-PCS 03CJ0ZZ Extirpation of Matter from Left Common Carotid Artery, Open Approach

2014 ICD-10-PCS 03CK0ZZ Extirpation of Matter from Right Internal Carotid Artery, Open Approach

2014 ICD-10-PCS 03CL0ZZ Extirpation of Matter from Left Internal Carotid Artery, Open Approach

#### **Exclusions**

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

**Denominator exceptions** 

- Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons)
- Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)
- Documentation of system reason(s) for not prescribing aspirin or clopidogrel (e.g., lack of drug availability, other reasons attributable to the health care system)

#### 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

None

#### **0076 Optimal Vascular Care**

The following exclusions are allowed to be applied to the eligible population: permanent nursing home residents, receiving hospice or palliative care services, or died prior to the end of the measurement period.

#### 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

Patients with known intolerance to anti-platlet agents such as aspirin or aspirin-like agents, or P2y12 antagonists, or those on heparin or other intravenous anti-coagulants; patients with active bleeding or undergoing urgent or emergent operations or endarterectomy combined with cardiac surgery. Patients with known intolerance to anti-platlet agents such as aspirin or aspirin-like agents, or P2y12 antagonists, or those on or other intravenous anti-coagulants; patients with active bleeding or undergoing urgent or emergent operations or endarterectomy combined with cardiac surgery.

#### **Exclusion Details**

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Time period for data collection: During the encounter within the 12-month period Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. The AHA and ACC exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure Coronary Artery Disease (CAD): Antiplatelet Therapy, exceptions may include medical reason(s) (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to the health care system) for not prescribing aspirin or clopidogrel. Although this methodology does not require the external reporting of more detailed exception data, the AHA and ACC recommend that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and auditreadiness. The AHA and ACC also advocate the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.

#### Additional details:

Append a modifier to CPT Category II code:

4086F-1P: Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons)

4086F-2P: Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)

4086F-3P: Documentation of system reason(s) for not prescribing aspirin or clopidogrel (e.g., lack of drug availability, other reasons attributable to the health care system)

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

N/A

#### **0076 Optimal Vascular Care**

- \* Patient was a permanent nursing home resident at any time during the measurement period
- \* Patient was in hospice or receiving palliative care at any time during the measurement period
- \* Patient died prior to the end of the measurement period

# 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

**Exclusion coding:** 

Gxxx6: Medical reasons for not prescribing antiplatelet therapy: patient allergy to both ASA and clopidogrel; patient admitted on heparin; patient admitted on coumadin/warfarin; patient has active bleeding

Gxxx7: Patient admitted from emergency department or patient is a direct admit or patient has other cardiac procedures done during same operation as the CEA

# Risk Adjustment

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

No risk adjustment or risk stratification 140560 | 107246

140560 | 107246

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

No risk adjustment or risk stratification

116000| 123834| 140881| 141015 116000| 123834| 140881| 141015

#### **0076 Optimal Vascular Care**

Statistical risk model

112459 | 148276

112459 | 148276

# 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

No risk adjustment or risk stratification

109878 | 121550

109878 | 121550

# Stratification

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Consistent with CMS' Measures Management System Blueprint and national recommendations put forth by the IOM (now NASEM) and NQF to standardize the

collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

NA

# **0076 Optimal Vascular Care**

The measure for the ischemic vascular disease population is not currently stratified when publicly reported on our consumer website, MN HealthScores. The data is, however, stratified by insurance product in our 2019 Health Care Disparities Reports by insurance type and race/ethnicity/language and country of origin.

https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-Final.pdf https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-By-RELC.pdf

These reports note gaps in outcomes for ischemic vascular disease patients in public programs versus other purchasers (6.6%) and disparities by race and ethnicity (as much as 12% for Black or African American and American Indian or Alaskan Natives)

# 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

# Type Score

#### 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Rate/proportion better quality = higher score

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Rate/proportion better quality = higher score

#### **0076 Optimal Vascular Care**

Ratio better quality = higher score

# 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

Rate/proportion better quality = higher score

# Algorithm

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Calculating the performance rate:

- 1. Define the initial population. The initial population is identified through a common set of characteristics that define the overall group of patients or other unit of measurement targeted for evaluation
- 2. Define the denominator by identifying the subset of the initial population that meets the denominator criteria. Note: in some cases, the initial population and denominator are identical
- 3. Determine the numerator by identifying the subset of the denominator that meets the numerator criteria
- 4. From the patients who did not meet the numerator criteria, determine if the provider has documented whether each patient represents an exception. Subtract from the denominator those patients that meet the conditions for a denominator exception; although the exception cases are removed from the denominator for the measure

calculation, the exception rate (i.e., percentage of patients with valid exceptions) should be calculated and reported along with performance rates to highlight variations in care

5. Calculate the performance rate

A patient not meeting the numerator criteria and without a valid and documented exception represents a quality failure. 140560 | 107246

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Step 1: Determine the denominator

Patients 18 to 75 years of age by the end of the measurement year AND who were discharged alive for AMI, CABG or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.

Step 2: Determine the numerator

Patients whose most recent blood pressure is adequately controlled (<140/90 mm Hg) during the measurement year. 116000| 123834| 140881| 141015

#### **0076 Optimal Vascular Care**

This measure is calculated by submitting a file of individual patient values (e.g. blood pressure, tobacco status, etc) to a HIPAA secure data portal. Programming within the data portal determines if each patient is a numerator case and then a rate is calculated for each clinic site. Please also refer to the measure calculation algorithms submitted within the data dictionary for this measure.

If any component of the numerator is noncompliant for any one of the four components, then the patient is numerator noncompliant for the composite patient level all-or none optimal vascular care measure.

Numerator logic is as follows:

**Blood Pressure Component:** 

Is Blood Pressure date in the measurement year? If no, is numerator noncompliant for this component. If yes, assess next variable.

BP Systolic < 140? If no, is numerator noncompliant for this component. If yes, assess next variable.

BP Diastolic < 90? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component.

Note: BP needs to occur during the measurement year AND most recent BP systolic less than 140 AND BP diastolic less than 90

Assess next component.

**Cholesterol Statin Use Component:** 

Is the patient on a statin medication? If yes, and most recent date is in the measurement year, is numerator compliant for this component. If no, assess next variable.

For patients not on a statin the following variables are used to assess numerator compliance related to contraindications or exceptions to statin use:

Is the patient age 18 to 20? If yes, numerator compliant (free-pass), if no, assess next variable.

Patients age 21 to 75. Is their most recent LDL in the last five years less than 40? If Yes, numerator compliant (free-pass), if no, assess next variable.

Does the patient have a valid contraindication/ exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, ends stage renal disease on dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with documentation of trying a statin at least once in the last 5 years)? If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.

Note: Patient is either on a statin (prescribed/ ordered) during the measurement year or has a valid exception either by age, presence or absence of ischemic vascular disease, low untreated LDL or valid contraindication/ exception.

Assess next component.

**Tobacco-Free Component:** 

Is Tobacco Status = 1 (Tobacco Free) and Tobacco Assessment Date a valid date? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component. Assess next component.

Daily Aspirin/ Anti-platelet Component:

Is the patient on daily aspirin or an antiplatelet? If yes, and date of most recent aspirin/anti-platelet is in the measurement year is numerator compliant, if no, assess next variable.

Does the patient have a valid contraindication/ exception to aspirin anti-platelet use defined as one of the following: anti-coagulant medication, history of gastrointestinal bleed, history of intracranial bleed, allergy, or physician documented reasons related to: risk of drug interaction, use of NSAIDS, uncontrolled HTN or gastro-intestinal reflux disease. If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.

Note: Patients are either on daily aspirin (indicated/ prescribed/ ordered) or an antiplatelet prescribed/ ordered) during the measurement year or has a valid contraindication/ exception.

If all of the above numerator components are in compliance, then the patient calculated as a numerator case for the optimal vascular care measure. 112459 | 148276

#### 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

The proportion of patients who do recieve antiplatelets as is recommended 109878 | 121550

#### Submission items

#### 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

5.1 Identified measures: 0465 : Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: The patient population of 0465 is adults undergoing carotid endarterectomy, whereas the patient population of 067 is adults with coronary artery disease.

5b.1 If competing, why superior or rationale for additive value: Not applicable.

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value: NA

Related Measures: None

#### **0076 Optimal Vascular Care**

5.1 Identified measures: 0067 : Coronary Artery Disease (CAD): Antiplatelet Therapy

0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

0073: Ischemic Vascular Disease (IVD): Blood Pressure Control

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: There are some differences noted in the denominator definitions, source data and settings of care. #0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet AND #0073 Ischemic Vascular Disease (IVD): Blood Pressure Control are most closely related to the components of our measure, however this measure focuses on the inpatient setting and only patients discharged with acute myocardial infarction, coronary bypass graft or percutaneous coronary interventions. #0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy focuses only on patients with coronary artery disease; however, from specifications available through QPS not able to compare diagnosis code definitions. This measure, #0076 Optimal Vascular Care is more inclusive with a denominator definition of ischemic vascular disease (atherosclerosis of coronary and peripheral arteries) #0543 was removed from the related list because although related, the measure's endorsement was removed in 2015.

5b.1 If competing, why superior or rationale for additive value: There are other similar measures that address three of the four components separately, but no currently endorsed measure exists that is a patient level all-or-none composite measure.

# 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

# Comparison of NQF #0076, NQF #0018, NQF #0067, NQF #0068 and NQF #0073

0076 Optimal Vascular Care

0018 Controlling High Blood Pressure

0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

# Steward

# **0076 Optimal Vascular Care**

MN Community Measurement

# **0018 Controlling High Blood Pressure**

National Committee for Quality Assurance

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

American Heart Association

# 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

National Committee for Quality Assurance

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

National Committee for Quality Assurance

# Description

# **0076 Optimal Vascular Care**

The percentage of patients 18-75 years of age who had a diagnosis of ischemic vascular disease (IVD) and whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:

- Blood pressure less than 140/90 mmHg
- On a statin medication, unless allowed contraindications or exceptions are present
- Non-tobacco user
- On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

# **0018 Controlling High Blood Pressure**

The percentage of adults 18-85 years of age who had a diagnosis of hypertension (HTN) and whose blood pressure was adequately controlled (<140/90 mm Hg) during the measurement year.

#### 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease (CAD) seen within a 12-month period who were prescribed aspirin or clopidogrel

# 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

The percentage of patients 18 years of age and older who were discharged from an inpatient setting with an acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary intervention (PCI) during the 12 months prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year and who had documentation of routine use of aspirin or another antiplatelet during the measurement year.

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

The percentage of patients 18 to 75 years of age who were discharged alive with acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) during the 12 months prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year and who had the following during the measurement year:

- Blood pressure control (BP): reported as under control <140/90 mm Hg.

# Type

#### **0076 Optimal Vascular Care**

Composite

#### **0018 Controlling High Blood Pressure**

Outcome: Intermediate Clinical Outcome

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

**Process** 

# 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

**Process** 

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Outcome

#### Data Source

#### **0076 Optimal Vascular Care**

Electronic Health Records, Paper Medical Records An excel template with formatted columns for data fields is provided. Almost all the medical groups in MN (99.9%) extract the information from their EMR. Other options have been historically available: Registries can be used as a source of information to create the data file; however groups must ensure that all of their eligible patients are included. Paper abstraction forms are provided for those clinics who wish to use them as an interim step to creating their data file.

All data is uploaded in electronic format (.csv file) to a HIPAA secure, encrypted and password protected data portal.

Available at measure-specific web page URL identified in S.1 Attachment MNCM\_-0076\_Optimal\_Vascular\_Care\_Specs\_Fields\_12-2019.xlsx

# **0018 Controlling High Blood Pressure**

Claims, Electronic Health Data, Electronic Health Records, Paper Medical Records This measure is based on administrative claims and medical record documentation collected in the course of providing care to health plan patients. NCQA collects Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from health plans via NCQA's online data submission system.

No data collection instrument provided Attachment 0018\_CBP\_Value\_Sets\_Fall\_2019-637002741932672877.xlsx

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Registry Data Quality Payment Program – MIPS Quality Program.

No data collection instrument provided No data dictionary

# 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

Claims, Electronic Health Records, Other, Paper Medical Records N/A No data collection instrument provided Attachment 0068\_IVD\_Value\_Set-636898260704331246.xlsx

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Claims, Electronic Health Records, Paper Medical Records NA

Attachment 0073\_IVD\_Blood\_Pressure\_Control\_Value\_Sets-635634189557555751.xlsx

#### Level

# **0076 Optimal Vascular Care**

Clinician: Group/Practice

# **0018 Controlling High Blood Pressure**

Health Plan

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Clinician: Individual

# 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

Clinician: Group/Practice, Clinician: Individual

#### 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Clinician: Group/Practice, Clinician: Individual

# Setting

# **0076 Optimal Vascular Care**

**Outpatient Services** 

#### **0018 Controlling High Blood Pressure**

**Outpatient Services** 

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Home Care, Outpatient Services, Post-Acute Care

#### 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

**Outpatient Services** 

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

**Outpatient Services** 

#### *Numerator Statement*

#### **0076 Optimal Vascular Care**

The number of patients in the denominator whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:

- The most recent blood pressure in the measurement period has a systolic value of less than 140 mmHg AND a diastolic value of less than 90 mmHg
- On a statin medication, unless allowed contraindications or exceptions are present
- Patient is not a tobacco user
- On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

# **0018 Controlling High Blood Pressure**

Patients whose most recent blood pressure level was <140/90 mm Hg during the measurement year.

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Patients who were prescribed aspirin or clopidogrel

# 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year.

#### 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Patients whose most recent blood pressure is adequately controlled during the measurement year. For a patient's BP to be adequately controlled, both the systolic and the diastolic BP must meet the desired threshold of <140/90 mm Hg.

#### **Numerator Details**

#### **0076 Optimal Vascular Care**

In order to be numerator compliant all four components must be met

- \* Blood pressure less than 140/90 mmHg AND
- \* On a statin medication, unless allowed contraindications or exceptions are present AND
- \* Non-tobacco user AND
- \* On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

**BLOOD PRESSURE COMPONENT** 

Blood Pressure Date [Date (mm/dd/yyyy)] AND

BP Systolic [Numeric] AND

BP Diastolic [Numeric]

Numerator component calculation: numerator component compliant is BP during the measurement year AND Systolic < 140 AND Diastolic < 90.

**BP** Date

Enter the date of the most recent blood pressure result during the measurement period.

- A test result from a provider outside of the reporting medical group is allowed if the result is documented in the reporting medical group's patient record and is the most recent test result during the measurement period.
- Do not include BP readings:
- o Taken during an acute inpatient stay or an ED visit.
- o Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).
- o Obtained the same day as a major diagnostic or surgical procedure (e.g., EKG/ECG, stress test, administration of IV contrast for a radiology procedure, endoscopy).
- o Reported by or taken by the patient.
- Leave BLANK if a blood pressure was not obtained during the measurement period.

BP Systolic

Enter the value of the most recent systolic blood pressure result during the measurement period.

- If more than one value is recorded on the most recent date, the lowest value may be submitted. It does NOT need to be from the same reading submitted in Column Z (BP Diastolic).
- NOTE: The systolic blood pressure is the upper number in the recorded fraction. For example, the systolic value for a blood pressure of 124/72 mmHg is 124.
- Leave BLANK if a blood pressure was not obtained during the measurement period. BP Diastolic

Enter the value of the most recent diastolic blood pressure result during the measurement period.

- If more than one value is recorded on the most recent date, the lowest value may be submitted. It does NOT need to be from the same reading as submitted in (BP Systolic).
- NOTE: The diastolic blood pressure is the lower number in the recorded fraction. For example, the diastolic value for a blood pressure of 124/72 mmHg is 72.
- Leave BLANK if a blood pressure was not obtained during the measurement period.

CHOLESTEROL MANAGEMENT STATIN COMPONENT

LDL Date [Date (mm/dd/yyyy)] AND

LDL Value [Numeric]

For calculating exceptions to statin use based on very low LDL (< 40 for cardiovascular disease and < 70 for patients with diabetes)

Enter the date of the most recent LDL test result between 01/01/2015 and 12/31/2019.

- A test result from a provider outside of the reporting medical group is allowed if the result is documented in the reporting medical group's patient record and is the most recent test result within the allowable time period.
- If the LDL result is too high to calculate, still enter the LDL test date if it is the most recent test result within the allowable time period.
- LDL values within the last five years will be used to calculate potential exceptions to being on a statin medication.
- Leave BLANK if an LDL test was not performed between 01/01/2015 and 12/31/2019.

Enter the value of the most recent LDL test result between 01/01/2015 and 12/31/2019.

• Leave BLANK if an LDL test was not performed during the allowable time period, or if the most recent test result was too high to calculate.

Statin Medication [Numeric] AND

Statin Medication Date [Date (mm/dd/yyyy)] AND/OR

Station Medication Exception [Numeric] AND

Station Medication Exception Date [Date (mm/dd/yyyy)]

Numerator component calculation: numerator component compliant if on a statin (prescribed/ ordered) or low LDL value (see above) or documented contraindication/exception is present.

Statin Medication:

Enter the code that corresponds to whether the patient was prescribed a statin medication or if a statin medication was active on the patient's medication list during the measurement period.

Please see Appendix A for a list of statin medications.

- 1 = Yes, patient was prescribed a statin medication, or a statin medication was indicated as active on the patient's medication list during the measurement period.
- 2 = No, patient was not prescribed a statin medication and a statin medication was not indicated as active on the patient's medication list during the measurement period.
- The following exceptions to statin medication use will be identified by the Data Portal based on the submitted LDL values:
- o Patients with ischemic vascular disease aged 21 to 75 years and an LDL result less than 40 mg/dL
- o Patients aged 40 75 years with an LDL result less than 70 mg/dL
- o Patients aged 21 39 years with an LDL less than 190 mg/dL

#### Statin Medication Date

Enter the date of the most recent statin prescription, order or review on an active medications list that included a statin during the measurement period.

• If a statin was not prescribed, ordered, or reviewed as an active medication during the measurement period, leave BLANK.

# Station Medication Exception

If the patient was NOT prescribed or did not have a statin medication active on their medication list during the measurement period (Column AA = 2), enter the value that corresponds to any of the following contraindications or exceptions:

- 1 = Pregnancy at any time during the measurement period
- 2 = Active liver disease (liver failure, cirrhosis, hepatitis)
- 3 = Rhabdomyolysis
- 4 = End stage renal disease on dialysis
- 5 = Heart failure
- 6 = Other provider documented reason: breastfeeding during the measurement period
- 7 = Other provider documented reason: woman of childbearing age not actively taking birth control during the measurement period
- 8 = Other provider documented reason: allergy to statin
- 9 = Drug interaction with a listed medication taken during the measurement period (valid drug-drug interactions include HIV protease inhibitors, nefazodone, cyclosporine, gemfibrozil, and danazol).
- 10 = Other provider documented reason: intolerance (with supporting documentation of trying a statin at least once within the last five years). Additionally, Myopathy and Myositis (CHOL-05) Value Set may be used to document intolerance to statins.
- If none of the above contraindications or exceptions are documented, leave BLANK.
- NOTE: Items 1 5 above can be defined by diagnosis codes that may be used in data collection. Value Sets include: Pregnancy V/Z Codes (PREG-01), Pregnancy Diagnosis Codes (PREG-02), Liver Disease (CHOL-01), Rhabdomyolysis (CHOL-02), ESRD on Dialysis (CHOL-03), and Heart Failure (CHOL-04)

Statin Medication Exception Date:

If the patient has a documented contraindication or exception enter the date of the contraindication or exception.

• If only the month and year are known, enter the first day of the month.

#### ASPIRIN/ANTIPLATELET COMPONENT

Aspirin or Anti-platelet Medication [Numeric] AND

Aspirin or Anti-platelet Date [Date (mm/dd/yyyy)] AND/OR

Aspirin or Anti-platelet Exception [Numeric] AND

Aspirin or Anti-platelet Exception Date [Date (mm/dd/yyyy)]

Numerator component calculation: numerator component compliant if indicated on daily aspirin or anti-platelet medication (prescribed/ ordered) or documented contraindication/exception is present.

Aspirin or Anti-platelet Medication

Enter the code that corresponds to whether the patient is prescribed a daily aspirin product or antiplatelet medication or if an aspirin product or anti-platelet medication was active on the patient's medication list at any time during the measurement period.

Please see Appendix B for methods to identify appropriate aspirin products or antiplatelet medications.

- 1 = Yes, patient was prescribed a daily aspirin product or antiplatelet medication, or one was indicated as active on the patient's medication list during the measurement period.
- 2 = No, patient was not prescribed a daily aspirin product or antiplatelet medication and one was not indicated as active on the patient's medication list during the measurement period.
- Aspirin/narcotic combination medications do not qualify as a daily aspirin product.

Aspirin or Anti-platelet Medication Date

Enter the date of the most recent daily aspirin product or anti-platelet medication prescription, order or review of an active medication list that included a daily aspirin product or anti-platelet medication during the measurement period.

\* If a daily aspirin product or anti-platelet medication was not prescribed, ordered or reviewed as an active medication during the measurement period, leave blank.

Aspirin or Anti-platelet Medication Exception

For patients who were not prescribed or taking a daily aspirin product or anti-platelet medication during the measurement period, enter the code that corresponds to any of the following contraindications or exceptions:

- 1 = Prescribed anti-coagulant medication during the measurement period
- 2 = History of gastrointestinal bleeding
- 3 = History of intracranial bleeding
- 4 = Bleeding disorder
- 5 = Other provider documented reason: allergy to aspirin or anti-platelets
- 6 = Other provider documented reason: use of non-steroidal anti-inflammatory agents
- 7 = Other provider documented reason: documented risk for drug interaction
- 8 = Other provider documented reason: uncontrolled hypertension (systolic blood pressure greater than 180 mmHg and/or diastolic blood pressure greater than 110 mmHg)
- 9 = Other provider documented reason: gastroesophageal reflux disease (GERD)

If none of the above contraindications or exceptions are documented, leave BLANK.

NOTE: Items 1 and 2 above can be defined by diagnosis codes that may be used in data collection. Value Sets include: GI Bleed (ASA-01) and Intracranial Bleed (ASA-02).

Aspirin or Anti-platelet Exception Date

If the patient has a documented contraindication or exception enter the date of the contraindication or exception. If only the month and year are known, enter the first day of the month.

#### **TOBACCO COMPONENT**

Tobacco Status Documentation Date [Date (mm/dd/yyyy)] AND

Tobacco Status [Numeric]

Numerator component calculation: numerator component compliant if tobacco status within the last two years and status is tobacco-free.

**Tobacco Status Documentation Date:** 

Enter the most recent date that the patient's tobacco status was documented during the measurement period or year prior.

If the patient's tobacco status is not documented or the date of the documentation cannot be determined, leave BLANK.

#### **Tobacco Status:**

Enter the code that corresponds to the patient's most recent tobacco status during the measurement period or year prior.

- 1 = Tobacco free (patient does not use tobacco; patient was a former user and is not a current user)
- 2 = No documentation
- 3 = Current tobacco user (tobacco includes any amount of cigarettes, cigars, pipes or smokeless tobacco)
- \* If the date of the tobacco status documentation is not documented in the patient record, enter 2
- \* E-cigarettes are not considered tobacco products.

A blank field will create an ERROR upon submission.

#### **0018 Controlling High Blood Pressure**

There are two data sources and approaches used for collecting data reporting the numerator for this measure: Administrative Claims and Medical Record Review

#### ADMINISTRATIVE CLAIMS

Use codes (See code value sets located in question S.2b.) to identify the most recent BP reading taken during an outpatient visit, a nonacute inpatient encounter, or remote monitoring event during the measurement year.

The blood pressure reading must occur on or after the date when the second diagnosis of hypertension (identified using the event/diagnosis criteria).

The patient is numerator compliant if the blood pressure is <140/90 mm Hg. The patient is not compliant if the blood pressure is >=140/90 mm Hg, if there is no blood pressure reading during the measurement year or if the reading is incomplete (e.g., the systolic or diastolic level is missing). If there are multiple blood pressure readings on the same date of service, use the lowest systolic and lowest diastolic blood pressure on that date as the presentative blood pressure.

Organizations that use CPT Category II codes to identify numerator compliance for this indicator must search for all codes in the following value sets and use the most recent codes during the measurement year to determine numerator compliance for both systolic and diastolic levels.

# VALUE SET / NUMERATOR COMPLIANCE

Systolic Less Than 140 Value Set / Systolic compliant

Systolic Greater Than or Equal to 140 Value Set / Systolic not compliant

Diastolic Less Than 80 Value Set / Diastolic compliant

Diastolic 80-89 Value Set / Diastolic compliant

Diastolic Greater Than or Equal to 90 Value Set / Diastolic not compliant

See attached code value sets.

# MEDICAL RECORD REVIEW

The number of patients in the denominator whose most recent blood pressure (both systolic and diastolic) is adequately controlled during the measurement year. For a patient's blood pressure to be controlled the systolic and diastolic blood pressure must be <140/90 mm hg (adequate control). To determine if a member's blood pressure is adequately controlled, the representative blood pressure must be identified.

All eligible blood pressure measurements recorded in the record must be considered. If an organization cannot find the medical record, the patient remains in the measure denominator and is considered noncompliant for the numerator.

Use the following guidance to find the appropriate medical record to review.

- Identify the patient's PCP.
- If the patient had more than one PCP for the time-period, identify the PCP who most recently provided care to the patient.
- If the patient did not visit a PCP for the time-period or does not have a PCP, identify the practitioner who most recently provided care to the patient.
- If a practitioner other than the patient's PCP manages the hypertension, the organization may use the medical record of that practitioner.

Identify the most recent blood pressure reading noted during the measurement year.

The blood pressure reading must occur on or after the date when the second diagnosis of hypertension (identified using the event/diagnosis criteria) occurred.

Do not include BP readings:

- Taken during an acute inpatient stay or an ED visit.
- Taken on the same day as a diagnostic test or diagnostic or therapeutic procedure that requires a change in diet or change in medication on or one day before the day of the test or procedure, with the exception of fasting blood tests.
- Reported by or taken by the patient.

BP readings from remote monitoring devices that are digitally stored and transmitted to the provider may be included. There must be documentation in the medical record that clearly states the reading was taken by an electronic device, and results were digitally stored and transmitted to the provider and interpreted by the provider.

Identify the lowest systolic and lowest diastolic BP reading from the most recent BP notation in the medical record. If multiple readings were recorded for a single date, use

the lowest systolic and lowest diastolic BP on that date as the representative BP. The systolic and diastolic results do not need to be from the same reading.

The patient is not compliant if the BP reading is =140/90 mm Hg or is missing, or if there is no BP reading during the measurement year or if the reading is incomplete (e.g., the systolic or diastolic level is missing).

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Time period for data collection: At least once during the measurement period Definition: Prescribed - May include prescription given to the patient for aspirin or clopidogrel at one or more visits in the measurement period OR patient already taking aspirin or clopidogrel as documented in current medication list. Report CPT Category II code 4086F: Aspirin or clopidogrel prescribed

# 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

#### **ADMINISTRATIVE**

Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year.

Oral antiplatelet therapy consists of: aspirin, clopidogrel, combination of aspirin and extended release dipyridamole, prasugrel, ticagrelor or ticlopidine.

Anticoagulant medications consist of: Apixaban, Argatroban, Bivalirudin, Dabigatran, Dalteparin, Desirudin, Edoxaban, Enoxaparin, Fondaparinux, Heparin, Lepirudin, Rivaroxaban, Tinzaparin, or Warfarin.

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#### MEDICAL RECORD

Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year.

At a minimum, documentation in the medical record must include a note indicating the date when aspirin or another antiplatelet was prescribed or documentation of prescription from another treating physician.

#### 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

#### **ADMINISTRATIVE CLAIMS**

Use automated data to identify the most recent BP reading taken during an outpatient visit (Outpatient Value Set) or a nonacute inpatient encounter (Nonacute Inpatient Value Set) during the measurement year.

The patient is numerator compliant if the BP is <140/90 mm Hg. The patient is not compliant if the BP is > or = 140/90 mm Hg, if there is no BP reading during the measurement year or if the reading is incomplete (e.g., the systolic or diastolic level is missing). If there are multiple BPs on the same date of service, use the lowest systolic and lowest diastolic BP on that date as the representative BP.

Organizations that use CPT Category II codes to identify numerator compliance for this indicator must search for all codes in the following value sets and use the most recent codes during the measurement year to determine numerator compliance for both systolic and diastolic levels.

See the corresponding excel document for the following value sets:

- Systolic Less Than 140 Value Set

- Systolic Greater Than/Equal To 140 Value Set
- Diastolic Less Than 80 Value Set
- Diastolic 80–89 Value Set
- Diastolic Greater Than/Equal To 90 Value Set
- Outpatient Value Set
- Nonacute Inpatient Value Set

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#### MEDICAL RECORD

To determine if a patient is adequately controlled, the representative blood pressure must be identified. Follow the steps below.

# Step 1

- Identify the most recent blood pressure reading noted during the measurement year. Do not include readings that meet the following criteria:
- Taken during an acute inpatient stay or an ED visit.
- Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).
- Taken the same day as major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy).
- Reported by or taken by the patient
- Documentation of "VS within normal limits" or "vital signs normal".

#### Step 2

- Identify the lowest systolic and lowest diastolic reading from the most recent blood pressure notation in the medical record. If there are multiple readings for a single date, use the lowest systolic and the lowest diastolic reading on that date as the representative blood pressure. The systolic and diastolic results do not need to be from the same reading.

The patient is not numerator compliant if the BP does not meet the specified threshold or is missing, or if there is no BP reading during the measurement year or if the reading is incomplete (i.e., the systolic or diastolic level is missing).

#### **Denominator Statement**

#### **0076 Optimal Vascular Care**

Patients ages 18 years or older at the start of the measurement period AND less than 76 years at the end of the measurement period who have a diagnosis of ischemic vascular disease (Ischemic Vascular Disease Value Set) with any contact during the current or prior measurement period OR had ischemic vascular disease (Ischemic Vascular Disease Value Set) present on an active problem list at any time during the measurement period.

Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease)

#### AND

At least one established patient office visit (Established Pt Diabetes & Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.

# **0018 Controlling High Blood Pressure**

Patients 18-85 years of age who had at least two visits on different dates of service with a diagnosis of hypertension during the measurement year or the year prior to the measurement year.

#### 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period

# 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

Patients 18 years or older by the end of the measurement year discharged from an inpatient setting with an AMI, CABG, or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Patients 18 to 75 years of age by the end of the measurement year who were discharged alive for AMI, CABG or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.

#### **Denominator Details**

# **0076 Optimal Vascular Care**

Please also refer to all code lists included in the data dictionary attached in S.2b.

Patients ages 18 years or older at the start of the measurement period AND less than 76 years at the end of the measurement period who have a diagnosis of ischemic vascular disease (Ischemic Vascular Disease Value Set) with any contact during the current or prior measurement period OR had ischemic vascular disease (Ischemic Vascular Disease Value Set) present on an active problem list at any time during the measurement period.

Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease)

AND

At least one established patient office visit (Established Pt Diabetes & Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.

**Eligible Specialties:** 

Family Medicine, Internal Medicine, Geriatric Medicine, Cardiology

Eligible Providers:

Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurses (APRN)

#### **0018 Controlling High Blood Pressure**

Patients who had continuous enrollment in the measurement year. No more than one gap in continuous enrollment of up to 45 days during the measurement year. If the patient has Medicaid, then no more than a 1-month gap in coverage.

Patients are identified for the denominator using claim/encounter data.

Patients who had at least two visits on different dates of service with a diagnosis of hypertension during the measurement year or the year prior to the measurement year. Visit type need not be the same for the two visits.

Any of the following combinations meet criteria:

- Outpatient visit with any diagnosis of hypertension
- A telephone visit with any diagnosis of hypertension
- An online assessment with any diagnosis of hypertension

Only one of the two visits may be a telephone visit, an online assessment or an outpatient telehealth visit. Identify outpatient telehealth visits by the presence of a telehealth modifier or the presence of a telehealth POS code associated with the outpatient visit.

See attached code value sets.

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Time period for data collection: 12 consecutive months

Patients aged >/= 18 years on date of encounter

AND

Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.2, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.760, I25.791, I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, Z95.1, Z95.5, Z98.61

AND

Patient encounter during the performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

WITHOUT

Telehealth Modifier: GQ, GT, 95, POS 02

#### 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

#### **ADMINISTRATIVE**

Patients are identified for the eligible population in two ways: by event or by diagnosis. The organization must use both methods to identify the eligible population, but a patient only needs to be identified by one method to be included in the measure.

Event. Any of the following during the year prior to the measurement year meet criteria:

- MI. Discharged from an inpatient setting with an MI (MI Value Set)\*. Use both facility and professional claims to identify MI.
- -CABG. Discharged from an inpatient setting with a CABG (CABG Value Set)\*. Use both facility and professional claims to identify CABG.
- -PCI. Patients who had a PCI (PCI Value Set)\* in any setting.

Diagnosis. Patients who meet at least one of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.

- -At least one outpatient visit (Outpatient Value Set)\* with an IVD diagnosis (IVD Value Set)\*, or
- -At least one acute inpatient encounter (Acute Inpatient Value Set)\* with an IVD diagnosis (IVD Value Set)\*.
- \*Due to the extensive volume of codes associated with identifying the denominator for this measure, we are attaching a separate file with code value sets. See code value sets located in question S.2b.

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#### MEDICAL RECORD

Documentation of IVD in the medical record includes:

- IVD
- Ischemic heart disease
- Angina
- Coronary atherosclerosis
- Coronary artery occlusion
- Cardiovascular disease
- Occlusion or stenosis of precerebral arteries (including basilar, carotid and vertebral arteries)
- Atherosclerosis of renal artery
- Atherosclerosis of native arteries of the extremities
- Chronic total occlusion of artery of the extremities
- Arterial embolism and thrombosis
- Atheroembolism.

Note: Use paper logs, patient registries or electronic medical records (EMRs) to identify the denominator, then use the medical record to confirm patient eligibility.

#### 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Use the codes listed in the AMI Value Set, CABG Value Set or PCI Value Set to identify AMI, PCI and CABG. AMI and CABG cases should be from inpatient claims only. All cases of PCI should be included, regardless of setting (e.g., inpatient, outpatient, ED).

Identify patients as having IVD who met at least one of the two criteria below, during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.

- At least one outpatient visit (Outpatient Value Set) with an IVD diagnosis (IVD Value Set), OR
- At least one acute inpatient visit (Acute Inpatient Value Set) with an IVD diagnosis (IVD Value Set)

See the corresponding excel document for the following value sets:

- Acute Inpatient Value Set
- Outpatient Value Set
- IVD Value Set
- AMI Value Set

- CABG Value Set
- PCI Value Set

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#### MEDICAL RECORD

Documentation of IVD in the medical record includes:

- IVD
- Ischemic heart disease
- Angina
- Coronary atherosclerosis
- Coronary artery occlusion
- Cardiovascular disease
- Occlusion or stenosis of precerebral arteries (including basilar, carotid and vertebral arteries)
- Atherosclerosis of renal artery
- Atherosclerosis of native arteries of the extremities
- Chronic total occlusion of artery of the extremities
- Arterial embolism and thrombosis
- Atheroembolism.

#### **Exclusions**

#### **0076 Optimal Vascular Care**

The following exclusions are allowed to be applied to the eligible population: permanent nursing home residents, receiving hospice or palliative care services, or died prior to the end of the measurement period.

#### **0018 Controlling High Blood Pressure**

This measure excludes adults in hospice. It also excludes adults with advanced illness and frailty, as well as Medicare adults 65 years of age and older enrolled in an I-SNP or living long-term in institutional settings.

Additionally, this measure excludes patients with evidence of end-stage renal disease, dialysis, nephrectomy, or kidney transplant on or prior to the December 31 of the measurement year. It also excludes female patients with a diagnosis of pregnancy during the measurement year, and patients who had a nonacute inpatient admission during the measurement year.

## 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Denominator exceptions

- Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons)
- Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)
- Documentation of system reason(s) for not prescribing aspirin or clopidogrel (e.g., lack of drug availability, other reasons attributable to the health care system)

# 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

Patients who had documentation of use of anticoagulant medications during the measurement year.

Exclude patients using hospice services any time during the measurement period.

## 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

None

#### **Exclusion Details**

#### **0076 Optimal Vascular Care**

- \* Patient was a permanent nursing home resident at any time during the measurement period
- \* Patient was in hospice or receiving palliative care at any time during the measurement period
- \* Patient died prior to the end of the measurement period

# **0018 Controlling High Blood Pressure**

#### ADMINISTRATIVE CLAIMS

Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the service began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data.

Exclude adults who meet any of the following criteria:

- Medicare members 66 years of age and older as of December 31 of the measurement year who meet either of the following:
- -- Enrolled in an Institutional SNP (I-SNP) any time during the measurement year.
- -- Living long-term in an institution any time during the measurement year as identified by the LTI flag in the Monthly Membership Detail Data File. Use the run data of the file to determine if a patient had an LTI flag during the measurement year.
- Members 66-80 years of age as of December 31 of the measurement year (all product lines) with frailty and advanced illness. Patients must meet BOTH of the following frailty and advanced illness criteria to be excluded:
- 1. At least one claim/encounter for frailty during the measurement year.
- 2. Any of the following during the measurement year or the year prior to the measurement year (count services that occur over both years):
- -- At least two outpatient visits, observation visits, ED visits, nonacute inpatient encounters or nonacute inpatient discharges (instructions below) on different dates of service, with an advanced illness diagnosis. Visit type need not be the same for the two visits. To identify a nonacute inpatient discharge:
- 1. Identify all acute and nonacute inpatient stays.
- 2. Confirm the stay was for nonacute care based on the presence of a nonacute code on the claim.
- 3. Identify the discharge date for the stay.
- -- At least one acute inpatient encounter with an advanced illness diagnosis.

- -- At least one acute inpatient discharge with an advanced illness diagnosis. To identify an acute inpatient discharge:
- 1. Identify all acute and nonacute inpatient stays.
- 2. Exclude nonacute inpatient stays.
- 3. Identify the discharge date for the stay.
- -- A dispensed dementia medication.

**DEMENTIA MEDICATIONS** 

**DESCRIPTION / PRESCRIPTION** 

Cholinesterase inhibitors / Donepezil; Galantamine; Rivastigmine

Miscellaneous central nervous system agents / Memantine

- Members 81 years of age and older as of December 31 of the measurement year (all product lines) with frailty during the measurement year.

Exclude patients with evidence of end-stage renal disease, dialysis, nephrectomy, or kidney transplant on or prior to December 31 of the measurement year, female patients with a diagnosis of pregnancy during the measurement year, and patients who had a nonacute inpatient admission during the measurement year. To identify nonacute inpatient admissions:

- 1. Identify all acute and nonacute inpatient stays.
- 2. Confirm the stay was for nonacute care based on the presence of a nonacute code on the claim.
- 3. Identify the admission date for the stay.

See attached code value sets.

MEDICAL RECORD REVIEW

Exclusionary evidence in the medical record must include a note indicating diagnosis of pregnancy or evidence of a nonacute inpatient admission during the measurement year, or evidence of ESRD, dialysis, nephrectomy or kidney transplant any time during the patient's history through December 31 of the measurement year.

#### 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Time period for data collection: During the encounter within the 12-month period

Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. The AHA and ACC exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure Coronary Artery Disease (CAD): Antiplatelet Therapy, exceptions may include medical reason(s) (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons), patient reason(s) (e.g., patient declined, other patient reasons), or system reason(s) (e.g., lack of drug availability, other reasons attributable to

the health care system) for not prescribing aspirin or clopidogrel. Although this methodology does not require the external reporting of more detailed exception data, the AHA and ACC recommend that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The AHA and ACC also advocate the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.

#### Additional details:

Append a modifier to CPT Category II code:

4086F-1P: Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons)

4086F-2P: Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)

4086F-3P: Documentation of system reason(s) for not prescribing aspirin or clopidogrel (e.g., lack of drug availability, other reasons attributable to the health care system)

# 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

Exclude patients using hospice services (G9723) any time during the measurement period.

Patients who had documentation of use of anticoagulant medications during the measurement year.

#### ANTICOAGULANT MEDICATIONS

- Apixaban
- Argatroban
- Bivalirudin
- Dabigatran
- Dalteparin
- Desirudin
- Edoxaban
- Enoxaparin
- Fondaparinux
- Heparin
- Lepirudin
- Rivaroxaban
- Tinzaparin
- Warfarin

## 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

N/A

#### Risk Adjustment

# **0076 Optimal Vascular Care**

Statistical risk model 112459 | 148276 112459 | 148276

# **0018 Controlling High Blood Pressure**

No risk adjustment or risk stratification 116000| 123834| 135810| 140881| 117446| 141015 116000| 123834| 135810| 140881| 117446| 141015

## 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

No risk adjustment or risk stratification 140560 | 107246 140560 | 107246

## 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

No risk adjustment or risk stratification 116000| 123834| 140881 116000| 123834| 140881

## 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

No risk adjustment or risk stratification 116000| 123834| 140881| 141015 116000| 123834| 140881| 141015

# **Stratification**

#### **0076 Optimal Vascular Care**

The measure for the ischemic vascular disease population is not currently stratified when publicly reported on our consumer website, MN HealthScores. The data is, however, stratified by insurance product in our 2019 Health Care Disparities Reports by insurance type and race/ethnicity/language and country of origin.

https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-Final.pdf https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-By-RELC.pdf These reports note gaps in outcomes for ischemic vascular disease patients in public programs versus other purchasers (6.6%) and disparities by race and ethnicity (as much as 12% for Black or African American and American Indian or Alaskan Natives)

## **0018 Controlling High Blood Pressure**

N/A

#### 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Consistent with CMS' Measures Management System Blueprint and national recommendations put forth by the IOM (now NASEM) and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer

#### 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

N/A

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

NA

# Type Score

#### **0076 Optimal Vascular Care**

Ratio better quality = higher score

#### **0018 Controlling High Blood Pressure**

Rate/proportion better quality = higher score

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Rate/proportion better quality = higher score

# 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

Rate/proportion better quality = higher score

## 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Rate/proportion better quality = higher score

# Algorithm

#### 0076 Optimal Vascular Care

This measure is calculated by submitting a file of individual patient values (e.g. blood pressure, tobacco status, etc) to a HIPAA secure data portal. Programming within the data portal determines if each patient is a numerator case and then a rate is calculated for each clinic site. Please also refer to the measure calculation algorithms submitted within the data dictionary for this measure.

If any component of the numerator is noncompliant for any one of the four components, then the patient is numerator noncompliant for the composite patient level all-or none optimal vascular care measure.

Numerator logic is as follows:

**Blood Pressure Component:** 

Is Blood Pressure date in the measurement year? If no, is numerator noncompliant for this component. If yes, assess next variable.

BP Systolic < 140? If no, is numerator noncompliant for this component. If yes, assess next variable.

BP Diastolic < 90? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component.

Note: BP needs to occur during the measurement year AND most recent BP systolic less than 140 AND BP diastolic less than 90

Assess next component.

Cholesterol Statin Use Component:

Is the patient on a statin medication? If yes, and most recent date is in the measurement year, is numerator compliant for this component. If no, assess next variable.

For patients not on a statin the following variables are used to assess numerator compliance related to contraindications or exceptions to statin use:

Is the patient age 18 to 20? If yes, numerator compliant (free-pass), if no, assess next variable.

Patients age 21 to 75. Is their most recent LDL in the last five years less than 40? If Yes, numerator compliant (free-pass), if no, assess next variable.

Does the patient have a valid contraindication/ exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, ends stage renal disease on dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with documentation of trying a statin at least once in the last 5 years)? If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.

Note: Patient is either on a statin (prescribed/ ordered) during the measurement year or has a valid exception either by age, presence or absence of ischemic vascular disease, low untreated LDL or valid contraindication/ exception.

Assess next component.

**Tobacco-Free Component:** 

Is Tobacco Status = 1 (Tobacco Free) and Tobacco Assessment Date a valid date? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component. Assess next component.

Daily Aspirin/ Anti-platelet Component:

Is the patient on daily aspirin or an antiplatelet? If yes, and date of most recent aspirin/anti-platelet is in the measurement year is numerator compliant, if no, assess next variable.

Does the patient have a valid contraindication/ exception to aspirin anti-platelet use defined as one of the following: anti-coagulant medication, history of gastrointestinal bleed, history of intracranial bleed, allergy, or physician documented reasons related to: risk of drug interaction, use of NSAIDS, uncontrolled HTN or gastro-intestinal reflux disease. If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.

Note: Patients are either on daily aspirin (indicated/ prescribed/ ordered) or an antiplatelet prescribed/ ordered) during the measurement year or has a valid contraindication/ exception.

If all of the above numerator components are in compliance, then the patient calculated as a numerator case for the optimal vascular care measure. 112459 | 148276

#### **0018 Controlling High Blood Pressure**

STEP 1: Determine the eligible population. To do so, identify adults who meet all specified criteria.

- AGES: 18-75 years as of December 31 of the measurement year.
- EVENT/DIAGNOSIS: Identify patients with hypertension in two ways: by claim/encounter data and by medical record data. SEE responses in S.6 and S.7 for eligible population and denominator criteria and details.
- STEP 2: Exclude patients who meet the exclusion criteria. SEE responses in S.8 and S.9 for denominator exclusion criteria and details.
- STEP 3: Determine the number of patients in the eligible population who had a blood pressure reading during the measurement year through the search of administrative data systems or medical record data.
- STEP 4: Identify the lowest systolic and lowest diastolic blood pressure reading from the most recent blood pressure notation in the medical record.
- STEP 5: Determine whether the result was <140/90 mm Hg.

STEP 6: Calculate the rate by dividing the numerator (STEP 5) by the denominator (after exclusions) (STEP 2). 116000 | 123834 | 135810 | 140881 | 117446 | 141015

# 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

Calculating the performance rate:

- 1. Define the initial population. The initial population is identified through a common set of characteristics that define the overall group of patients or other unit of measurement targeted for evaluation
- 2. Define the denominator by identifying the subset of the initial population that meets the denominator criteria. Note: in some cases, the initial population and denominator are identical
- 3. Determine the numerator by identifying the subset of the denominator that meets the numerator criteria
- 4. From the patients who did not meet the numerator criteria, determine if the provider has documented whether each patient represents an exception. Subtract from the denominator those patients that meet the conditions for a denominator exception; although the exception cases are removed from the denominator for the measure calculation, the exception rate (i.e., percentage of patients with valid exceptions) should be calculated and reported along with performance rates to highlight variations in care
- 5. Calculate the performance rate

A patient not meeting the numerator criteria and without a valid and documented exception represents a quality failure. 140560 | 107246

## 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

Step 1: Determine the denominator

Patients 18 years of age or older by the end of the measurement year AND who were discharged from an inpatient setting for an AMI, CABG or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.

Step 2: Exclude patients who meet the exclusion criteria

Patients on anticoagulant therapy.

Step 3: Determine the numerator

Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year.

Step 4: Calculate the rate by dividing the numerator (Step 3) by the denominator (after exclusions) (Step 2). 116000 | 123834 | 140881

# 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

Step 1: Determine the denominator

Patients 18 to 75 years of age by the end of the measurement year AND who were discharged alive for AMI, CABG or PCI during the 12 months prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.

Step 2: Determine the numerator

Patients whose most recent blood pressure is adequately controlled (<140/90 mm Hg) during the measurement year. 116000| 123834| 140881| 141015

#### Submission items

#### **0076 Optimal Vascular Care**

5.1 Identified measures: 0067: Coronary Artery Disease (CAD): Antiplatelet Therapy

0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

0073: Ischemic Vascular Disease (IVD): Blood Pressure Control

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: There are some differences noted in the denominator definitions, source data and settings of care. #0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet AND #0073 Ischemic Vascular Disease (IVD): Blood Pressure Control are most closely related to the components of our measure, however this measure focuses on the inpatient setting and only patients discharged with acute myocardial infarction, coronary bypass graft or percutaneous coronary interventions. #0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy focuses only on patients with coronary artery disease; however, from specifications available through QPS not able to compare diagnosis code definitions. This measure, #0076 Optimal Vascular Care is more inclusive with a denominator definition of ischemic vascular disease (atherosclerosis of coronary and peripheral arteries) #0543 was removed from the related list because although related, the measure's endorsement was removed in 2015.

5b.1 If competing, why superior or rationale for additive value: There are other similar measures that address three of the four components separately, but no currently endorsed measure exists that is a patient level all-or-none composite measure.

#### **0018 Controlling High Blood Pressure**

5.1 Identified measures: 0061 : Comprehensive Diabetes Care: Blood Pressure Control (<140/90 mm Hg)

2602 : Controlling High Blood Pressure for People with Serious Mental Illness

2606 : Diabetes Care for People with Serious Mental Illness: Blood Pressure Control (<140/90 mm Hg)

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: There are several related measures that assess blood pressure control but are either focused on different population, use different data sources or are specified at different levels of accountability than NQF 0018. Measure 0061 is NQF endorsed as a single measure that uses health plan reported data to assess the percentage of patients 18-75 years of age with diabetes (type 1 and type 2) whose most recent blood pressure level is <140/90 mm Hg. Measure 2602 is NQF endorsed as a single measure that uses health plan reported data to assess the percentage of patients 18-85 years of age with serious mental illness who had a diagnosis of hypertension and whose blood pressure was adequately controlled during the measurement year. Measure 2606 is NQF endorsed as a single measure that uses health plan reported data to assess the percentage of patients 18-75 years of age with a serious mental illness and diabetes (type 1 and type 2) whose most recent blood pressure reading during the measurement year is <140/90 mm Hg. Measure 0076 is NQF endorsed as a composite measure (all or nothing) that uses physician reported data to assess the percentage of adult ischemic vascular disease patients, 18-75 years of age, who have optimally managed modifiable risk factors including blood pressure and three other

indicators. Measure 0729 is NQF endorsed as a composite measure (all or nothing) that uses physician reported data to assess the percentage of adult diabetes patients, 18-75 years of age, who have optimally managed modifiable risk factors including blood pressure and four other indicators. HARMONIZED MEASURE ELEMENTS: All measures described above focus on a blood pressure target of <140/90 mm Hg. UNHARMONIZED MEASURE ELEMENTS: - Data Source and Level of Accountability: Measures 0018, 0061, 2602, and 2606 are collected through administrative claims and/or medical record review using health plan reported data. Measures 0076 and 0729 are collected through medical record abstraction and reported at the physician level of accountability. - Population Focus: Measure 0018 is focused on the general population of people with hypertension while the other measures focus on either diabetes, serious mental illness with diabetes, or serious mental illness with hypertension. - Age Range: Measures 0018 and 2602 focus on adults 18-85 while the other measures focus on adults 18-75. IMPACT ON INTERPRETABILITY? AND DATA COLLECTION BURDEN: The differences between measures 0018, 0061, 2602, and 2606 do not have an impact on interpretability of?publicly?reported rates or an impact on data collection burden as the measures are focused on different populations. The differences between 0018, 0076, and 0729 also do not have an impact on interpretability of publicly reported rates or an impact on data collection burden because the data for each measure is collected from different data sources by different entities.

5b.1 If competing, why superior or rationale for additive value: NA

## 0067 Coronary Artery Disease (CAD): Antiplatelet Therapy

5.1 Identified measures: 0465 : Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: The patient population of 0465 is adults undergoing carotid endarterectomy, whereas the patient population of 067 is adults with coronary artery disease.

5b.1 If competing, why superior or rationale for additive value: Not applicable.

## 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

5.1 Identified measures: 0142: Aspirin prescribed at discharge for AMI

0067 : Coronary Artery Disease (CAD): Antiplatelet Therapy

0076:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: DUE TO THE TEXT LIMIT IN THIS SECTION – WE ARE PROVIDING OUR ANSWER FOR 5a.2 IN SECTION 5b.1.

 $5b.1\ \text{If competing, why superior or rationale for additive value: ANSWER FOR SECTION } 5a.2$ 

Our current measure, NQF 0068 – Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet, assesses the percentage of patients 18 years of age and older who were discharged from an inpatient setting with an acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary intervention (PCI) during the 12 months prior to the measurement year, AND patients who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year, who had documentation of the routine use of aspirin or another antiplatelet during the measurement year. NQF 0068 uses administrative claims, electronic clinical data, electronic health record data, and paper medical records from the

ambulatory care setting, providing a wide array of options for how data can be collected and reported.

The following is a description of the differences and the impact on interpretability and data collection burden between NQF 0068 and each related measure listed in 5.1a:

#### NQF 0142 - ASPIRIN PRESCRIBED AT DISCHARGE FOR AMI

This measure assesses the percentage of AMI patients, 18 years and older, who are prescribed aspirin at hospital discharge. The measure population only includes patients who have had an AMI, whereas NQF 0068 includes patients who have had an AMI, CABG or PCI procedure, and patients who have diagnoses consistent with ischemic vascular disease. NQF 0142 focuses only on aspirin prescribed at discharge while NQF 0068 focuses on documentation of the use of any antiplatelet medication during the measurement year. NQF 0142 is a facility-level measure that uses administrative claims and paper medical records from the inpatient setting; NQF 0068 is a physician-level measure that uses administrative claims, electronic clinical data, electronic health record data, and paper medical records from the ambulatory care setting.

There is no impact on interpretability of publically-reported rates or added burden of data collection because the focus of each measure is different, the accountable entity is different and the data for each measure is collected from different data sources by different entities. Additionally, both use value sets of codes to identify patients with AMI that do not conflict.

#### NQF 0067 - CHRONIC STABLE CORONARY ARTERY DISEASE: ANTIPLATELET THERAPY

This measure assesses the percentage of patients aged 18 years and older with a diagnosis of coronary artery disease (CAD) who were seen by a physician within a 12-month period and who were prescribed aspirin or clopidogrel. The focus of this measure is very similar to NQF 0068 in that it assesses the routine use of antiplatelet therapy in a twelve-month period for patients with CAD. However, NQF 0068 includes more antiplatelet medications than just aspirin or clopidogrel and includes a broader population of patients with cardiovascular disease than just those with CAD.

Although NQF 0067 and NQF 0068 are both physician-level measures that are specified to collect data from administrative claims, electronic clinical data, electronic health record data, and paper medical records from the ambulatory care setting, the impact on interpretability of publically-reported rates or added burden of data collection should be minimal because NQF 0067 is currently only reported through registry data. Additionally, NQF 0067 is focused on only on patients with CAD, while NQF 0068 is focused on a broader population of patients with cardiovascular disease who would benefit from the use of antiplatelet medications.

## NQF 0076 - OPTIMAL VASCULAR CARE

This composite measure assesses the percentage of adult patients ages 18 to 75 who have ischemic vascular disease with optimally-managed modifiable risk factors (blood pressure, tobacco-free status, daily aspirin use) at their most recent visit with a physician during the measurement year. While the focus populations for NQF 0076 and NQF 0068 are very similar, NQF 0076 is a composite that includes assessment of blood pressure control and tobacco use status. NQF 0068 assesses the routine use of aspirin or other antiplatelet medications while NQF 0076 focuses only on aspirin use. NQF 0076 does not use administrative claims though it does use electronic clinical data, electronic health record

data, and paper medical records from the ambulatory care setting, which is similar to NQF 0068.

Despite the similarities, there should be minimal impact on interpretability of publically-reported rates or added burden of data collection between the two measures since NQF 0076 is a composite of multiple indicators while NQF 0068 is focused only on antiplatelet therapy.

NQF 2452 – PERCUTANEOUS CORONARY INTERVENTION (PCI): POST-PROCEDURAL OPTIMAL MEDICAL THERAPY (NOTE: UNABLE TO SELECT IN 5.a1)

NQF 2452 is a composite measure that assesses the percentage of patients undergoing PCI who receive prescriptions for all medications (aspirin, P2Y12 and statins) for which they are eligible for at discharge. The measure population for NQF 2452 is patients undergoing PCI while NQF 0068 includes patient who have had an AMI, CABG or PCI procedure, and patients who have diagnoses consistent with ischemic vascular disease. NQF 2452 assesses the prescription of aspirin, P2Y12 agents, and statins at discharge; NQF 0068 assesses documentation of use of antiplatelet medications during the measurement year. NQF 2452 is a physician-level measure that uses data from registries while NQF 0068 is a physician-level measure that uses administrative claims, electronic clinical data, electronic health record data, and paper medical records from the ambulatory care setting.

There is no impact on interpretability of publically-reported rates or added burden of data collection because the focus of each measure is different and the data for each measure is collected from different data sources by different entities.

NQF 0964 – THERAPY WITH ASPIRIN, P2Y12 INHIBITOR, AND STATIN AT DISCHARGE FOLLOWING PCI IN ELIGIBLE PATIENTS (NOTE: UNABLE TO SELECT IN 5.a1)

NQF 0964 is a composite measure that assesses the percentage of patients undergoing PCI who receive prescriptions for all medications (aspirin, P2Y12 and statins) for which they are eligible for at discharge. The measure population for NQF 0964 is patients undergoing PCI while NQF 0068 includes patient who have had an AMI, CABG or PCI procedure, and patients who have diagnoses consistent with ischemic vascular disease. NQF 0964 assesses the prescription of aspirin, P2Y12 agents, and statins at discharge; NQF 0068 assesses documentation of use of antiplatelet medications during the measurement year. NQF 0964 is a facility-level measure that uses data from registries while NQF 0068 is a physician-level measure that uses administrative claims, electronic clinical data, electronic health record data, and paper medical records from the ambulatory care setting.

There is no impact on interpretability of publically-reported rates or added burden of data collection because the focus of each measure is different, the accountable entity is different and the data for each measure is collected from different data sources by different entities.

#### ANSWER FOR SECTION 5b.1

Our current measure, NQF 0068, has a long history of use and is implemented in four national programs: PQRS, EHR Incentive Program, CMS ACO Shared Savings Program, and the Heart/Stroke Recognition Program.

## 0073 Ischemic Vascular Disease (IVD): Blood Pressure Control

- 5.1 Identified measures:
- 5a.1 Are specs completely harmonized?
- 5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value: NA

Related Measures: None

# Comparison of NQF #0290 and NQF #0288

0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

#### Steward

#### 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

Centers for Medicare and Medicaid Services

#### 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

Centers for Medicare and Medicaid Services

#### Description

## 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

This measure calculates the median time from emergency department arrival to time of transfer to another facility for acute coronary intervention.

## 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

This measure calculates the percentage of Emergency Department (ED) acute myocardial infarction (AMI) patients with ST-segment elevation on the electrocardiogram (ECG) closest to arrival time receiving fibrinolytic therapy during the ED stay and having a time from ED arrival to fibrinolysis of 30 minutes or less. The measure is calculated using chartabstracted data, on a rolling, quarterly basis and is publicly reported, in aggregate, for one calendar year. The measure has been publicly reported, annually, by CMS as a component of its Hospital Outpatient Quality Reporting (HOQR) Program since 2012.

#### Type

#### 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

**Process** 

## 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

**Process** 

#### Data Source

#### 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

Electronic Health Records, Paper Medical Records An electronic data collection tool is made available from vendors or facilities can download the free CMS Abstraction & Reporting Tool (CART). Paper tools for manual abstraction, which are posted on www.QualityNet.org, are also available for the CART tool. These tools are posted on www.QualityNet.org.

Available at measure-specific web page URL identified in S.1 Attachment 0290\_Annual\_Update\_Code\_Set\_-2019-.xlsx

#### 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

Claims (Only), Other, Paper Records An electronic data collection tool is made available from vendors or facilities can download the free CMS Abstraction & Reporting Tool (CART). Paper tools for manual abstraction, which are posted on www.QualityNet.org, are also available for the CART tool. These tools are posted on www.QualityNet.org.

Available at measure-specific web page URL identified in S.1 Attachment NQF\_0288\_MeasureCodeSet.xlsx

#### Level

# 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

Facility

## 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

Facility, Other

# Setting

## 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

**Emergency Department and Services** 

# 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

Hospital

# **Numerator Statement**

# 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

This measure is reported as a continuous variable statement: Time (in minutes) from emergency department arrival to transfer to another facility for acute coronary intervention.

#### 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

The number of ED AMI patients whose time from ED arrival to fibrinolysis is 30 minutes or less.

#### **Numerator Details**

## 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

NQF #0290 is a continuous measure; therefore, the numerator and denominator details contained in Section S.5 and S.7 are the same.

The following data elements are used to define the measure population:

- E/M Code
- ICD-10-CM Principal Diagnosis Code
- Initial ECG Interpretation
- Transfer for Acute Coronary Intervention

The measure population includes patients with a diagnosis of acute myocardial infarction (AMI) and ST-segment elevation on the electrocardiogram (ECG) performed closest to emergency department (ED) arrival who are transferred from the ED to a short-term general hospital for inpatient care, or to a federal healthcare facility specifically for an acute coronary intervention (ACI). Patients are included in the measure population if:

- Initial ECG Interpretation is equal to "Yes"; and
- Fibrinolytic Administration is equal to "No"; and
- Transfer for Acute Coronary Intervention is equal to "[1] There was documentation the patient was transferred from this facility's emergency department to another facility specifically for acute coronary intervention."

Median times to transfer within a three-month period are aggregated, on a rolling basis, for AMI patients who are transferred for ACI.

#### 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

The numerator is defined by six evaluation and management (E/M) codes and 18 ICD-10-CM diagnosis codes included in the value set for this measure; these detailed lists can be found in the Excel workbook provided for Section S2b.

The numerator includes patients age 18 or older who have ST-elevation on the ECG closest to ED arrival and who receive fibrinolytic therapy within 30 minutes or less of ED arrival. There are no numerator exceptions.

#### **Denominator Statement**

# 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

This measure is reported as a continuous variable statement: Time (in minutes) from emergency department arrival to transfer to another facility for acute coronary intervention.

# 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

The number of ED AMI patients with ST-segment elevation on ECG who received fibrinolytic therapy.

#### **Denominator Details**

# 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

NQF #0290 is a continuous measure; therefore, the numerator and denominator details contained in Section S.5 and S.7 are the same.

The following data elements are used to define the measure population:

- E/M Code
- ICD-10-CM Principal Diagnosis Code
- Initial ECG Interpretation
- Transfer for Acute Coronary Intervention

The measure population includes patients with a diagnosis of acute myocardial infarction (AMI) and ST-segment elevation on the electrocardiogram (ECG) performed closest to emergency department (ED) arrival who are transferred from the ED to a short-term general hospital for inpatient care, or to a federal healthcare facility specifically for an acute coronary intervention (ACI). Patients are included in the measure population if:

- Initial ECG Interpretation is equal to "Yes"; and
- Fibrinolytic Administration is equal to "No"; and
- Transfer for Acute Coronary Intervention is equal to "[1] There was documentation the patient was transferred from this facility's emergency department to another facility specifically for acute coronary intervention."

#### 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

The denominator is defined by six evaluation and management (E/M) codes and 18 ICD-10-CM diagnosis codes included in the value set for this measure; these detailed lists can be found in the Excel workbook provided for Section S2b.

The denominator includes patients who are discharged or transferred to a short-term general hospital for inpatient care or to a Federal healthcare facility, who have ST-segment elevation on the ECG performed closest to ED arrival, and who receive fibrinolytic therapy.

#### **Exclusions**

# 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

**Excluded Populations:** 

- Patients less than 18 years of age; or
- Patients receiving fibrinolytic therapy administration.

# 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

Patients are excluded who are less than 18 years of age. Additionally, patients who are not administered fibrinolytic therapy within 30 minutes AND had a Reason for Delay in Fibrinolytic Therapy, as defined in the Data Dictionary, are also excluded.

#### **Exclusion Details**

#### 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

The following data elements are used to define the measure exclusions:

- Birthdate
- Fibrinolytic Therapy Administration

#### 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

Cases are excluded for any patients that meet any of the following criteria:

- Patients less than 18 years of age.
- Patients who did not receive Fibrinolytic Administration within 30 minutes (Fibrinolytic Administration Date and Fibrinolytic Administration Time (in minutes) minus Outpatient Encounter Date and Arrival Time (in minutes) is greater than 30 minutes) AND had a Reason for Delay in Fibrinolytic Therapy, as defined in the Data Dictionary.

# Risk Adjustment

## 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

No risk adjustment or risk stratification

109921| 138817| 138553| 141592| 146188| 113612| 141015| 151003| 150979 109921| 138817| 138553| 141592| 146188| 113612| 141015| 151003| 150979

# 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

No risk adjustment or risk stratification 109921 | 138817 | 138553 | 141592

109921| 138817| 138553| 141592

# Stratification

0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

Not applicable; this measure does not stratify its results.

# Type Score

0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

Continuous variable better quality = lower score

0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

Other (specify): Percentage better quality = higher score

# Algorithm

#### 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

Measure algorithm is available in the attached Measure Information Form. Measure algorithm is as follows:

- 1. Start. Run all cases that are included in the AMI Hospital Outpatient Population Algorithm and pass the edits defined in the Data Processing Flow through this measure. Proceed to Initial ECG Interpretation.
- 2. Check Initial ECG Interpretation.
- a. If Initial ECG Interpretation is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If Initial ECG Interpretation equals No, the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- c. If Initial ECG Interpretation equals Yes, the case will proceed to Fibrinolytic Administration.
- 3. Check Fibrinolytic Administration.
- a. If Fibrinolytic Administration is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If Fibrinolytic Administration equals Yes, the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- c. If Fibrinolytic Administration equals No, the case will proceed to Transfer for Acute Coronary Intervention.
- 4. Check Transfer for Acute Coronary Intervention.
- a. If Transfer for Acute Coronary Intervention is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If Transfer for Acute Coronary Intervention equals 2 or 3, the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

- c. If Transfer for Acute Coronary Intervention equals 1, the case will proceed to ED Departure Date.
- 5. Check ED Departure Date.
- a. If ED Departure Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If ED Departure Date equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- c. If ED Departure Date equals Non-UTD Value, the case will proceed to ED Departure Time.
- 6. Check ED Departure Time.
- a. If ED Departure Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If ED Departure Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- c. If ED Departure Time equals Non-UTD Value, the case will proceed to Arrival Time.
- 7. Check Arrival Time.
- a. If Arrival Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
- b. If Arrival Time equals Non-UTD Value, the case will proceed to the Measurement Value.
- 8. Calculate the Measurement Value. Time in minutes is equal to the ED Departure Date and ED Departure Time (in minutes) minus the Outpatient Encounter Date and Arrival Time (in minutes).
- 9. Check the Measurement Value.
- a. If Measurement Value is less than 0 minutes, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If Measurement Value is greater than or equal to 0 minutes, the case will proceed to Reason for Not Administering Fibrinolytic Therapy.
- 10. Check Reason for Not Administering Fibrinolytic Therapy.
- a. If Reason for Not Administering Fibrinolytic Therapy is missing, the case will proceed to a Measure Category Assignment of X and the case will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If Reason for Not Administering Fibrinolytic Therapy equals 1, 2, or 3, the case will proceed to a Measure Category Assignment of D1, the OP-3a Overall Rate. Initialize the Measure Category Assignment for OP-3b and OP-3c equal to B. Do not change the Measure Category Assignment that was already calculated for the overall rate of OP-3a. Proceed to Reason for Not Administering Fibrinolytic Therapy.
- 11. Check Reason for Not Administering Fibrinolytic Therapy.
- a. If Reason for Not Administering Fibrinolytic Therapy equals 1 or 2, the case will proceed to a Measure Category Assignment of D2, the OP-3c Quality Improvement Rate. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b. If Reason for Not Administering Fibrinolytic Therapy equals 3, the case will proceed to a Measure Category Assignment of D, the OP-3b Reporting Rate. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

Submission Threshold

In order to reduce the burden on hospitals that treat a low number of patients but otherwise meet the submission requirements for a particular quality measure, hospitals that have five or fewer cases in a quarter (both Medicare and non-Medicare) for any measure set (i.e., Stroke) will not be required to submit patient level data for the entire measure set for that quarter. (Hospital Outpatient Quality Reporting Specifications Manual, Release Notes Version: 13.0a) 109921 | 138817 | 138553 | 141592 | 146188 | 113612 | 141015 | 151003 | 150979

# 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

This measure calculates the percentage of ED AMI patients with ST-segment elevation on the ECG closest to arrival time receiving fibrinolytic therapy during the ED stay and having a time from ED arrival to fibrinolysis of 30 minutes or less. The patient population is determined from two algorithms; the AMI Hospital Outpatient Population algorithm as well as the NQF #0288 measure-specific algorithm. The measure is calculated based on four consecutive quarters of hospital outpatient claims data, as follows:

- 1. Check E/M Code; if on Table 1.0 (in the Excel workbook provided for Section S2b), proceed
- 2. Check Discharge Code; include patients with discharge code of 4a or 4d
- 3. Calculate Patient Age (Outpatient Encounter Date Birthdate)
- 4. Check Patient Age; if >= 18, proceed
- 5. Check ICD-10-CM Principal Diagnosis Code; if on Table 1.1 (in the Excel workbook provided for Section S2b), proceed to the measure-specific algorithm
- 6. Check Initial ECG Interpretation; if "Yes," proceed
- 7. Check Fibrinolytic Administration; if "Yes," proceed, record as the denominator
- 8. Check Fibrinolytic Administration Date; if a Non-Unable to Determine (UTD) value, proceed
- 9. Check Fibrinolytic Administration Time; if a Non-UTD value, proceed
- 10. Check Arrival Time; if a Non-UTD value, proceed
- 11. Calculate Time to Fibrinolysis (Fibrinolytic Administration Time minus Arrival Time)
- 12. Check Time to Fibrinolysis; if >= 0 min and <= 30 min, record as the numerator. If > 30 min and = 360 min, proceed
- 13. Check Reason for Delay in Fibrinolytic Therapy; if "Yes," patient is excluded from measure population. If "No," record in the denominator. Aggregate denominator and numerator counts by Medicare provider number
- 14. Measure = numerator counts / denominator counts [The value should be recorded as a percentage] 109921 | 138817 | 138553 | 141592

#### Submission items

# 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention

5.1 Identified measures: 0288 : Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: NQF #0290 and NQF #0288 are both in the Hospital OQR Program. These measures have the same initial patient population — patients with AMI and ST-segment elevation on the ECG performed closest to hospital arrival. While the target populations are the same, the focus of the measures is different. NQF #0288 focuses on the timely administration of fibrinolytic therapy and NQF# 0290 focuses on the timely transfer of patients who require a PCI. These two measures share several key data elements (i.e., Initial ECG Interpretation, Fibrinolytic Administration, and Arrival Time). The specifications for these two measures are generally aligned, where possible.

5b.1 If competing, why superior or rationale for additive value: No competing measures that address both the same measure focus and target population as NQF #0290 were identified.

#### 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

5.1 Identified measures: 0290 : Median Time to Transfer to Another Facility for Acute Coronary Intervention

0163: Primary PCI received within 90 minutes of hospital arrival

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: NQF #0288 and NQF #0290 are both in the HOQR Program, and NQF #0163 is included in the Hospital Inpatient Quality Reporting (HIQR) Program as an electronically specified clinical quality measure (eCQM). The two measures use the same initial patient population – patients with AMI and ST-segment elevation on the ECG performed closest to emergency department arrival who are transferred from the emergency department to a short-term general hospital for inpatient care, or to a Federal healthcare facility. While the target populations are the same, the focus of the two measures is different. NQF #0288 focuses on the timely administration of fibrinolytic therapy and the focus of NQF #0290 is the timely transfer of patients who require PCI. Although NQF #0163 (used in the HIQR Program) is similar to NQF #0288 (HOQR), the two measures serve different target populations and purposes: NQF #0288 focuses on timely administration of fibrinolytic therapy, while NQF #0163 focuses on the timely initiation of PCI for a patient who arrives at a PCI-capable hospital. All three measures share a number of key data elements (i.e., Initial ECG Interpretation, Fibrinolytic Administration, and Arrival Time). The specifications for the three measures are generally aligned, where possible.

5b.1 If competing, why superior or rationale for additive value: No competing measures that address both the same measure focus and target population as NQF #0288 were identified.

# **Appendix F: Pre-Evaluation Comments**

Comments received as of June 12, 2020.

Topic	Commenter	Comment
NQF #0290 Median Time to Transfer to Another Facility for Acute Coronary Intervention	Submitted by Federation of American Hospitals (FAH)	The Federation of American Hospitals (FAH) appreciates the opportunity to comment on this measure prior to the Standing Committee's evaluation. Specifically, the FAH asks the committee to consider whether a measure that has been endorsed since 2007 should be required to submit testing on the measure score validity and not just data element validity. For example, it would be useful to understand if this process measure is either correlated to other performance measures, distinguishes differences in quality between hospitals, or is evaluated through some other empiric approach to demonstrate that it is a valid indicator of quality. Given the generally high-performance scores and the potential burden of data collection, the FAH believes that it is important that this question be addressed for measures that are widely used over many years.

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