



# Cardiovascular, Spring 2020 Cycle: CDP Report

**DRAFT REPORT FOR COMMENT  
AUGUST 5, 2020**

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## Executive Summary

Cardiovascular disease (CVD) is a significant burden in the United States, leading to approximately one in four deaths per year.<sup>1</sup> Considering the effect of CVD, measures that assess clinical care performance and patient outcomes are critical to reducing the negative impacts of CVD.

For this project, the Standing Committee evaluated four measures undergoing maintenance review against NQF's standard evaluation criteria. The Committee recommended all four measures for continued endorsement. The recommended measures are:

- **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)
- **NQF 0067** Coronary Artery Disease (CAD): Antiplatelet Therapy (American Heart Association)
- **NQF 0076** Optimal Vascular Care (MN Community Measurement)
- **NQF 0290** Median Time to Transfer to Another Facility for Acute Coronary Intervention (Centers for Medicare and Medicaid Services (CMS)/Mathematica)

Brief summaries of the measures currently under review are included in the body of the report; detailed summaries of the Committee's discussion and ratings of the criteria for each measure are in [Appendix A](#).

## Introduction

Cardiovascular disease (comprising coronary artery disease, heart failure, stroke, and hypertension) is highly prevalent in the United States, affecting 48% of adults age 20 and older.<sup>2</sup> Heart disease is the leading cause of death in the United States and stroke is the fifth leading cause.<sup>3</sup>

The measures in the Cardiovascular portfolio have been grouped into various conditions, diseases, or procedures related to cardiovascular health. These topic areas include primary prevention and screening, coronary artery disease (CAD), ischemic vascular disease (IVD), acute myocardial infarction (AMI), cardiac catheterization, percutaneous catheterization intervention (PCI), heart failure (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 ([Appendix C](#)) oversees NQF's portfolio of Cardiovascular measures ([Appendix B](#)) that includes measures for acute myocardial infarction (AMI), cardiac catheterization/percutaneous coronary intervention (PCI), coronary artery disease (CAD)/ischemic vascular disease (IVD), cardiac imaging, heart failure, hyperlipidemia, hypertension, implantable cardiovascular devices (ICDs), rhythm disorders, and survival after cardiac arrest. This portfolio contains 42 endorsed measures: 19 process measures, 18 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	6	1
Coronary artery disease (CAD)/ischemic vascular disease (IVD)	6	1	1
Cardiac imaging	0	3	0
Heart failure	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
<b>Total</b>	<b>19</b>	<b>18</b>	<b>5</b>

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

## Cardiovascular Measure Evaluation

On June 30, 2020, the Cardiovascular Standing Committee evaluated four measures undergoing maintenance review against NQF's [standard measure evaluation criteria](#).

**Table 2. Cardiovascular Measure Evaluation Summary**

	Maintenance	New	Total
Measures under consideration	4	0	4
Measures recommended for endorsement	4	0	4

## Comments Received Prior to Committee Evaluation

NQF solicits 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 will close on September 3, 2020. As of June 12, one comment was submitted and shared with the Committee prior to the measure evaluation meeting ([Appendix F](#)).

## Summary of Measure Evaluation

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

### **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): Recommended**

**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. The Committee observed that the developers included the 2012 Guidelines for the Diagnosis and Management of Patients with Stable Ischemic Heart Disease. The Committee noted that there is a 2014 update to the 2012 guidelines, 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 Committee expressed some concern related to lack of data on racial and ethnic disparities. However, they agreed that median and mean scores of low 80s demonstrate reasonable measure performance

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gap. The Committee stated no concerns regarding reliability for this measure. There were some concerns regarding low correlation for score-level validity testing. However, the results were still statistically significant, and no other major concerns were expressed by the Committee. The Committee had no concerns about measure feasibility. In their discussions related to usability and use, the 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 Committee did highlight the feedback to request the addition of ARNI in combination with ARB therapy to the value set as part of that use. The Committee noted improvement over time with no significant unintended consequences and passed the measure on use and usability. The 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.

**0067 Coronary Artery Disease (CAD): Antiplatelet Therapy (American Heart Association): Recommended**

**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. The Committee noted that this is one of the staple measures of cardiology care for patients with coronary artery disease (CAD). The Committee agreed that the evidence base has not changed since the previous NQF endorsement in 2016 and determined that the evidence provided was based on systematic review and grading of the body of empirical evidence. The Committee observed that there is a moderate measure performance gap. It did not raise any issues regarding reliability of the measure but expressed some concerns regarding the validity of the measure. The Committee noted that the measure did not include some of the exclusions nor did it specify the exceptions that were analyzed. The MIPS dataset used for testing did not have missing data. It was not indicated if missing data in other data sets could be systematic and if omissions could lead to unbiased performance results. The Committee also observed that no risk adjustment was conducted for the measure, which can compromise the validity of the results.

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

**0076 Optimal Vascular Care (MN Community Measurement): Recommended**

**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

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 ischemic vascular disease. The Committee noted that the developer provided evidence for each component of the composite and that the evidence for each component was of at least moderate strength. The Committee observed that performance has dropped slightly from 2016 to 2019, while the number of eligible patients almost doubled. The 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 demonstrate disparity and continued opportunity for improvement. The Committee indicated strong support for the composite quality construct and rationale. The Committee discussed the impact of socio-economic 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 Committee was satisfied with the quality construct and rationale. It was satisfied with the Scientific Methods Panel'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 Committee appreciated the additional information and had no additional comments or questions on the scientific acceptability of the measure. It regarded the measure as moderately feasible with no significant concerns. In discussions related to usability and use, the Committee concluded that the measure is used in accountability applications with no unintended consequences or harms identified. The Committee also noted general improvement over time. The Committee observed that there are several related measures but did not consider these measures to be competing.

#### **0290 Median Time to Transfer to Another Facility for Acute Coronary Intervention (Mathematica): Recommended**

**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. The Committee noted updated evidence since the previous endorsement in 2016 and that the evidence was at least moderate in strength. It observed that while median time to transfer has stayed consistent over time, there is continued demonstration of significant variation across facilities, supporting a moderate measure performance gap. The 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 Committee had questions regarding the significance of the cases excluded due to “Initial EKG Interpretation” and whether facilities that mis-interpret an electrocardiogram (EKG) could be excluded from the measure. The developers clarified that the audit process for validating the data elements pulls a random sample of cases, and that hospitals are not able to influence which cases are selected for audit. The Committee determined that the measure was both reliable and valid. It regarded the measure as moderately feasible with no significant concerns. In discussions related to usability and use, the Committee concluded that the measure is used in the Hospital Outpatient Quality Reporting program and reported on Hospital Compare. The Committee also noted that the median score does not appear to have shown much improvement over time, but that there was variation in performance across facilities. The Committee observed that there is a related measure but that it focuses on a different treatment path.

### 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 one measure, NQF #2712, will be removed. NQF #0669 will be deferred to the spring 2021 cycle.

**Table 3. Measures Withdrawn from Consideration**

Measure	Reason for withdrawal
<b>NQF 0669 Cardiac Imaging for Preoperative Risk Assessment for Non-Cardiac, Low Risk Surgery</b>	Deferred to spring 2021 measure review cycle.
<b>NQF 2712 Statin Use in Persons with Diabetes</b>	Developer is not seeking 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

### Measures Recommended

#### 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, 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)

**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 06/30/2020

##### 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 Guideline for the Diagnosis and Management of Patients with Stable Ischemic Heart Disease. The recommendation stated:
  - 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**
- 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 that there have been no changes in the evidence since the measure was last reviewed.
- The Committee noted that there was a 2014 focused update to the guidelines that was not included, but that 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 dataset 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.
  - The average number of eligible patients is 86 for the 774 providers.
  - 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 Method	Average Performance Rate	Standard Deviation
2018	CQM	83.2	N/A
2017	Registry/QCQR	83.3	11.1
2016	Registry/QCQR	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 not yet made 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 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: 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-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. 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 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 of 0.70 is generally considered a minimum threshold for reliability.
- The Committee had no concerns regarding the reliability testing.
- 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 there would be a positive association of scores 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 an 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, confirming the developers' hypothesis.
- The Committee had some concerns about the possibility of missing data and its potential for impact on the measure validity.

<ul style="list-style-type: none"> <li>The Committee also expressed concern regarding the low correlation for score-level validity testing. However, they noted the results were still statistically significant.</li> <li>The Committee determined the measure met the validity criterion.</li> </ul>
<p><b>3. Feasibility: H-7; M-10; L-0; I-0</b></p> <p><i>(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)</i></p> <p>Rationale:</p> <ul style="list-style-type: none"> <li>The Committee had no concerns on this criterion. The measure uses readily available data elements that are generated during care delivery.</li> </ul>
<p><b>4. Use and Usability</b></p> <p><i>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)</i></p> <p>4a. Use: <b>Pass-17; No Pass-0</b> 4b. Usability: <b>H-4; M-12; L-1; I-0</b></p> <p>Rationale:</p> <ul style="list-style-type: none"> <li>The Committee had no concerns on 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 appear very similar.</li> </ul>
<p><b>5. Related and Competing Measures</b></p> <ul style="list-style-type: none"> <li>This measure is related to:             <ul style="list-style-type: none"> <li>0081 Heart Failure (HF) Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) or Angiotensin Receptor-Nepilysin Inhibitor (ARNI) Therapy for Left Ventricular Systolic Dysfunction (LVSD)</li> <li>0081e Heart Failure (HF) Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) or Angiotensin Receptor-Nepilysin Inhibitor (ARNI) Therapy for Left Ventricular Systolic Dysfunction (LVSD)</li> <li>0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients</li> <li>1662 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy</li> </ul> </li> <li>The Committee did not note any issues between these measures.</li> </ul>
<p><b>6. Standing Committee Recommendation for Endorsement: Y-16; N-1</b></p>
<p><b>7. Public and Member Comment</b></p>
<p><b>8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X</b></p>
<p><b>9. Appeals</b></p>

<p><b>0067 Coronary Artery Disease (CAD): Antiplatelet Therapy</b></p>
<p><a href="#">Submission</a>   <a href="#">Specifications</a></p>
<p><b>Description:</b> 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</p> <p><b>Numerator Statement:</b> Patients who were prescribed aspirin or clopidogrel</p> <p><b>Denominator Statement:</b> All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period</p> <p><b>Exclusions:</b> Denominator exceptions</p>

- 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 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 06/30/2020**

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

(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 guideline for the diagnosis and management of patients with stable IHD
    - Non-enteric-coated, chewable aspirin (162 mg to 325 mg) should be given to all patients with NSTEMI-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 NSTEMI-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 guideline 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 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 coronary artery disease.
- The developer also included a summary of the quantity, quality, and consistency of the body of evidence.
- The developer attested that there have been no changes in the evidence since the measure was last reviewed.
- The Committee noted that there was a 2014 focused update to the guidelines, but that 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 dataset reflects information at the provider level.
  - Of those 1,846 providers, 1,843 providers 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 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:
  - Overall mean performance on 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/QCQR	89.6	13.2
2016	Registry/QCQR	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 not yet made 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)
- The Committee expressed some concern that overall performance was beginning to top out but noted that there are probably disparities in performance around race and gender. It decided 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 through December 31, 2018; and 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 providers 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 states, 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 the 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 of 0.70 is generally considered a minimum threshold for reliability.
- The Committee had no concerns regarding 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

<p>and domain. They hypothesized that there would be a positive association of scores 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 &lt; 40%) within a 12-month period.</p> <ul style="list-style-type: none"> <li>• Providers included in the analysis had at least one patient in the denominator after exceptions were applied.</li> <li>• The results demonstrated that the NQF #0067 <i>Coronary Artery Disease (CAD): Antiplatelet Therapy</i> was positively correlated with NQF #0066 <i>Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF &lt; 40%)</i>.</li> <li>• The correlation was highly statistically significant with a coefficient of correlation of 0.47, which showed moderate correlation, significant, and confirms the developer hypothesis, demonstrating the criterion validity of the measure.</li> <li>• The Committee noted that the measure did not include some of the exclusions nor did it specify the exceptions that were analyzed. The MIPS dataset used for testing did not have missing data. It was not indicated if missing data in other data sets could be systematic and if omissions could lead to unbiased performance results.</li> <li>• The Committee also observed that no risk adjustment was conducted for the measure, which can compromise the validity of the results. The Committee recommended that risk adjustment be considered for future iterations of the measure.</li> <li>• The Committee determined the measure met the validity criterion.</li> </ul>
<p><b>3. Feasibility: H-4; M-13; L-0; I-0</b>  <i>(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)</i>  Rationale:</p> <ul style="list-style-type: none"> <li>• The Committee had no concerns on this criterion. The measure uses readily available data elements that are generated during care delivery.</li> </ul>
<p><b>4. Use and Usability</b>  <i>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)</i>  4a. Use: <b>Pass-17; No Pass -0</b> 4b. Usability: <b>H-5; M-12; L-0; I-0</b>  Rationale:</p> <ul style="list-style-type: none"> <li>• The Committee had no concerns on 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 appear very similar.</li> </ul>
<p><b>5. Related and Competing Measures</b></p> <ul style="list-style-type: none"> <li>• The measure is related to: <ul style="list-style-type: none"> <li>○ 0465 Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy</li> <li>○ 0073 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet</li> <li>○ 0076 Optimal Vascular Care</li> </ul> </li> <li>• The Committee did not note any issues between these measures.</li> </ul>
<p><b>6. Standing Committee Recommendation for Endorsement: Yes-15; No-0</b></p>
<p><b>7. Public and Member Comment</b></p>
<p><b>8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X</b></p>
<p><b>9. Appeals</b></p>

**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 06/30/2020****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 the 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.
- The developer noted that there was data that supported but did not prove 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, “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
  - The developer provided a diagram illustrating the steps between assessing patients (age ≥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).
  - 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 work group 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
  - 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. There was not clear evidence of an additional reduction in ASCVD events from high-intensity statin therapy in patients >75.
- 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 aged 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 plaque, 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 (Ask about tobacco use, Advise tobacco users to quit, Assess willingness to make a quit attempt, Assist tobacco users in making a quit attempt, and Arrange for follow-up) interventions significantly increased patients' use of recommended counseling and medication for cessation.
  - Component # 4: Daily Aspirin or Anti-Platelet Medication
    - The developer provided a diagram illustrating the steps between assessing patients with cardiovascular disease variables/risk to determine appropriate aspirin/anti-platelet 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/ACC Secondary Prevention and Risk Reduction Therapy for Patients with Coronary and Other Atherosclerotic Vascular Disease: 2011 Update:
      - Aspirin 75-162 mg daily is recommended in all patients with coronary artery disease unless contraindicated. Class I; Level of Evidence: A
      - Clopidogrel 75 mg 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 the evidence supporting the prevention of secondary cardiovascular events for patients with cardiovascular disease by appropriately prescribing aspirin or anti-platelet 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 meta-analysis involving 287 studies; 135,000 patients: therapy vs. control; and 77,000 patients comparing different anti-platelet regimens.
    - 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:
        - Aspirin 81-162 mg/day indefinitely. Class I
        - Clopidogrel, prasugrel, or ticagrelor (i.e., P2Y<sub>12</sub> 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.
- Aspirin 81-325 mg/day 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 Committee noted that the evidence provided for each component was of at least moderate 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. 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 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 there are disparities for race and ethnicity. The 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 states 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 anti-platelet 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 states 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 Committee discussed the impact of socio-economic 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 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 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
  - The SMP rated the measure high for reliability: H-5; M-3; L-1; I-0.
  - The Committee had no concerns regarding reliability.
  - Validity testing 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 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 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.
  - The 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.
  - The SMP passed the measure on quality construct with votes split between high and moderate ratings: H-3; M-3; L-1; I-1.
  - The 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, EHR's, 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 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:
  - [MN Community Measurement- MN HealthScores Website.](#)
  - [Health Care Quality Report](#)
  - [Quality of Care for Chronic Conditions in Minnesota](#)
- Payment:
  - [HealthPartners Partners in Quality Program](#)
- Regulatory and Accreditation Programs:
  - [Minnesota Statewide Quality Reporting and Measurement System \(SQRMS\).](#)
- Professional Certification or Recognition Program
  - [MN Department of Health Health Care Homes Certification & Recertification](#)
- Quality Improvement with Benchmarking (external benchmarking to multiple organizations):
  - [MN Department of Health Health Care Homes Performance Measurement and Evaluation](#)
- The 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 reports 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 (that was previously artificial because patients truly did have ischemic vascular disease). At the same time, the numerator rates did not change significantly, demonstrating patients were achieving optimal targets.
- The Committee had no concerns regarding usability.

#### 5. Related and Competing Measures

- This measure is related to:
  - 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
  - 0018 Controlling High Blood Pressure
- The Committee did not note any issues between these measures.

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

#### 7. Public and Member Comment

#### 8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

#### 9. Appeals

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

[Submission](#) | [Specifications](#)

**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:

- Patients less than 18 years of age; or
- 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 06/30/2020

##### 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 that 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 where 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)
  - “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 the 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).
- There was a focused update 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 states these articles are aligned with the existing evidence.
- The Committee had no concerns regarding evidence.
- Results appear to have stayed consistent from 2010 through 2018.
- The developer notes that “women, older patients, non-white patients, and Hispanic patients had longer median times to transfer than their male, younger, white, non-Hispanic counterparts.”
- Summary of performance data from 2016 review cycle:
  - 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 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 in minutes, 450 facilities, calendar year 2018, data from the CMS Clinical Data Warehouse

- The Committee observed that while median time to transfer has stayed 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.

	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 Committee had no concerns regarding reliability.
- The developer states 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 provides 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 (through 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 almost perfect agreement.

- The developer states it has seen improvement in Kappa values for two critical data elements (“initial ECG interpretation” and “reason for no fibrinolytic administration”) since the previous submission. It interprets this to suggest improvement in documentation by emergency departments.
- The 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 pulls a random sample of cases and that hospitals are not able to influence which cases are selected for audit.
- The developers clarified that the audit process for validating the data elements pulls a random sample of cases and that hospitals are not able to influence which cases are selected for audit.
- The 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 conversion to an electronic or digital measure challenging. In particular, the data elements 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 work group agreed that “the practical aspects of reporting this chart-abstracted measure do not place undue burden on facilities that collect the data.”
- The 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 [Hospital Compare](#)
- Currently in use in CMS’s [Hospital Outpatient Quality Reporting Program](#)
- Those being measured receive quarterly results through CMS’s 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 states it has received no feedback to date and no comments during calendar years 2016-2019.
- The developer indicates it is willing to consider feedback and has a process for incorporating changes into the measure.
- The Committee had no concerns regarding use.
- 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.
  - Data from 2018 indicate a median facility score of 54 minutes, with an IQR of 43-70 minutes.
- The Committee noted that the median score does not appear to have shown much improvement over time, but that there was variation in performance across facilities.

### 5. Related and Competing Measures

<ul style="list-style-type: none"><li>• This measure is related to:<ul style="list-style-type: none"><li>○ 0288 Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival</li></ul></li><li>• The Committee did not note any issues between these measures</li></ul>
<b>6. Standing Committee Recommendation for Endorsement: Yes-16; No-0</b>
<b>7. Public and Member Comment</b>
<b>8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X</b>
<b>9. Appeals</b>

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

NQF #	Title	Federal Programs: Finalized or Implemented as of February 20, 2020
0018	Controlling High Blood Pressure	Medicare and Medicaid Electronic Health Record Incentive Program for Eligible Professionals Medicare Shared Savings Program, Merit-Based Incentive Payment System (MIPS) Program, Medicaid Marketplace Quality Rating System (QRS), Medicaid
0028	Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention	Million Hearts, MIPS, Medicaid Promoting Interoperability Program for Eligible Professionals, Medicare Shared Savings Program
0066	Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy – Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%)	Physician Compare; MIPS
0067	Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	MIPS
0068	Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic	MIPS
0070/ 0070e	Coronary Artery Disease (CAD): Beta-Blocker Therapy – Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	MIPS, Medicaid Promoting Interoperability Program for Eligible Professionals
0071	Persistence of Beta-Blocker Treatment After a Heart Attack	MIPS
0081/ 0081e	Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	MIPS, Medicaid Promoting Interoperability Program for Eligible Professionals
0083/ 0083e	Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	MIPS, Medicaid Promoting Interoperability Program for Eligible Professionals
0114	Risk-Adjusted Post-Operative Renal Failure	MIPS
0115	Risk-Adjusted Surgical Re-exploration	MIPS
0119	Risk-Adjusted Operative Mortality for CABG	MIPS
0129	Risk-Adjusted Prolonged Intubation (Ventilation)	MIPS

<sup>a</sup> Per CMS Measures Inventory Tool as of 02/20/2020

NQF #	Title	Federal Programs: Finalized or Implemented as of February 20, 2020
0130	Risk-Adjusted Deep Sternal Wound Infection Rate	Hospital Compare, Hospital Outpatient Quality Reporting
0131	Risk-Adjusted Stroke/Cerebrovascular Accident	MIPS
0229	Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following heart failure (HF) hospitalization for patients 18 and older	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing
0230	Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following acute myocardial infarction (AMI) hospitalization for patients 18 and older	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing
0290	Median Time to Transfer to Another Facility for Acute Coronary Intervention	Hospital Compare, Hospital Outpatient Quality Reporting
0330	Hospital 30-Day, All-Cause, Risk-Standardized Readmission Rate (RSSR) Following Heart Failure Hospitalization	Hospital Readmission Reduction Program (HRRP)
0505	Hospital 30-Day All-Cause, Risk-Standardized Readmission Rate (RSSR) Following Acute Myocardial Infarction (AMI) Hospitalization	Hospital Readmission Reduction Program, Hospital Compare
0643	Cardiac Rehabilitation Patient Referral from an Outpatient Setting	Hospital Readmission Reduction Program, Hospital Compare
0669	Cardiac Imaging for Preoperative Risk Assessment for Non-Cardiac, Low Risk Surgery	Hospital Compare, Hospital Outpatient Quality Reporting
0670	Cardiac stress imaging not meeting appropriate use criteria: Preoperative evaluation in low risk surgery patients	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0671	Cardiac stress imaging not meeting appropriate use criteria: Routine testing after percutaneous coronary intervention (PCI)	MIPS
0672	Cardiac stress imaging not meeting appropriate use criteria: Testing in asymptomatic, low risk patients	MIPS
1525	Atrial Fibrillation and Atrial Flutter: Chronic Anticoagulation Therapy	MIPS
2474	Cardiac Tamponade and/or Pericardiocentesis Following Atrial Fibrillation Ablation	MIPS

## Appendix C: Cardiovascular Standing Committee and NQF Staff

### STANDING COMMITTEE

**Mary George, MD, MSPH, FACS, FAHA (Co-Chair)**

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

**Thomas Kottke, MD, MSPH (Co-Chair)**

Medical Director for Population Health, Consulting Cardiologist, HealthPartners  
Minneapolis, Minnesota

**Linda Briggs, DNP**

Assistant Professor, George Washington University, School of Nursing Washington  
District of Columbia

**Leslie Cho, MD**

Section Head, Preventive Cardiology and Rehabilitation, Cleveland Clinic  
Cleveland, Ohio

**Helene Clayton-Jeter, OD**

Healthcare Consultant, Clinical Optometrist, CrossOver Healthcare Ministry  
Arlington, Virginia

**Joseph Cleveland, MD**

Professor of Cardiothoracic Surgery & Surgical Director for Adult Cardiac Transplantation/Mechanical Cardiac Assist Devices, University of Colorado Denver  
Aurora, Colorado

**Michael Crouch, MD, MSPH, FAAFP**

Research Director and Quality Improvement Program Director, Memorial Family Medicine Residency Program and Associate Clinical Professor of Family Medicine, Texas A & M University School of Medicine  
Bryan, Texas

**Tim Dewhurst, MD, FACC**

Interventional Cardiologist, Medical Director for Clinical Value Improvement, Kaiser Permanente,  
Washington State  
Seattle, Washington

**Kumar Dharmarajan, MD, MBA**

Chief Scientific Officer, Clover Health  
Jersey City, New Jersey

**William Downey, MD**

### NATIONAL QUALITY FORUM

NQF REVIEW DRAFT—Comments due by September 3, 2020 by 6:00 PM ET.

Medical Director, Interventional Cardiology Sanger Heart and Vascular Institute,  
Carolinas HealthCare System  
Charlotte, North Carolina

**Howard Eisen, MD**

Medical Director of the Cardiac Transplant, Mechanical Circulatory Support and Advanced Heart Failure  
Programs  
Hershey, Pennsylvania

**Naftali Zvi Frankel, MS**

Principal, Déclore Consulting  
New York, New York

**Ellen Hillegass, PT, EdD, CCS, FAACVPR, FAPTA**

American Physical Therapy Association  
Sandy Springs, Georgia

**Charles Mahan, PharmD, PhC, RPh**

Presbyterian Healthcare Services, Clinical Assistant Professor of Pharmacy, University of New Mexico  
Albuquerque, New Mexico

**Soeren Mattke, MD, DSc**

Director, Center for Improving Chronic Illness Care and Research Professor of Economics,  
University of Southern California  
Los Angeles, California

**Gwen Mayes, JD, MMSc**

Patient Story Coach/Writer  
Annapolis, Maryland

**Kristi Mitchell, MPH**

Senior Vice President, Avalere Health, LLC  
Washington, District of Columbia

**Jason Spangler, MD, MPH, FACPM**

Executive Director, Medical Policy, Amgen, Inc.  
Washington, District of Columbia

**Mladen Vidovich, MD**

Professor of Medicine, University of Illinois at Chicago, Chief of Cardiology,  
Jesse Brown VA Medical Center  
Chicago, Illinois

**David Walsworth, MD, FAAFP**

**NATIONAL QUALITY FORUM**

NQF REVIEW DRAFT—Comments due by September 3, 2020 by 6:00 PM ET.

Department of Family Medicine, Michigan State University  
East Lansing MI

**Daniel Waxman, MD, PhD, FACC**

Health Policy Researcher at RAND, Associate Professor, Emergency Medicine at University of California,  
Los Angeles (UCLA)  
Los Angeles, California

NQF STAFF

**Sheri Winsper, RN, MSN, MSHA**

Senior Vice President, Quality Measurement

**Apryl Clark, MHSA**

Acting Vice President, Quality Measurement

**Amy Moyer, MS, PMP**

Director

**Janaki Panchal, MSPH**

Manager

**Karri Albanese, BA**

Analyst

**Mike DiVecchia, MBA, PMP**

Project Manager

## Appendix D: Measure Specifications

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### 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)

#### NATIONAL QUALITY FORUM

NQF REVIEW DRAFT—Comments due by September 3, 2020 by 6:00 PM ET.

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  $\geq$  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  $\geq$  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, O24.113, O24.119, O24.12, O24.13, 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

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

### STEWARDSHIP

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

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## DENOMINATOR DETAILS

Time period for data collection: 12 consecutive months

Patients aged  $\geq$  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

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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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## 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

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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.
  - 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).

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- 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.

#### Statin 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.

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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

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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 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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## 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](http://www.QualityNet.org), are also available for the CART tool. These tools are posted on [www.QualityNet.org](http://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

### NATIONAL QUALITY FORUM

NQF REVIEW DRAFT—Comments due by September 3, 2020 by 6:00 PM ET.

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

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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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## 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
Type	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_I9toI10_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_file_-_2015.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	<p>Patients who were prescribed ACE inhibitor or ARB therapy within a 12-month period</p> <p>*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.</p> <p>Definitions:</p> <p>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</p>

	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-Nepilysin 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	<p>Time period for data collection: At least once during the measurement period</p> <p>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.</p> <p>Definition:</p> <p>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.</p> <p>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.,</p>	<p>Time Period for Data Collection: At least once during the measurement period when seen in the outpatient setting OR at each hospital discharge</p> <p>Definition:</p> <p>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.</p> <p>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.</p> <p>Numerator Note:</p> <p>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</p>	<p>Refer to <a href="http://www.qualitynet.org/dcs/ContentServer?c=Page&amp;pagename=QnetPublic%2FPage%2FQnetTier4&amp;cid=1228773564870">http://www.qualitynet.org/dcs/ContentServer?c=Page&amp;pagename=QnetPublic%2FPage%2FQnetTier4&amp;cid=1228773564870</a>:</p> <ul style="list-style-type: none"> <li>• Section 1 - Data Dictionary   Alphabetical Data Dictionary – pages 1-17 through 1-18 plus pages 1-73 through 1-74.</li> <li>• Appendices   Appendix C - Medication Tables – pages Appendix C-6 through Appendix C-7 plus pages Appendix C-11 through Appendix C-12.</li> <li>• Section 2 - Measurement Information   Section 2.1 - Acute Myocardial Infarction (AMI) – page AMI-3-1.</li> </ul>	<p>See attached for EHR specifications.</p> <p>For Claims/Administrative: Report CPT Category II 4009F Angiotensin converting enzyme (ACE) inhibitor or Angiotensin Receptor Blocker (ARB) therapy prescribed</p>

	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-Nepilysin 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
	<p>angiotensin receptor neprilysin inhibitor [ARNI, sacubitril/valsartan], ACEI+diuretic, ARB+diuretic, ACEI+calcium channel blocker) would meet performance for this measure.</p> <p>FOR SUBMISSION CRITERIA 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF &lt; 40% (without a diagnosis of diabetes) Report Quality Data Code G8935: Clinician prescribed angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy</p> <p>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</p>	<p>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.</p> <p>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</p> <p>(NOTE to NQF: Based on the language revision, PCPI is requesting updated coding and descriptor.)</p>		

	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
Denominator 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
Denominator 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)

	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
	<p>AND</p> <p>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</p> <p>AND</p> <p>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,</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>Submission Criteria 1: Patients who were prescribed ACE inhibitor or ARB therapy within a 12-month period when seen in the outpatient setting</p>	<p>410.20: Inferolateral wall, acute myocardial infarction-episode of care unspecified</p> <p>410.21: Inferolateral wall, acute myocardial infarction-initial episode</p> <p>410.30: Inferoposterior wall, acute myocardial infarction-episode of care unspecified</p> <p>410.31: Inferoposterior wall, acute myocardial infarction-initial episode</p> <p>410.40: Other inferior wall, acute myocardial infarction-episode of care unspecified</p> <p>410.41: Other inferior wall, acute myocardial infarction-initial episode</p> <p>410.50: Other lateral wall, acute myocardial infarction-episode of care unspecified</p> <p>410.51: Other lateral wall, acute myocardial infarction-initial episode</p> <p>410.60: True posterior wall, acute myocardial infarction-episode of care unspecified</p>	

	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
	<p>99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350</p> <p>WITHOUT</p> <p>Telehealth Modifier: GQ, GT, 95, POS 02</p> <p>AND</p> <p>Two Denominator Eligible Visits</p> <p>AND</p> <p>Left Ventricular Ejection Fraction (LVEF) &lt; 40% or documentation of moderately or severely depressed left ventricular systolic function: G8934</p> <p>FOR SUBMISSION CRITERIA 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes</p> <p>Patients aged &gt;= 18 years on date of encounter</p> <p>AND</p> <p>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,</p>	<p>Patients aged &gt;= 18 years on date of encounter</p> <p>AND</p> <p>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</p> <p>AND</p> <p>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</p> <p>WITHOUT</p> <p>Telehealth Modifier: GQ, GT, 95, POS 02</p> <p>AND</p>	<p>410.61: True posterior wall, acute myocardial infarction-initial episode</p> <p>410.70: Subendocardial, acute myocardial infarction-episode of care unspecified</p> <p>410.71: Subendocardial, acute myocardial infarction-initial episode</p> <p>410.80: Other specified sites, acute myocardial infarction-episode of care unspecified</p> <p>410.81: Other specified sites, acute myocardial infarction-initial episode</p> <p>410.90: Unspecified site, acute myocardial infarction-episode of care unspecified</p> <p>410.91: Unspecified site, acute myocardial infarction-initial episode</p> <p>LVSD - Refer to <a href="http://www.qualitynet.org/dcs/ContentServer?c=Page&amp;pagename=QnetPublic%2FPage%2FQnetTier4&amp;cid=1228773564870">http://www.qualitynet.org/dcs/ContentServer?c=Page&amp;pagename=QnetPublic%2FPage%2FQnetTier4&amp;cid=1228773564870</a>:</p> <ul style="list-style-type: none"> <li>• Section 1 - Data Dictionary   Alphabetical Data Dictionary – pages 1-261 through 1-264.</li> </ul>	

	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
	<p>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</p> <p>AND</p> <p>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,</p>	<p>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</p> <p>WITH OR WITHOUT</p> <p>Telehealth Modifier: GQ, GT, 95, POS 02</p> <p>AND</p> <p>Left ventricular ejection fraction (LVEF) less than 40% or documentation of moderately or severely depressed left ventricular systolic function: 3021F</p> <p>Submission Criteria 2: Patients who were prescribed ACE inhibitor or ARB or ARNI therapy at each hospital discharge</p> <p>Patients aged &gt;= 18 years on date of encounter</p>		

	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-Nepilysin 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, E10.3533, 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,	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		

	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
	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,			

	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
	<p>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, O24.113, O24.119, O24.12, O24.13, O24.311, O24.312, O24.313, O24.319, O24.32, O24.33, O24.811, O24.812, O24.813, O24.819, O24.82, O24.83</p> <p>AND</p> <p>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</p>			

	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
	<p>WITHOUT</p> <p>Telehealth Modifier: GQ, GT, 95, POS 02</p> <p>AND</p> <p>Two Denominator Eligible Visits</p> <p>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.</p>			
Exclusions	<p>Denominator Exceptions:</p> <p>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</p>	<p>Denominator Exceptions:</p> <p>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</p>	<p>Exclusions:</p> <ul style="list-style-type: none"> <li>•&lt;18 years of age</li> <li>•Patients who have a length of stay greater than 120 days</li> <li>•Discharged to another hospital</li> <li>•Expired</li> <li>•Left against medical advice</li> </ul>	<p>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</p>

	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
	<p>or mitral valve, other medical reasons)</p> <p>Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB therapy (e.g., patient declined, other patient reasons)</p> <p>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)</p>	<p>experienced marked azotemia, allergy, intolerance, other medical reasons).</p> <p>Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., patient declined, other patient reasons).</p> <p>Documentation of system reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., other system reasons).</p>	<ul style="list-style-type: none"> <li>• Discharged to home for hospice care</li> <li>• Discharged to a health care facility for hospice care</li> <li>• Patients with comfort measures only documented</li> <li>• Patients enrolled in clinical trials</li> <li>• Patients with a documented reason for no ACEI and no ARB at discharge</li> </ul>	<p>therapy, acute kidney injury due to ACEI or ARB therapy, other medical reasons</p> <p>ACE inhibitor or ARB therapy not prescribed during the measurement period, patient reason(s) documented (e.g., patient declined, other patient reasons)</p>
Exclusion Details	<p>Time period for data collection: During the encounter within the 12-month period</p> <p>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</p>	<p>Time Period for Data Collection: During the encounter within the 12-month period</p> <p>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</p>	<p>Refer to <a href="http://www.qualitynet.org/dcs/ContentServer?c=Page&amp;pagename=QnetPublic%2FPage%2FQnetTier4&amp;cid=1228773564870">http://www.qualitynet.org/dcs/ContentServer?c=Page&amp;pagename=QnetPublic%2FPage%2FQnetTier4&amp;cid=1228773564870</a>:</p> <ul style="list-style-type: none"> <li>• 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, 1-209, 1-261 through 1-264, and 1-326 through 1-331.</li> <li>• Appendices   Appendix C - Medication Tables PDF – pages Appendix C-6 through Appendix C-7 plus pages Appendix C-11 through Appendix C-12, and</li> </ul>	<p>Append modifier to CPT II code 4009F-1P</p> <p>Append modifier to CPT II code 4009F-2P</p>

	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-Nepilysin 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-Nepilysin 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-Nepilysin 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
	<p>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.</p> <p>Additional details:  FOR SUBMISSION CRITERIA 1:  Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF&lt;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</p>	<p>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.</p> <p>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</p>		

	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-Nepilysin 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
	<p>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)</p> <p>FOR SUBMISSION CRITERIA 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes</p> <p>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)</p>	<p>shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons)</p> <p>4010F-2P: Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., patient declined, other patient reasons)</p> <p>4010F-3P: Documentation of system reason(s) for not prescribing ACE inhibitor or ARB or ARNI therapy (e.g., other system reasons)</p>		
Risk Adjustment	<p>No risk adjustment or risk stratification</p> <p>140560   107246   141015</p> <p>140560   107246   141015</p>	<p>No risk adjustment or risk stratification</p> <p>140560   135810</p> <p>140560   135810</p>	<p>No risk adjustment or risk stratification</p> <p>109921   141592   135810</p> <p>109921   141592   135810</p>	<p>No risk adjustment or risk stratification</p> <p>113315</p> <p>113315</p>

	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
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.	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	<p>THERE ARE TWO SUBMISSION CRITERIA FOR THIS MEASURE:</p> <p>1) Patients who are 18 years and older with a diagnosis of CAD with LVEF &lt; 40%</p> <p>OR</p> <p>2) Patients who are 18 years and older with a diagnosis of CAD who have diabetes</p> <p>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</p>	<p>S.12. Type of score: Rate/proportion If other:</p> <p>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</p> <p>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</p>	<p>Refer to <a href="http://www.qualitynet.org/dcs/ContentServer?c=Page&amp;pagename=QnetPublic%2FPage%2FQnetTier4&amp;cid=1228773564870">http://www.qualitynet.org/dcs/ContentServer?c=Page&amp;pagename=QnetPublic%2FPage%2FQnetTier4&amp;cid=1228773564870</a>: 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</p>	<p>Calculation algorithm is included in data dictionary/code table attachment (2a1.30). 113315</p>

	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-Nepilysin 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
	<p>diabetes) will count as appropriate reporting for this patient. For the purposes of this measure, the single performance rate can be calculated as follows:</p> $\text{Performance Rate} = (\text{Numerator 1} + \text{Numerator 2}) / [(\text{Denominator 1} - \text{Denominator Exceptions 1}) + (\text{Denominator 2} - \text{Denominator Exceptions 2})]$ <p>Calculation algorithm for Submission Criteria 1: Patients who are 18 years and older with a diagnosis of CAD with current or prior LVEF&lt;40%</p> <ol style="list-style-type: none"> <li>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).</li> <li>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.</li> </ol>	<p>population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.)</p> <p>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:</p> $\text{Performance Rate} = (\text{Numerator 1} + \text{Numerator 2}) / [(\text{Denominator 1} - \text{Denominator Exceptions 1}) + (\text{Denominator 2} - \text{Denominator Exceptions 2})]$ <p>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</p>		

	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
	<p>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.</p> <p>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</p>	<p>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).</p> <p>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.</p> <p>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.</p> <p>4. From the patients who did not meet the numerator criteria, determine if the provider has documented that</p>		

	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-Nepilysin 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
	<p>any exception criteria, they should be removed from the denominator for performance calculation.</p> <p>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.</p> <p>If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.</p> <p>Calculation algorithm for Submission Criteria 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes</p> <ol style="list-style-type: none"> <li>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).</li> <li>2. From the patients within the initial population criteria, find</li> </ol>	<p>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. --</p> <p>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.</p>		

	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
	<p>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.</p> <p>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.</p> <p>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</p>	<p>If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.</p> <p>Calculation algorithm for Submission Criteria 2: Patients who were prescribed ACE inhibitor or ARB or ARNI therapy at each hospital discharge</p> <p>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).</p> <p>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.</p> <p>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</p>		

	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-Nepilysin 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
	<p>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.</p> <p>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.</p> <p>If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.</p> <p>140560   107246   141015</p>	<p>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.</p> <p>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. --</p> <p>Although the exception cases</p>		

	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-Nepilysin 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 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-Nepilysin Inhibitor (ARNI) Therapy for Left	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	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	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

	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
	<p>Ventricular Systolic Dysfunction (LVSD)</p> <p>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)</p> <p>5a.1 Are specs completely harmonized? Yes</p> <p>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.</p> <p>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</p>	<p>Angiotensin Receptor-Neprilysin Inhibitor (ARNI) Therapy for Left Ventricular Systolic Dysfunction (LVSD)</p> <p>5a.1 Are specs completely harmonized? Yes</p> <p>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 &lt;40%. In both measures, the population of focus (ie, the denominator) is different. NQF 0081e is the eCQM version of this measure.</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>	<p>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</p>	<p>0594 : Post MI: ACE inhibitor or ARB therapy</p> <p>0610 : Heart Failure - Use of ACE Inhibitor (ACEI) or Angiotensin Receptor Blocker (ARB) Therapy</p> <p>0619 : Diabetes with Hypertension or Proteinuria - Use of an ACE Inhibitor or ARB</p> <p>0621 : Non-Diabetic Nephropathy - Use of ACE Inhibitor or ARB Therapy</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>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.</p> <p>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</p>

	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.			<p>terminology standards (eg, SNOMED, RxNorm, LOINC) named in the Meaningful Use Program (CMS EHR Incentive Program).</p> <p>The data source for ActiveHealth measures is what they call “level 2 clinically enriched data” (including data from claims &amp; 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).</p> <p>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.</p>

## 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: <ul style="list-style-type: none"> <li>• Blood pressure less than 140/90 mmHg</li> <li>• On a statin medication, unless allowed contraindications or exceptions are present</li> <li>• Non-tobacco user</li> <li>• On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present</li> </ul>	Percentage of patients undergoing carotid endarterectomy (CEA) who are taking an anti-platelet agent (aspirin or clopidogrel or equivalent such as aggrenox/tiglacor etc) within 48 hours prior to surgery and are prescribed this medication at hospital discharge following surgery
Type	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_Control_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 source of information to create the data file; however groups must ensure that all of their eligible patients	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

	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
			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 MNMCM_0076_Optimal_Vascular_Care_Specs_Fields_12-2019.xlsx	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	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 or 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: <ul style="list-style-type: none"> <li>• 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</li> <li>• On a statin medication, unless allowed contraindications or exceptions are present</li> <li>• Patient is not a tobacco user</li> <li>• On daily aspirin or anti-platelet medication, unless allowed</li> </ul>	Patients over age 18 undergoing carotid endarterectomy who received anti-platelet 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
			contraindications or exceptions are present	
Numerator or Details	<p>Time period for data collection: At least once during the measurement period</p> <p>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</p>	<p>ADMINISTRATIVE CLAIMS</p> <p>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 &lt;140/90 mm Hg. The patient is not compliant if the BP is &gt; 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.</p>	<p>In order to be numerator compliant all four components must be met</p> <ul style="list-style-type: none"> <li>* Blood pressure less than 140/90 mmHg AND</li> <li>* On a statin medication, unless allowed contraindications or exceptions are present AND</li> <li>* Non-tobacco user AND</li> <li>* On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present</li> </ul> <p>BLOOD PRESSURE COMPONENT</p> <p>Blood Pressure Date [Date (mm/dd/yyyy)] AND</p> <p>BP Systolic [Numeric] AND</p> <p>BP Diastolic [Numeric]</p> <p>Numerator component calculation: numerator component compliant is BP during the measurement year AND Systolic &lt; 140 AND Diastolic &lt; 90.</p> <p>BP Date</p> <p>Enter the date of the most recent blood pressure result during the measurement period.</p> <ul style="list-style-type: none"> <li>• 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</li> </ul>	<p>Numerator coding, These are fields that are collected via the data form for the VQI registry, which is approved for PQRS:</p> <p>Gxxx1: Documentation that oral antiplatelet therapy was given within 48 hours prior to surgical incision</p> <p>Gxxx2: No documentation that oral antiplatelet was given within 48 hours prior to the initiation of surgery</p> <p>Gxxx3: Oral antiplatelet therapy prescribed at hospital discharge</p> <p>Gxxx4: Oral antiplatelet therapy NOT prescribed at hospital discharge, Gxxx5 does not apply</p> <p>Gxxx5: Patient expired, left against medical advice, discharged to hospice, or transferred to another acute care hospital or federal hospital</p>

	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
		<p>See the corresponding excel document for the following value sets:</p> <ul style="list-style-type: none"> <li>- Systolic Less Than 140 Value Set</li> <li>- Systolic Greater Than/Equal To 140 Value Set</li> <li>- Diastolic Less Than 80 Value Set</li> <li>- Diastolic 80–89 Value Set</li> <li>- Diastolic Greater Than/Equal To 90 Value Set</li> <li>- Outpatient Value Set</li> <li>- Nonacute Inpatient Value Set</li> </ul> <p>---</p> <p><b>MEDICAL RECORD</b></p> <p>To determine if a patient is adequately controlled, the representative blood pressure must be identified. Follow the steps below.</p> <p><b>Step 1</b></p> <ul style="list-style-type: none"> <li>- Identify the most recent blood pressure reading noted during the measurement year.</li> </ul> <p>Do not include readings that meet the following criteria:</p> <ul style="list-style-type: none"> <li>- Taken during an acute inpatient stay or an ED visit.</li> <li>- Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure</li> </ul>	<p>record and is the most recent test result during the measurement period.</p> <ul style="list-style-type: none"> <li>• Do not include BP readings: <ul style="list-style-type: none"> <li>o Taken during an acute inpatient stay or an ED visit.</li> <li>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).</li> <li>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).</li> <li>o Reported by or taken by the patient.</li> </ul> </li> <li>• Leave BLANK if a blood pressure was not obtained during the measurement period.</li> </ul> <p><b>BP Systolic</b></p> <p>Enter the value of the most recent systolic blood pressure result during the measurement period.</p> <ul style="list-style-type: none"> <li>• 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</li> </ul>	

	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
		<p>performed (e.g., sigmoidoscopy, removal of a mole).</p> <ul style="list-style-type: none"> <li>- Taken the same day as major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy).</li> <li>- Reported by or taken by the patient</li> <li>- Documentation of "VS within normal limits" or "vital signs normal".</li> </ul> <p>Step 2</p> <ul style="list-style-type: none"> <li>- 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.</li> </ul> <p>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).</p>	<p>submitted in Column Z (BP Diastolic).</p> <ul style="list-style-type: none"> <li>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.</li> <li>Leave BLANK if a blood pressure was not obtained during the measurement period.</li> </ul> <p>BP Diastolic</p> <p>Enter the value of the most recent diastolic blood pressure result during the measurement period.</p> <ul style="list-style-type: none"> <li>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).</li> <li>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.</li> <li>Leave BLANK if a blood pressure was not obtained during the measurement period.</li> </ul> <p>CHOLESTEROL MANAGEMENT STATIN COMPONENT LDL Date [Date (mm/dd/yyyy)] AND</p>	

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			<p>LDL Value [Numeric]</p> <p>For calculating exceptions to statin use based on very low LDL (&lt; 40 for cardiovascular disease and &lt; 70 for patients with diabetes)</p> <p>Enter the date of the most recent LDL test result between 01/01/2015 and 12/31/2019.</p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>LDL values within the last five years will be used to calculate potential exceptions to being on a statin medication.</li> <li>Leave BLANK if an LDL test was not performed between 01/01/2015 and 12/31/2019.</li> </ul> <p>Enter the value of the most recent LDL test result between 01/01/2015 and 12/31/2019.</p> <ul style="list-style-type: none"> <li>Leave BLANK if an LDL test was not performed during the allowable time period, or if the</li> </ul>	

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			<p>most recent test result was too high to calculate.</p> <p>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)]</p> <p>Numerator component calculation: numerator component compliant if on a statin (prescribed/ ordered) or low LDL value (see above) or documented contraindication/exception is present.</p> <p>Statin Medication:</p> <p>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.</p> <p>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.</p> <p>2 = No, patient was not prescribed a statin medication and a statin medication was not indicated as</p>	

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			<p>active on the patient's medication list during the measurement period.</p> <ul style="list-style-type: none"> <li>The following exceptions to statin medication use will be identified by the Data Portal based on the submitted LDL values: <ul style="list-style-type: none"> <li>Patients with ischemic vascular disease aged 21 to 75 years and an LDL result less than 40 mg/dL</li> <li>Patients aged 40 – 75 years with an LDL result less than 70 mg/dL</li> <li>Patients aged 21 – 39 years with an LDL less than 190 mg/dL</li> </ul> </li> </ul> <p>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.</p> <ul style="list-style-type: none"> <li>If a statin was not prescribed, ordered, or reviewed as an active medication during the measurement period, leave BLANK.</li> </ul> <p>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</p>	

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			<p>= 2), enter the value that corresponds to any of the following contraindications or exceptions:</p> <p>1 = Pregnancy at any time during the measurement period</p> <p>2 = Active liver disease (liver failure, cirrhosis, hepatitis)</p> <p>3 = Rhabdomyolysis</p> <p>4 = End stage renal disease on dialysis</p> <p>5 = Heart failure</p> <p>6 = Other provider documented reason: breastfeeding during the measurement period</p> <p>7 = Other provider documented reason: woman of childbearing age not actively taking birth control during the measurement period</p> <p>8 = Other provider documented reason: allergy to statin</p> <p>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).</p> <p>10 = Other provider documented reason: intolerance (with supporting documentation of trying a statin at least once within the last five years). Additionally,</p>	

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			<p>Myopathy and Myositis (CHOL-05) Value Set may be used to document intolerance to statins.</p> <ul style="list-style-type: none"> <li>If none of the above contraindications or exceptions are documented, leave BLANK.</li> <li>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)</li> </ul> <p>Statin Medication Exception Date: If the patient has a documented contraindication or exception enter the date of the contraindication or exception.</p> <ul style="list-style-type: none"> <li>If only the month and year are known, enter the first day of the month.</li> </ul> <p>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)]</p>	

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			<p>Numerator component calculation: numerator component compliant if indicated on daily aspirin or anti-platelet medication (prescribed/ ordered) or documented contraindication/exception is present.</p> <p>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.</p> <p>Please see Appendix B for methods to identify appropriate aspirin products or antiplatelet medications.</p> <p>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.</p> <p>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.</p>	

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			<ul style="list-style-type: none"> <li>Aspirin/narcotic combination medications do not qualify as a daily aspirin product.</li> </ul> <p>Aspirin or Anti-platelet Medication Date</p> <p>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.</p> <p>* 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.</p> <p>Aspirin or Anti-platelet Medication Exception</p> <p>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:</p> <p>1 = Prescribed anti-coagulant medication during the measurement period</p> <p>2 = History of gastrointestinal bleeding</p> <p>3 = History of intracranial bleeding</p>	

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			<p>4 = Bleeding disorder</p> <p>5 = Other provider documented reason: allergy to aspirin or anti-platelets</p> <p>6 = Other provider documented reason: use of non-steroidal anti-inflammatory agents</p> <p>7 = Other provider documented reason: documented risk for drug interaction</p> <p>8 = Other provider documented reason: uncontrolled hypertension (systolic blood pressure greater than 180 mmHg and/or diastolic blood pressure greater than 110 mmHg)</p> <p>9 = Other provider documented reason: gastroesophageal reflux disease (GERD)</p> <p>If none of the above contraindications or exceptions are documented, leave BLANK.</p> <p>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).</p> <p>Aspirin or Anti-platelet Exception Date</p> <p>If the patient has a documented contraindication or exception enter the date of the contraindication or exception. If</p>	

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			<p>only the month and year are known, enter the first day of the month.</p> <p>TOBACCO COMPONENT</p> <p>Tobacco Status Documentation Date [Date (mm/dd/yyyy)] AND Tobacco Status [Numeric]</p> <p>Numerator component calculation: numerator component compliant if tobacco status within the last two years and status is tobacco-free.</p> <p>Tobacco Status Documentation Date:</p> <p>Enter the most recent date that the patient's tobacco status was documented during the measurement period or year prior.</p> <p>If the patient's tobacco status is not documented or the date of the documentation cannot be determined, leave BLANK.</p> <p>Tobacco Status:</p> <p>Enter the code that corresponds to the patient's most recent tobacco status during the measurement period or year prior.</p> <p>1 = Tobacco free (patient does not use tobacco; patient was a former user and is not a current user)</p> <p>2 = No documentation</p> <p>3 = Current tobacco user (tobacco includes any amount of cigarettes,</p>	

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			<p>cigars, pipes or smokeless tobacco)</p> <p>* If the date of the tobacco status documentation is not documented in the patient record, enter 2.</p> <p>* E-cigarettes are not considered tobacco products.</p> <p>A blank field will create an ERROR upon submission.</p>	
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.	<p>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.</p> <p>Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease)</p> <p>AND</p> <p>At least one established patient office visit (Established Pt Diabetes &amp; Vasc Value Set) performed or supervised by an eligible provider in an eligible</p>	Patients over age 18 undergoing carotid endarterectomy.

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			specialty for any reason during the measurement period.	
Denominator Details	<p>Time period for data collection: 12 consecutive months</p> <p>Patients aged <math>\geq 18</math> years on date of encounter</p> <p>AND</p> <p>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</p> <p>AND</p> <p>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,</p>	<p>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).</p> <p>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.</p> <ul style="list-style-type: none"> <li>- At least one outpatient visit (Outpatient Value Set) with an IVD diagnosis (IVD Value Set), OR</li> <li>- At least one acute inpatient visit (Acute Inpatient Value Set) with an IVD diagnosis (IVD Value Set)</li> </ul> <p>See the corresponding excel document for the following value sets:</p> <ul style="list-style-type: none"> <li>- Acute Inpatient Value Set</li> <li>- Outpatient Value Set</li> <li>- IVD Value Set</li> <li>- AMI Value Set</li> <li>- CABG Value Set</li> </ul>	<p>Please also refer to all code lists included in the data dictionary attached in S.2b.</p> <p>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.</p> <p>Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease)</p> <p>AND</p> <p>At least one established patient office visit (Established Pt Diabetes &amp; Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.</p> <p>Eligible Specialties:</p>	<p>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:</p> <p>BOTH</p> <p>--Gxxx1 OR Gxxx2</p> <p>AND</p> <p>--Gxxx3 OR Gxxx4 OR Gxxx5</p> <p>OR</p> <p>--Gxxx6 OR Gxxx7</p> <p>Numerator coding:</p> <p>Gxxx1: Documentation that oral antiplatelet therapy was given within 48 hours prior to surgical incision</p> <p>Gxxx2: No documentation that oral antiplatelet was given within 48 hours prior to the initiation of surgery</p> <p>Gxxx3: Oral antiplatelet therapy prescribed at hospital discharge</p> <p>Gxxx4: Oral antiplatelet therapy NOT prescribed at hospital discharge, Gxxx5 does not apply</p> <p>Gxxx5: Patient expired, left against medical advice, discharged to hospice,</p>

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	99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350 WITHOUT Telehealth Modifier: GQ, GT, 95, POS 02	- PCI Value Set --- 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.	Family Medicine, Internal Medicine, Geriatric Medicine, Cardiology Eligible Providers: Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurses (APRN)	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	Denominator exceptions • Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (e.g., allergy,	None	The following exclusions are allowed to be applied to the eligible population: permanent nursing home residents, receiving	Patients with known intolerance to antiplatelet agents such as aspirin or aspirin-like agents, or P2y12 antagonists, or those on heparin or other intravenous

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	<p>intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons)</p> <ul style="list-style-type: none"> <li>Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)</li> <li>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)</li> </ul>		hospice or palliative care services, or died prior to the end of the measurement period.	anti-coagulants; patients with active bleeding or undergoing urgent or emergent operations or endarterectomy combined with cardiac surgery. Patients with known intolerance to anti-platelet 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	<p>Time period for data collection: During the encounter within the 12-month period</p> <p>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</p>	N/A	<p>* Patient was a permanent nursing home resident at any time during the measurement period</p> <p>* Patient was in hospice or receiving palliative care at any time during the measurement period</p> <p>* Patient died prior to the end of the measurement period</p>	<p>Exclusion coding:</p> <p>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</p> <p>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</p>

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	<p>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</p>			

	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
	<p>advocate the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.</p> <p>Additional details:</p> <p>Append a modifier to CPT Category II code:</p> <p>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)</p> <p>4086F-2P: Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)</p> <p>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)</p>			
Risk Adjustm ent	<p>No risk adjustment or risk stratification</p> <p>140560   107246</p> <p>140560   107246</p>	<p>No risk adjustment or risk stratification</p> <p>116000   123834   140881   141015</p> <p>116000   123834   140881   141015</p>	<p>Statistical risk model</p> <p>112459   148276</p> <p>112459   148276</p>	<p>No risk adjustment or risk stratification</p> <p>109878   121550</p> <p>109878   121550</p>
Stratifica tion	Consistent with CMS' Measures Management System Blueprint and	NA	The measure for the ischemic vascular disease population is not	

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	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		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. <a href="https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-Final.pdf">https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-Final.pdf</a> <a href="https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-By-RELC.pdf">https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-By-RELC.pdf</a> 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	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	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	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	The proportion of patients who do receive antiplatelets as is recommended 109878   121550

	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
	<p>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</p> <p>3. Determine the numerator by identifying the subset of the denominator that meets the numerator criteria</p> <p>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</p> <p>5. Calculate the performance rate</p> <p>A patient not meeting the numerator criteria and without a valid and documented exception represents a quality failure.</p> <p>140560  107246</p>	<p>both the measurement year and the year prior to the measurement year.</p> <p>Step 2: Determine the numerator</p> <p>Patients whose most recent blood pressure is adequately controlled (&lt;140/90 mm Hg) during the measurement year.</p> <p>116000  123834  140881  141015</p>	<p>site. Please also refer to the measure calculation algorithms submitted within the data dictionary for this measure.</p> <p>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.</p> <p>Numerator logic is as follows:</p> <p>Blood Pressure Component:</p> <p>Is Blood Pressure date in the measurement year? If no, is numerator noncompliant for this component. If yes, assess next variable.</p> <p>BP Systolic &lt; 140? If no, is numerator noncompliant for this component. If yes, assess next variable.</p> <p>BP Diastolic &lt; 90? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component.</p> <p>Note: BP needs to occur during the measurement year AND most recent BP systolic less than 140 AND BP diastolic less than 90</p> <p>Assess next component.</p> <p>Cholesterol Statin Use Component:</p>	

	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
			<p>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.</p> <p>For patients not on a statin the following variables are used to assess numerator compliance related to contraindications or exceptions to statin use:</p> <p>Is the patient age 18 to 20? If yes, numerator compliant (free-pass), if no, assess next variable.</p> <p>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.</p> <p>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.</p>	

	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
			<p>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.</p> <p>Tobacco-Free Component:</p> <p>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.</p> <p>Daily Aspirin/ Anti-platelet Component:</p> <p>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.</p> <p>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.</p>	

	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
			<p>If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.</p> <p>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.</p> <p>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</p>	
Submission items	<p>5.1 Identified measures: 0465 : Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy</p> <p>5a.1 Are specs completely harmonized? Yes</p> <p>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.</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value: NA</p> <p>Related Measures: None</p>	<p>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</p> <p>5a.1 Are specs completely harmonized? No</p> <p>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</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>

	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
	5b.1 If competing, why superior or rationale for additive value: Not applicable.		<p>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.</p> <p>5b.1 If competing, why superior or rationale for additive value: There are other similar measures that address three of the four</p>	

	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
			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
Steward	MN Community Measurement	National Committee for Quality Assurance	American Heart Association	National Committee for Quality Assurance	National Committee for Quality Assurance
Description	<p>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:</p> <ul style="list-style-type: none"> <li>• Blood pressure less than 140/90 mmHg</li> <li>• On a statin medication, unless contraindications or exceptions are present</li> <li>• Non-tobacco user</li> <li>• On daily aspirin or anti-platelet</li> </ul>	<p>The percentage of adults 18-85 years of age who had a diagnosis of hypertension (HTN) and whose blood pressure was adequately controlled (&lt;140/90 mm Hg) during the measurement year.</p>	<p>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</p>	<p>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.</p>	<p>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:</p> <ul style="list-style-type: none"> <li>- Blood pressure control (BP): reported as under control &lt;140/90 mm Hg.</li> </ul>

	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
	medication, unless allowed contraindications or exceptions are present				
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. 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	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	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_Control_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
	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				
Level	Clinician : Group/Practice	Health Plan	Clinician : Individual	Clinician : Group/Practice, Clinician : Individual	Clinician : Group/Practice, Clinician : Individual
Setting	Outpatient Services	Outpatient Services	Home Care, Outpatient Services, Post-Acute Care	Outpatient Services	Outpatient Services
Numerator 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: <ul style="list-style-type: none"> <li>• 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</li> <li>• On a statin medication, unless allowed contraindications or exceptions are present</li> </ul>	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
	<ul style="list-style-type: none"> <li>• Patient is not a tobacco user</li> <li>• On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present</li> </ul>				
Numerator Details	<p>In order to be numerator compliant all four components must be met</p> <p>* Blood pressure less than 140/90 mmHg AND</p> <p>* On a statin medication, unless allowed contraindications or exceptions are present AND</p> <p>* Non-tobacco user AND</p> <p>* On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present</p> <p>BLOOD PRESSURE COMPONENT</p> <p>Blood Pressure Date [Date (mm/dd/yyyy)] AND</p>	<p>There are two data sources and approaches used for collecting data reporting the numerator for this measure:</p> <p>Administrative Claims and Medical Record Review</p> <p>ADMINISTRATIVE CLAIMS</p> <p>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.</p> <p>The blood pressure reading must occur on or after the date when the second diagnosis of hypertension (identified using the event/diagnosis criteria).</p>	<p>Time period for data collection:</p> <p>At least once during the measurement period</p> <p>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</p>	<p>ADMINISTRATIVE</p> <p>Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year.</p> <p>Oral antiplatelet therapy consists of: aspirin, clopidogrel, combination of aspirin and extended release dipyridamole, prasugrel, ticagrelor or ticlopidine.</p> <p>Anticoagulant medications consist of: Apixaban, Argatroban, Bivalirudin, Dabigatran, Dalteparin, Desirudin, Edoxaban, Enoxaparin, Fondaparinux, Heparin, Lepirudin, Rivaroxaban, Tinzaparin, or Warfarin.</p> <p>---</p> <p>MEDICAL RECORD</p> <p>Patients who had documentation of routine use of aspirin or another</p>	<p>ADMINISTRATIVE CLAIMS</p> <p>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.</p> <p>The patient is numerator compliant if the BP is &lt;140/90 mm Hg. The patient is not compliant if the BP is &gt; 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.</p> <p>Organizations that use CPT Category II codes to identify numerator compliance for this indicator must search for all codes in the following value</p>

	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
	<p>BP Systolic [Numeric] AND BP Diastolic [Numeric] Numerator component calculation: numerator component compliant is BP during the measurement year AND Systolic &lt; 140 AND Diastolic &lt; 90. BP Date Enter the date of the most recent blood pressure result during the measurement period.</p> <ul style="list-style-type: none"> <li>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.</li> <li>Do not include BP readings: <ul style="list-style-type: none"> <li>Taken during an acute inpatient stay or an ED visit.</li> <li>Taken during an outpatient visit</li> </ul> </li> </ul>	<p>The patient is numerator compliant if the blood pressure is &lt;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.</p> <p>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.</p>		<p>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.</p>	<p>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:</p> <ul style="list-style-type: none"> <li>- Systolic Less Than 140 Value Set</li> <li>- Systolic Greater Than/Equal To 140 Value Set</li> <li>- Diastolic Less Than 80 Value Set</li> <li>- Diastolic 80–89 Value Set</li> <li>- Diastolic Greater Than/Equal To 90 Value Set</li> <li>- Outpatient Value Set</li> <li>- Nonacute Inpatient Value Set</li> </ul> <p>---</p> <p><b>MEDICAL RECORD</b></p> <p>To determine if a patient is adequately controlled, the representative blood pressure must be identified. Follow the steps below.</p> <p><b>Step 1</b></p> <ul style="list-style-type: none"> <li>- Identify the most recent blood pressure reading noted during the measurement year.</li> </ul> <p>Do not include readings that meet the following criteria:</p>

	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
	<p>which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).</p> <ul style="list-style-type: none"> <li>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).</li> <li>o Reported by or taken by the patient. <ul style="list-style-type: none"> <li>• Leave BLANK if a blood pressure was not obtained during the measurement period.</li> </ul> </li> </ul> <p>BP Systolic</p> <p>Enter the value of the most recent systolic blood pressure result during the measurement period.</p> <ul style="list-style-type: none"> <li>• 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</li> </ul>	<p>VALUE SET / NUMERATOR COMPLIANCE</p> <p>Systolic Less Than 140 Value Set / Systolic compliant</p> <p>Systolic Greater Than or Equal to 140 Value Set / Systolic not compliant</p> <p>Diastolic Less Than 80 Value Set / Diastolic compliant</p> <p>Diastolic 80-89 Value Set / Diastolic compliant</p> <p>Diastolic Greater Than or Equal to 90 Value Set / Diastolic not compliant</p> <p>See attached code value sets.</p> <p>MEDICAL RECORD REVIEW</p> <p>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 &lt;140/90 mm hg</p>			<ul style="list-style-type: none"> <li>- Taken during an acute inpatient stay or an ED visit.</li> <li>- 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).</li> <li>- Taken the same day as major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy).</li> <li>- Reported by or taken by the patient</li> <li>- Documentation of "VS within normal limits" or "vital signs normal".</li> </ul> <p>Step 2</p> <ul style="list-style-type: none"> <li>- 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.</li> </ul>

	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
	<p>submitted in Column Z (BP Diastolic).</p> <ul style="list-style-type: none"> <li>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.</li> <li>Leave BLANK if a blood pressure was not obtained during the measurement period.</li> </ul> <p>BP Diastolic</p> <p>Enter the value of the most recent diastolic blood pressure result during the measurement period.</p> <ul style="list-style-type: none"> <li>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).</li> <li>NOTE: The diastolic blood pressure is the lower number in the recorded fraction. For example, the diastolic value for a</li> </ul>	<p>(adequate control). To determine if a member's blood pressure is adequately controlled, the representative blood pressure must be identified.</p> <p>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.</p> <p>Use the following guidance to find the appropriate medical record to review.</p> <ul style="list-style-type: none"> <li>- Identify the patient's PCP.</li> <li>- If the patient had more than one PCP for the time-period, identify the PCP who most recently provided care to the patient.</li> <li>- If the patient did not visit a PCP for the time-period or does not have a PCP, identify the practitioner who most</li> </ul>			<p>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).</p>

	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
	<p>blood pressure of 124/72 mmHg is 72.</p> <ul style="list-style-type: none"> <li>Leave BLANK if a blood pressure was not obtained during the measurement period.</li> </ul> <p>CHOLESTEROL MANAGEMENT STATIN COMPONENT</p> <p>LDL Date [Date (mm/dd/yyyy)] AND LDL Value [Numeric]</p> <p>For calculating exceptions to statin use based on very low LDL (&lt; 40 for cardiovascular disease and &lt; 70 for patients with diabetes)</p> <p>Enter the date of the most recent LDL test result between 01/01/2015 and 12/31/2019.</p> <ul style="list-style-type: none"> <li>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.</li> </ul>	<p>recently provided care to the patient.</p> <ul style="list-style-type: none"> <li>If a practitioner other than the patient's PCP manages the hypertension, the organization may use the medical record of that practitioner.</li> </ul> <p>Identify the most recent blood pressure reading noted during the measurement year.</p> <p>The blood pressure reading must occur on or after the date when the second diagnosis of hypertension (identified using the event/diagnosis criteria) occurred.</p> <p>Do not include BP readings:</p> <ul style="list-style-type: none"> <li>Taken during an acute inpatient stay or an ED visit.</li> <li>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.</li> </ul>			

	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
	<ul style="list-style-type: none"> <li>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.</li> <li>LDL values within the last five years will be used to calculate potential exceptions to being on a statin medication.</li> <li>Leave BLANK if an LDL test was not performed between 01/01/2015 and 12/31/2019.</li> </ul> <p>Enter the value of the most recent LDL test result between 01/01/2015 and 12/31/2019.</p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p>Statin Medication [Numeric] AND Statin Medication Date [Date (mm/dd/yyyy)] AND/OR</p>	<p>- Reported by or taken by the patient.</p> <p>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.</p> <p>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.</p> <p>The patient is not compliant if the BP</p>			

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	<p>Station Medication Exception [Numeric] AND</p> <p>Station Medication Exception Date [Date (mm/dd/yyyy)]</p> <p>Numerator component calculation: numerator component compliant if on a statin (prescribed/ ordered) or low LDL value (see above) or documented contraindication/exception is present.</p> <p>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.</p> <p>Please see Appendix A for a list of statin medications.</p> <p>1 = Yes, patient was prescribed a statin medication, or a statin medication was indicated as active on the patient's</p>	<p>reading is <math>\leq 140/90</math> 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).</p>			

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	<p>medication list during the measurement period.</p> <p>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.</p> <ul style="list-style-type: none"> <li>The following exceptions to statin medication use will be identified by the Data Portal based on the submitted LDL values: <ul style="list-style-type: none"> <li>Patients with ischemic vascular disease aged 21 to 75 years and an LDL result less than 40 mg/dL</li> <li>Patients aged 40 – 75 years with an LDL result less than 70 mg/dL</li> <li>Patients aged 21 – 39 years with an LDL less than 190 mg/dL</li> </ul> </li> </ul> <p>Statin Medication Date Enter the date of the most recent statin prescription, order or</p>				

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	<p>review on an active medications list that included a statin during the measurement period.</p> <ul style="list-style-type: none"> <li>If a statin was not prescribed, ordered, or reviewed as an active medication during the measurement period, leave BLANK.</li> </ul> <p>Station Medication Exception</p> <p>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:</p> <p>1 = Pregnancy at any time during the measurement period</p> <p>2 = Active liver disease (liver failure, cirrhosis, hepatitis)</p> <p>3 = Rhabdomyolysis</p>				

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	<p>4 = End stage renal disease on dialysis</p> <p>5 = Heart failure</p> <p>6 = Other provider documented reason: breastfeeding during the measurement period</p> <p>7 = Other provider documented reason: woman of childbearing age not actively taking birth control during the measurement period</p> <p>8 = Other provider documented reason: allergy to statin</p> <p>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).</p> <p>10 = Other provider documented reason: intolerance (with supporting documentation of trying a statin at least</p>				

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	<p>once within the last five years). Additionally, Myopathy and Myositis (CHOL-05) Value Set may be used to document intolerance to statins.</p> <ul style="list-style-type: none"> <li>• If none of the above contraindications or exceptions are documented, leave BLANK.</li> <li>• 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</li> </ul>				

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	<p>contraindication or exception.</p> <ul style="list-style-type: none"> <li>If only the month and year are known, enter the first day of the month.</li> </ul> <p>ASPIRIN/ANTIPLATELET COMPONENT</p> <p>Aspirin or Anti-platelet Medication [Numeric]</p> <p>AND</p> <p>Aspirin or Anti-platelet Date [Date (mm/dd/yyyy)]</p> <p>AND/OR</p> <p>Aspirin or Anti-platelet Exception [Numeric]</p> <p>AND</p> <p>Aspirin or Anti-platelet Exception Date [Date (mm/dd/yyyy)]</p> <p>Numerator component calculation: numerator component compliant if indicated on daily aspirin or anti-platelet medication (prescribed/ ordered) or documented contraindication/exception is present.</p> <p>Aspirin or Anti-platelet Medication</p>				

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	<p>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.</p> <p>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.</p> <p>2 = No, patient was not prescribed a daily aspirin product or antiplatelet medication and one was not indicated as active on the patient's</p>				

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	<p>medication list during the measurement period.</p> <ul style="list-style-type: none"> <li>Aspirin/narcotic combination medications do not qualify as a daily aspirin product.</li> </ul> <p>Aspirin or Anti-platelet Medication Date</p> <p>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.</p> <p>* 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.</p> <p>Aspirin or Anti-platelet Medication Exception</p> <p>For patients who were not prescribed or taking a daily aspirin</p>				

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	<p>product or anti-platelet medication during the measurement period, enter the code that corresponds to any of the following contraindications or exceptions:</p> <p>1 = Prescribed anti-coagulant medication during the measurement period</p> <p>2 = History of gastrointestinal bleeding</p> <p>3 = History of intracranial bleeding</p> <p>4 = Bleeding disorder</p> <p>5 = Other provider documented reason: allergy to aspirin or anti-platelets</p> <p>6 = Other provider documented reason: use of non-steroidal anti-inflammatory agents</p> <p>7 = Other provider documented reason: documented risk for drug interaction</p> <p>8 = Other provider documented reason: uncontrolled</p>				

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	<p>hypertension (systolic blood pressure greater than 180 mmHg and/or diastolic blood pressure greater than 110 mmHg)</p> <p>9 = Other provider documented reason: gastroesophageal reflux disease (GERD)</p> <p>If none of the above contraindications or exceptions are documented, leave BLANK.</p> <p>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).</p> <p>Aspirin or Anti-platelet Exception Date</p> <p>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.</p>				

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	<p>TOBACCO COMPONENT</p> <p>Tobacco Status Documentation Date [Date (mm/dd/yyyy)] AND Tobacco Status [Numeric]</p> <p>Numerator component calculation: numerator component compliant if tobacco status within the last two years and status is tobacco-free.</p> <p>Tobacco Status Documentation Date: Enter the most recent date that the patient's tobacco status was documented during the measurement period or year prior.</p> <p>If the patient's tobacco status is not documented or the date of the documentation cannot be determined, leave BLANK.</p> <p>Tobacco Status: Enter the code that corresponds to the patient's most recent tobacco status during</p>				

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	<p>the measurement period or year prior.</p> <p>1 = Tobacco free (patient does not use tobacco; patient was a former user and is not a current user)</p> <p>2 = No documentation</p> <p>3 = Current tobacco user (tobacco includes any amount of cigarettes, cigars, pipes or smokeless tobacco)</p> <p>* If the date of the tobacco status documentation is not documented in the patient record, enter 2.</p> <p>* E-cigarettes are not considered tobacco products.</p> <p>A blank field will create an ERROR upon submission.</p>				
Deno minat or State ment	<p>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</p>	<p>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.</p>	<p>All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period</p>	<p>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</p>	<p>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.</p>

	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
	<p>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.</p> <p>Both contacts AND the active problem list must be queried for diagnosis (Ischemic Vascular Disease)</p> <p>AND</p> <p>At least one established patient office visit (Established Pt Diabetes &amp; Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.</p>			and the year prior to the measurement year.	
Deno minat or Details	<p>Please also refer to all code lists included in the data dictionary attached in S.2b.</p> <p>Patients ages 18 years or older at the start of the measurement period AND less than</p>	<p>Patients who had continuous enrollment in the measurement year.</p> <p>No more than one gap in continuous enrollment of up to 45 days during the measurement year. If the patient has Medicaid,</p>	<p>Time period for data collection: 12 consecutive months</p> <p>Patients aged <math>\geq 18</math> years on date of encounter</p> <p>AND</p> <p>Diagnosis for coronary artery disease (ICD-10-CM): I20.0, I20.1, I20.8, I20.9, I21.01,</p>	<p>ADMINISTRATIVE</p> <p>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</p>	<p>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</p>

	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
	<p>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</p> <p>At least one established patient office visit (Established Pt Diabetes &amp; Vasc Value Set) performed or supervised by an eligible provider in an eligible specialty for any reason during the measurement period.</p> <p>Eligible Specialties:</p>	<p>then no more than a 1-month gap in coverage.</p> <p>Patients are identified for the denominator using claim/encounter data.</p> <p>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.</p> <p>Any of the following combinations meet criteria:</p> <ul style="list-style-type: none"> <li>- Outpatient visit with any diagnosis of hypertension</li> <li>- A telephone visit with any diagnosis of hypertension</li> <li>- An online assessment with any diagnosis of hypertension</li> </ul> <p>Only one of the two visits may be a telephone visit, an online assessment or an outpatient telehealth visit. Identify outpatient</p>	<p>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</p> <p>AND</p> <p>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</p> <p>WITHOUT</p> <p>Telehealth Modifier: GQ, GT, 95, POS 02</p>	<p>needs to be identified by one method to be included in the measure.</p> <p>Event. Any of the following during the year prior to the measurement year meet criteria:</p> <ul style="list-style-type: none"> <li>- MI. Discharged from an inpatient setting with an MI (MI Value Set)*. Use both facility and professional claims to identify MI.</li> <li>-CABG. Discharged from an inpatient setting with a CABG (CABG Value Set)*. Use both facility and professional claims to identify CABG.</li> <li>-PCI. Patients who had a PCI (PCI Value Set)* in any setting.</li> </ul> <p>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.</p> <ul style="list-style-type: none"> <li>-At least one outpatient visit (Outpatient Value Set)* with an IVD diagnosis (IVD Value Set)*, or</li> <li>-At least one acute inpatient encounter (Acute Inpatient</li> </ul>	<p>of setting (e.g., inpatient, outpatient, ED).</p> <p>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.</p> <ul style="list-style-type: none"> <li>- At least one outpatient visit (Outpatient Value Set) with an IVD diagnosis (IVD Value Set), OR</li> <li>- At least one acute inpatient visit (Acute Inpatient Value Set) with an IVD diagnosis (IVD Value Set)</li> </ul> <p>See the corresponding excel document for the following value sets:</p> <ul style="list-style-type: none"> <li>- Acute Inpatient Value Set</li> <li>- Outpatient Value Set</li> <li>- IVD Value Set</li> <li>- AMI Value Set</li> <li>- CABG Value Set</li> <li>- PCI Value Set</li> </ul> <p>---</p> <p>MEDICAL RECORD</p> <p>Documentation of IVD in the medical record includes:</p> <ul style="list-style-type: none"> <li>- IVD</li> <li>- Ischemic heart disease</li> <li>- Angina</li> </ul>

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	<p>Family Medicine, Internal Medicine, Geriatric Medicine, Cardiology</p> <p>Eligible Providers: Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurses (APRN)</p>	<p>telehealth visits by the presence of a telehealth modifier or the presence of a telehealth POS code associated with the outpatient visit.</p> <p>See attached code value sets.</p>		<p>Value Set)* with an IVD diagnosis (IVD Value Set)*.</p> <p>*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.</p> <p>---</p> <p><b>MEDICAL RECORD</b></p> <p>Documentation of IVD in the medical record includes:</p> <ul style="list-style-type: none"> <li>- IVD</li> <li>- Ischemic heart disease</li> <li>- Angina</li> <li>- Coronary atherosclerosis</li> <li>- Coronary artery occlusion</li> <li>- Cardiovascular disease</li> <li>- Occlusion or stenosis of precerebral arteries (including basilar, carotid and vertebral arteries)</li> <li>- Atherosclerosis of renal artery</li> <li>- Atherosclerosis of native arteries of the extremities</li> <li>- Chronic total occlusion of artery of the extremities</li> <li>- Arterial embolism and thrombosis</li> <li>- Atheroembolism.</li> </ul>	<ul style="list-style-type: none"> <li>- Coronary atherosclerosis</li> <li>- Coronary artery occlusion</li> <li>- Cardiovascular disease</li> <li>- Occlusion or stenosis of precerebral arteries (including basilar, carotid and vertebral arteries)</li> <li>- Atherosclerosis of renal artery</li> <li>- Atherosclerosis of native arteries of the extremities</li> <li>- Chronic total occlusion of artery of the extremities</li> <li>- Arterial embolism and thrombosis</li> <li>- Atheroembolism.</li> </ul>

	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
				Note: Use paper logs, patient registries or electronic medical records (EMRs) to identify the denominator, then use the medical record to confirm patient eligibility.	
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.	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.	Denominator exceptions <ul style="list-style-type: none"> <li>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)</li> <li>Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)</li> <li>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)</li> </ul>	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
Exclusion Details	* Patient was a permanent nursing home resident at any	ADMINISTRATIVE CLAIMS Exclude patients who use hospice services or elect	Time period for data collection: During the encounter within the 12-month period	Exclude patients using hospice services (G9723) any	N/A

	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
	<p>time during the measurement period</p> <p>* Patient was in hospice or receiving palliative care at any time during the measurement period</p> <p>* Patient died prior to the end of the measurement period</p>	<p>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:</p> <ul style="list-style-type: none"> <li>- Medicare members 66 years of age and older as of December 31 of the measurement year who meet either of the following: <ul style="list-style-type: none"> <li>-- Enrolled in an Institutional SNP (I-SNP) any time during the measurement year.</li> <li>-- 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</li> </ul> </li> </ul>	<p>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</p>	<p>time during the measurement period.</p> <p>Patients who had documentation of use of anticoagulant medications during the measurement year.</p> <p>ANTICOAGULANT MEDICATIONS</p> <ul style="list-style-type: none"> <li>- Apixaban</li> <li>- Argatroban</li> <li>- Bivalirudin</li> <li>- Dabigatran</li> <li>- Dalteparin</li> <li>- Desirudin</li> <li>- Edoxaban</li> <li>- Enoxaparin</li> <li>- Fondaparinux</li> <li>- Heparin</li> <li>- Lepirudin</li> <li>- Rivaroxaban</li> <li>- Tinzaparin</li> <li>- Warfarin</li> </ul>	

	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
		<p>during the measurement year.</p> <p>- 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:</p> <ol style="list-style-type: none"> <li>1. At least one claim/encounter for frailty during the measurement year.</li> <li>2. Any of the following during the measurement year or the year prior to the measurement year (count services that occur over both years): <ul style="list-style-type: none"> <li>-- 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</li> </ul> </li> </ol>	<p>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.</p> <p>Additional details: Append a modifier to CPT Category II code:</p>		

	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
		<p>nonacute inpatient discharge:</p> <ol style="list-style-type: none"> <li>1. Identify all acute and nonacute inpatient stays.</li> <li>2. Confirm the stay was for nonacute care based on the presence of a nonacute code on the claim.</li> <li>3. Identify the discharge date for the stay.</li> </ol> <p>-- At least one acute inpatient encounter with an advanced illness diagnosis.</p> <p>-- At least one acute inpatient discharge with an advanced illness diagnosis. To identify an acute inpatient discharge:</p> <ol style="list-style-type: none"> <li>1. Identify all acute and nonacute inpatient stays.</li> <li>2. Exclude nonacute inpatient stays.</li> <li>3. Identify the discharge date for the stay.</li> </ol> <p>-- A dispensed dementia medication.</p> <p>DEMENTIA MEDICATIONS DESCRIPTION / PRESCRIPTION Cholinesterase inhibitors / Donepezil;</p>	<p>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)</p> <p>4086F-2P: Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (e.g., patient declined, other patient reasons)</p> <p>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)</p>		

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		<p>Galantamine; Rivastigmine</p> <p>Miscellaneous central nervous system agents / Memantine</p> <p>- Members 81 years of age and older as of December 31 of the measurement year (all product lines) with frailty during the measurement year.</p> <p>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:</p> <ol style="list-style-type: none"> <li>1. Identify all acute and nonacute inpatient stays.</li> <li>2. Confirm the stay was for nonacute care based on the presence of a nonacute code on the claim.</li> </ol>			

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		<p>3. Identify the admission date for the stay. See attached code value sets.</p> <p>MEDICAL RECORD REVIEW</p> <p>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.</p>			
Risk Adjust ment	<p>Statistical risk model 112459  148276 112459  148276</p>	<p>No risk adjustment or risk stratification 116000  123834  135810  140881  117446  141015 116000  123834  135810  140881  117446  141015</p>	<p>No risk adjustment or risk stratification 140560  107246 140560  107246</p>	<p>No risk adjustment or risk stratification 116000  123834  140881 116000  123834  140881</p>	<p>No risk adjustment or risk stratification 116000  123834  140881  141015 116000  123834  140881  141015</p>
Stratifi cation	The measure for the ischemic vascular disease population is not currently stratified when publicly reported	N/A	Consistent with CMS' Measures Management System Blueprint and national recommendations put forth by the IOM (now NASEM) and	N/A	NA

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	<p>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.</p> <p><a href="https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-Final.pdf">https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-Final.pdf</a></p> <p><a href="https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-By-RELC.pdf">https://mncm.org/wp-content/uploads/2020/01/2018-Disparities-Report-By-RELC.pdf</a></p> <p>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)</p>		<p>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</p>		
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
Algorithm	This measure is calculated by	STEP 1: Determine the eligible population. To do	Calculating the performance rate:	Step 1: Determine the denominator	Step 1: Determine the denominator

## NATIONAL QUALITY FORUM

NQF REVIEW DRAFT—Comments due by September 3, 2020 by 6:00 PM ET.

	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
	<p>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.</p> <p>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:</p> <p>Blood Pressure Component: Is Blood Pressure date in the measurement year? If no, is</p>	<p>so, identify adults who meet all specified criteria.</p> <ul style="list-style-type: none"> <li>- AGES: 18-75 years as of December 31 of the measurement year.</li> <li>- 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.</li> </ul> <p>STEP 2: Exclude patients who meet the exclusion criteria. SEE responses in S.8 and S.9 for denominator exclusion criteria and details.</p> <p>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.</p> <p>STEP 4: Identify the lowest systolic and lowest diastolic blood pressure reading from</p>	<ol style="list-style-type: none"> <li>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</li> <li>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</li> <li>3. Determine the numerator by identifying the subset of the denominator that meets the numerator criteria</li> <li>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</li> </ol>	<p>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.</p> <p>Step 2: Exclude patients who meet the exclusion criteria</p> <p>Patients on anticoagulant therapy.</p> <p>Step 3: Determine the numerator</p> <p>Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year.</p> <p>Step 4: Calculate the rate by dividing the numerator (Step 3) by the denominator (after exclusions) (Step 2). 116000  123834  140881</p>	<p>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.</p> <p>Step 2: Determine the numerator</p> <p>Patients whose most recent blood pressure is adequately controlled (&lt;140/90 mm Hg) during the measurement year. 116000  123834  140881  141015</p>

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	<p>numerator noncompliant for this component. If yes, assess next variable.</p> <p>BP Systolic &lt; 140? If no, is numerator noncompliant for this component. If yes, assess next variable.</p> <p>BP Diastolic &lt; 90? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component.</p> <p>Note: BP needs to occur during the measurement year AND most recent BP systolic less than 140 AND BP diastolic less than 90</p> <p>Assess next component.</p> <p>Cholesterol Statin Use Component:</p> <p>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</p>	<p>the most recent blood pressure notation in the medical record.</p> <p>STEP 5: Determine whether the result was &lt;140/90 mm Hg.</p> <p>STEP 6: Calculate the rate by dividing the numerator (STEP 5) by the denominator (after exclusions) (STEP 2).</p> <p>116000   123834   135810   140881   117446   141015</p>	<p>be calculated and reported along with performance rates to highlight variations in care</p> <p>5. Calculate the performance rate</p> <p>A patient not meeting the numerator criteria and without a valid and documented exception represents a quality failure. 140560   107246</p>		

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	<p>no, assess next variable.</p> <p>For patients not on a statin the following variables are used to assess numerator compliance related to contraindications or exceptions to statin use:</p> <p>Is the patient age 18 to 20? If yes, numerator compliant (free-pass), if no, assess next variable.</p> <p>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.</p> <p>Does the patient have a valid contraindication/exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, end stage renal disease on dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with</p>				

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	<p>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.</p> <p>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.</p> <p>Assess next component.</p> <p>Tobacco-Free Component:</p> <p>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</p>				

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	<p>component. Assess next component.</p> <p>Daily Aspirin/ Anti-platelet Component:</p> <p>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.</p> <p>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</p>				

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	<p>remains in the denominator.</p> <p>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.</p> <p>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</p>				
Submission items	<p>5.1 Identified measures: 0067 : Coronary Artery Disease (CAD): Antiplatelet Therapy</p> <p>0068 : Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet</p> <p>0073 : Ischemic Vascular Disease (IVD): Blood Pressure Control</p>	<p>5.1 Identified measures:</p> <p>0061 : Comprehensive Diabetes Care: Blood Pressure Control (&lt;140/90 mm Hg)</p> <p>2602 : Controlling High Blood Pressure for People with Serious Mental Illness</p> <p>2606 : Diabetes Care for People with Serious Mental Illness: Blood Pressure Control (&lt;140/90 mm Hg)</p>	<p>5.1 Identified measures: 0465 : Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy</p> <p>5a.1 Are specs completely harmonized? Yes</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: The patient population of 0465 is adults undergoing carotid endarterectomy, whereas the</p>	<p>5.1 Identified measures: 0142 : Aspirin prescribed at discharge for AMI</p> <p>0067 : Coronary Artery Disease (CAD): Antiplatelet Therapy</p> <p>0076 :</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value: NA</p> <p>Related Measures: None</p>

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	<p>5a.1 Are specs completely harmonized? No</p> <p>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</p>	<p>5a.1 Are specs completely harmonized? Yes</p> <p>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 &lt;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</p>	<p>patient population of 067 is adults with coronary artery disease.</p> <p>5b.1 If competing, why superior or rationale for additive value: Not applicable.</p>	<p>DUE TO THE TEXT LIMIT IN THIS SECTION – WE ARE PROVIDING OUR ANSWER FOR 5a.2 IN SECTION 5b.1.</p> <p>5b.1 If competing, why superior or rationale for additive value: ANSWER FOR SECTION 5a.2</p> <p>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,</p>	

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	<p>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.</p> <p>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.</p>	<p>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 &lt;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</p>		<p>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.</p> <p>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:</p> <p>NQF 0142 – ASPIRIN PRESCRIBED AT DISCHARGE FOR AMI</p> <p>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</p>	

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		<p>of adult diabetes patients, 18-75 years of age, who have optimally managed modifiable risk factors including blood pressure and four other indicators.</p> <p>HARMONIZED MEASURE ELEMENTS: All measures described above focus on a blood pressure target of &lt;140/90 mm Hg.</p> <p>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</p>		<p>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.</p> <p>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.</p> <p>Additionally, both use value sets of codes to identify patients with AMI that do not conflict.</p> <p>NQF 0067 – CHRONIC STABLE CORONARY ARTERY DISEASE: ANTIPLATELET THERAPY</p> <p>This measure assesses the percentage of patients aged 18 years and older with a diagnosis of coronary artery</p>	

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		<p>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.</p>		<p>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.</p> <p>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</p>	

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		5b.1 If competing, why superior or rationale for additive value: NA		<p>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.</p> <p>NQF 0076 – OPTIMAL VASCULAR CARE</p> <p>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</p>	

	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
				<p>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.</p> <p>NQF 2452 – PERCUTANEOUS CORONARY INTERVENTION (PCI): POST-PROCEDURAL OPTIMAL MEDICAL THERAPY (NOTE: UNABLE TO SELECT IN 5.a1)</p> <p>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</p>	

	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
				<p>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.</p> <p>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.</p> <p>NQF 0964 – THERAPY WITH ASPIRIN, P2Y12 INHIBITOR, AND STATIN AT DISCHARGE FOLLOWING PCI IN ELIGIBLE PATIENTS (NOTE: UNABLE TO SELECT IN 5.a1)</p> <p>NQF 0964 is a composite measure that assesses the</p>	

	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
				<p>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.</p> <p>There is no impact on interpretability of publically-reported rates or added burden of data collection</p>	

	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
				<p>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.</p> <p>ANSWER FOR SECTION 5b.1</p> <p>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.</p>	

### 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
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 chart-abstracted 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	Process	Process

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
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 <a href="http://www.QualityNet.org">www.QualityNet.org</a> , are also available for the CART tool. These tools are posted on <a href="http://www.QualityNet.org">www.QualityNet.org</a> . Available at measure-specific web page URL identified in S.1 Attachment 0290_Annual_Update_Code_Set_-2019-.xlsx	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 <a href="http://www.QualityNet.org">www.QualityNet.org</a> , are also available for the CART tool. These tools are posted on <a href="http://www.QualityNet.org">www.QualityNet.org</a> . 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: <ul style="list-style-type: none"> <li>• E/M Code</li> <li>• ICD-10-CM Principal Diagnosis Code</li> <li>• Initial ECG Interpretation</li> <li>• Transfer for Acute Coronary Intervention</li> </ul> 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: <ul style="list-style-type: none"> <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> </ul> There was documentation the patient was transferred from this	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
	<p>facility's emergency department to another facility specifically for acute coronary intervention."</p> <p>Median times to transfer within a three-month period are aggregated, on a rolling basis, for AMI patients who are transferred for ACI.</p>	
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	<p>NQF #0290 is a continuous measure; therefore, the numerator and denominator details contained in Section S.5 and S.7 are the same.</p> <p>The following data elements are used to define the measure population:</p> <ul style="list-style-type: none"> <li>• E/M Code</li> <li>• ICD-10-CM Principal Diagnosis Code</li> <li>• Initial ECG Interpretation</li> <li>• Transfer for Acute Coronary Intervention</li> </ul> <p>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:</p> <ul style="list-style-type: none"> <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> </ul> <p>There was documentation the patient was transferred from this facility's emergency department to another facility specifically for acute coronary intervention."</p>	<p>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.</p> <p>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.</p>
Exclusions	<p>Excluded Populations:</p> <ul style="list-style-type: none"> <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.

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
Exclusion Details	The following data elements are used to define the measure exclusions: <ul style="list-style-type: none"> <li>• Birthdate</li> <li>• Fibrinolytic Therapy Administration</li> </ul>	Cases are excluded for any patients that meet any of the following criteria: <ul style="list-style-type: none"> <li>• Patients less than 18 years of age.</li> <li>• 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.</li> </ul>
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: <ol style="list-style-type: none"> <li>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.</li> <li>2. Check Initial ECG Interpretation. <ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>c. If Initial ECG Interpretation equals Yes, the case will proceed to Fibrinolytic Administration.</li> </ol> </li> <li>3. Check Fibrinolytic Administration. <ol style="list-style-type: none"> <li>a. If Fibrinolytic Administration is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return</li> </ol> </li> </ol>	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: <ol style="list-style-type: none"> <li>1. Check E/M Code; if on Table 1.0 (in the Excel workbook provided for Section S2b), proceed</li> <li>2. Check Discharge Code; include patients with discharge code of 4a or 4d</li> <li>3. Calculate Patient Age (Outpatient Encounter Date - Birthdate)</li> <li>4. Check Patient Age; if <math>\geq 18</math>, proceed</li> <li>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</li> <li>6. Check Initial ECG Interpretation; if "Yes," proceed</li> <li>7. Check Fibrinolytic Administration; if "Yes," proceed, record as the denominator</li> </ol>

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
	<p>to Transmission Data Processing Flow: Clinical in the Data Transmission section.</p> <p>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.</p> <p>c. If Fibrinolytic Administration equals No, the case will proceed to Transfer for Acute Coronary Intervention.</p> <p>4. Check Transfer for Acute Coronary Intervention.</p> <p>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.</p> <p>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.</p> <p>c. If Transfer for Acute Coronary Intervention equals 1, the case will proceed to ED Departure Date.</p> <p>5. Check ED Departure Date.</p> <p>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.</p> <p>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.</p> <p>c. If ED Departure Date equals Non-UTD Value, the case will proceed to ED Departure Time.</p> <p>6. Check ED Departure Time.</p> <p>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.</p>	<p>8. Check Fibrinolytic Administration Date; if a Non-Unable to Determine (UTD) value, proceed</p> <p>9. Check Fibrinolytic Administration Time; if a Non-UTD value, proceed</p> <p>10. Check Arrival Time; if a Non-UTD value, proceed</p> <p>11. Calculate Time to Fibrinolysis (Fibrinolytic Administration Time minus Arrival Time)</p> <p>12. Check Time to Fibrinolysis; if <math>\geq 0</math> min and <math>\leq 30</math> min, record as the numerator. If <math>&gt; 30</math> min and <math>= 360</math> min, proceed</p> <p>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</p> <p>14. Measure = numerator counts / denominator counts [The value should be recorded as a percentage] 109921   138817   138553   141592</p>

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
	<p>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.</p> <p>c. If ED Departure Time equals Non-UTD Value, the case will proceed to Arrival Time.</p> <p>7. Check Arrival Time.</p> <p>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.</p> <p>b. If Arrival Time equals Non-UTD Value, the case will proceed to the Measurement Value.</p> <p>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).</p> <p>9. Check the Measurement Value.</p> <p>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.</p> <p>b. If Measurement Value is greater than or equal to 0 minutes, the case will proceed to Reason for Not Administering Fibrinolytic Therapy.</p> <p>10. Check Reason for Not Administering Fibrinolytic Therapy.</p> <p>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.</p> <p>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.</p> <p>11. Check Reason for Not Administering Fibrinolytic Therapy.</p>	

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
	<p>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.</p> <p>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.</p> <p>Submission Threshold</p> <p>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</p>	
Submission items	<p>5.1 Identified measures: 0288 : Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival</p> <p>5a.1 Are specs completely harmonized? Yes</p> <p>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.</p>	<p>5.1 Identified measures: 0290 : Median Time to Transfer to Another Facility for Acute Coronary Intervention</p> <p>0163 : Primary PCI received within 90 minutes of hospital arrival</p> <p>5a.1 Are specs completely harmonized? No</p> <p>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.</p>

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
	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.	<p>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.</p> <p>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.</p>

## 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-Nepilysin 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-Nepilysin 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-Nepilysin 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-Nepriylsin 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-Nepriylsin 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%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.

**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  $\geq$  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  $\geq$  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, O24.113, O24.119, O24.12, O24.13, 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

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  $\geq 18$  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  $\geq$  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 (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%2FQnetTier4&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-Nepilysin 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%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, 1-209, 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-Nepilysin 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%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

**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-Nepilysin 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-Nepilysin 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-Nepilysin 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-Nepilysin 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 anti-platelet agent (aspirin or clopidogrel or equivalent 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 MNMCM\_-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-platelet 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 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.

#### **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 surgical 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  $\geq 18$  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

### 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 surgical 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-platelet 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-platelet 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 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)

**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, end 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 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

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

The proportion of patients who do receive 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 MNMCM\_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  $\geq 140/90$  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  $\geq 140/90$  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  $\geq$  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

#### **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

---

#### 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

#### **NATIONAL QUALITY FORUM**

NQF REVIEW DRAFT—Comments due by September 3, 2020 by 6:00 PM ET.

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, end 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 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

## 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 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 chart-abstracted 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](http://www.QualityNet.org), are also available for the CART tool. These tools are posted on [www.QualityNet.org](http://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](http://www.QualityNet.org), are also available for the CART tool. These tools are posted on [www.QualityNet.org](http://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  $\geq 18$ , 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  $\geq 0$  min and  $\leq 30$  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.

National Quality Forum  
1099 14th Street NW, Suite 500  
Washington, DC 20005  
<http://www.qualityforum.org>

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