Cardiovascular Conditions 2016-2017

TECHNICAL REPORT

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NATIONAL QUALITY FORUM

Contents

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Executive Summary

Cardiovascular disease (CVD) is the leading cause of death for men and women in the United States. It kills nearly one in four Americans and costs $312 billion per year, more than 10 percent of annual health expenditures.[1] Considering the overall toll of cardiovascular disease, measures that assess clinical care performance and patient outcomes are paramount to reducing the negative impacts of CVD.

NQF's cardiovascular portfolio of measures is one of the largest, with measures for 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. Despite the large number of endorsed measures, gaps remain in patient-reported outcomes and patient-centric composite measures.

In phase 4 of this project, the Cardiovascular Standing Committee evaluated six measures: two newly submitted measures and four measures undergoing maintenance review against NQF's standard evaluation criteria. The Standing Committee endorsed the following four 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%) (American Heart Association)
- 0076: Optimal Vascular Care (MN Community Measurement)
- 0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention (Centers for Medicare & Medicaid Services)
- 2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%) – Legacy eMeasure (AMA-PCPI)

The Committee did not endorse the following two measures:

- 2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease (American College of Cardiology)
- 0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival (Centers for Medicare & Medicaid Services

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

Introduction

Cardiovascular disease (CVD) is the leading cause of death for men and women in the United States. It kills nearly one in four Americans and costs $312 billion per year, more than 10 percent of annual health expenditures.[2] Considering the overall toll of cardiovascular disease, measures that assess the performance of clinical care and patient outcomes are critical to reducing the negative impacts of CVD.

Due to the large number of cardiovascular (CV) measures, maintenance review of endorsed measures and consideration of new measures has taken place over multiple phases of work that span several years. This report presents measure evaluations performed in 2016. A description of the previous cardiovascular projects can be found in the phase 1 (2013-2014), phase 2 (2014-2015), and phase 3 (2015-2016) reports, which detail the measure evaluation process for the measures that underwent review.

The measures in the CV portfolio have been grouped into various topic areas based on the specific condition, disease, or procedure 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. The topic areas addressed by measures under review during this phase are described below.

Coronary Artery Disease (CAD)/Acute Myocardial Infarction (AMI)

Acute myocardial infarctions (AMI), or heart attacks, occur when blood flow in the arteries of the heart is blocked. When blood is not able to reach parts of the heart muscle, it begins to die; with greater damage occurring the longer the arteries remain blocked.[3]

Fibrinolytic Therapy/Percutaneous Coronary Intervention (PCI)

Patients with acute ST-elevation myocardial infarction (STEMI) or total occlusion of blood flow in the arteries of the heart should receive coronary reperfusion therapy with either primary percutaneous coronary intervention (PCI) or fibrinolytic therapy. Fibrinolytic therapy works by dissolving clots which are obstructing blood flow to the heart. For most patients with acute STEMI, primary PCI is preferred rather than fibrinolytic therapy. However, fibrinolytic therapy should be administered in a timely manner if primary PCI is not available.[4]

Percutaneous coronary intervention (PCI), commonly known as coronary angioplasty, is a nonsurgical procedure used to open narrow or blocked coronary arteries. This procedure is done by inserting a deflated balloon or other device on a thin flexible tube (catheter) from the inguinal femoral artery or radial artery up through blood vessels to reach the site of blockage at the heart. X-ray imaging is used to guide the catheter threading. At the blockage, the balloon is inflated to open the artery, allowing blood to flow. A stent is often placed at the site of blockage to permanently open the artery. The procedure restores blood flow to the heart muscle.[5]

Heart Failure (HF)

Damage to the heart muscle affects the heart's ability to pump blood effectively throughout the body. Heart failure is a chronic progressive disease that affects more than 5.8 million Americans and is the leading cause of hospitalization in patients over age 65.[6]

Statin Use

High cholesterol is a risk factor for stroke and heart attacks that affects 1 in 3 American adults. Two-thirds of those affected do not have the condition under control, and about half of adults with high cholesterol do not get treatment. Measures that assess the control of this risk factor, including the use of statin medications for high cholesterol, could reduce risk of heart attack or stroke by more than 80 percent.[7]

Trends and Performance

The 2015 National Healthcare Quality and Disparities Report[8] provides an overview of progress toward addressing the National Quality Strategy goals and priorities. This recent report demonstrates that while progress has been made in improving the health of Americans affected by cardiovascular disease, there is still more work to do. For example, blood pressure control among people diagnosed with high blood pressure still remains a problem. From 1999-2002 to 2011-2012, the percentage of adults with hypertension who had their blood pressure under control improved from 29.4 percent to 51.8 percent.

In addition, from 2005 to 2013, the percentage of hospital patients with a heart attack who received timely fibrinolytic therapy improved overall from 37.9 percent to 54.3 percent. While performance rates have increased for black and Hispanic patients, disparities persist. In 2013, white patients received timely fibrinolytic therapy 55.9 percent of the time versus 51.4 percent for black patients and 53.5 percent for Hispanic patients. Although progress has been made in raising awareness of blood pressure management and fibrinolytic therapy, there are still opportunities for improvements.

NQF Portfolio of Performance Measures for Cardiovascular Conditions

The Cardiovascular Standing Committee (see Appendix D) oversees NQF's portfolio (Appendix B) of cardiovascular measures that includes measures for *primary prevention* ("specific practices for the prevention of disease or mental disorders in susceptible individuals or populations"); *screening* ("organized periodic procedures performed on large groups of people for the purpose of detecting disease"); and *secondary prevention* ("the prevention of recurrences or exacerbations of a disease or complications of its therapy").[9] It also contains measures for the evaluation, ongoing management, acute care, hospitalization, and cost and resource use in cardiovascular diseases and conditions. This portfolio contains 54 measures: 36 process/structure measures, 15 outcome measures, and 3 composite measures (see table 1 below). Among these, four measures were evaluated for maintenance of endorsement by the Cardiovascular Standing Committee during this phase of the project.

Table 1. NQF Cardiovascular Portfolio of Measures

	Process/Structure	Outcome	Composite
Primary prevention and screening	2	0	0
CAD/IVD	5	2	1
AMI	8	3	
Cardiac catheterization/PCI	4	6	1
Heart failure	9	2	0
Rhythm disorders	1	1	0
ICDs	1	0	1
Cardiac imaging	4	0	0
Cardiac Rehab	2	0	0
High blood pressure	0	1	0
Total	36	15	3

Additional measures related to cardiovascular conditions are assigned to other projects. These include readmission measures for AMI and HF (readmissions project), measures for coronary artery bypass graft (CABG) (surgery project), cost and resource use measures (resource use project), and primary prevention measures (health and well-being project).

National Quality Strategy

NQF-endorsed measures for cardiovascular care support the National Quality Strategy (NQS). NQS serves as the overarching framework for guiding and aligning public and private efforts across all levels (local, state, and national) to improve the quality of healthcare in the U.S. The NQS establishes the "triple aim" of better care, affordable care, and healthy people/communities, focusing on six priorities to achieve those aims: *Safety, Person and Family Centered Care, Communication and Care Coordination, Effective Prevention and Treatment of Illness, Best Practices for Healthy Living, and Affordable Care.*

NQF's cardiovascular portfolio aligns with many of the NQS priorities, including:

- *Effective Prevention and Treatment of Illness* – Beginning with cardiovascular conditions.
- *Communication and Care Coordination* – Care coordination is a priority because the prevention, diagnosis, and treatment of cardiovascular disease occurs across providers (e.g., primary care, cardiologists, imaging, interventionalists), and often requires communication across both acute and post-acute settings (e.g., emergency department, inpatient facilities, rehabilitation facilities). Improving communication and care coordination for patients with cardiovascular disease may reduce complications, hospital admissions, readmissions, and healthcare costs.
- *Best Practices for Healthy Living* – Engaging Americans in healthy behaviors (e.g., healthy diet to achieve normal cholesterol levels) and accessing preventive services are critical for the prevention and management of cardiovascular conditions.
- *Person- and Family-Centered Care* – Ensuring that persons and families are engaged as partners in care improves the quality of healthcare and health outcomes, while lowering costs.

- *Safety* – Making care safer and reducing the harm caused by healthcare delivery is a priority.
- *Affordable Care* – Making healthcare more affordable and encouraging the appropriate use of healthcare resources is a priority for individuals, families, employers, and governments.

Use of Measures in the Portfolio

Endorsement of measures by NQF is valued not only because the evaluation process itself is both rigorous and transparent, but also because evaluations are conducted by multistakeholder committees. Stakeholders include clinicians and other experts from the full range of healthcare providers, employers, health plans, public agencies, community coalitions, and patients—many of whom use measures on a daily basis to ensure better care. Moreover, NQF-endorsed measures undergo routine "maintenance" (i.e., re-evaluation) to ensure that they are still the best-available measures and reflect the current science. Importantly, federal law requires that preference be given to NQF-endorsed measures for use in federal public reporting and performance-based payment programs. NQF-endorsed measures are also used by a variety of stakeholders in the private sector, including hospitals, health plans, and communities.

Many of the measures in the CV portfolio are among NQF's most long-standing measures, several of which have been endorsed since 2007. Many are in use in at least one federal program and have been included in the Cardiovascular Family of Measures by the NQF-convened Measure Applications Partnership (MAP). See Appendix C for details of federal program use for the measures in the portfolio.

Improving NQF's Cardiovascular Portfolio

Standing Committee Input on Gaps in the Portfolio

Although new measure submissions are evaluated with each project phase, significant gaps still remain within the cardiovascular portfolio, and opportunities also exist to harmonize related measures across sites and settings of care. During this phase, the Committee identified numerous areas where additional measure development is needed, including:

- Patient-centric outcome measures, including intermediate outcomes (e.g., blood pressure, medication adherence) and primary prevention measures (e.g., physical activity, nutrition, alcohol) for organizations such as accountable care organizations (ACOs) that have greater incentive to take on risk for longer periods of time.
- Risk-stratified measures to better understand the clinical differences among ethnic and minority patients to assist providers and payers serving those populations thereby reducing disparities.
- Measures that encourage patient self-care and shared decision making.
- Measures for advanced heart failure rather than just reduced left ventricular heart failure (LVEF).
- Venous thromboembolism (VTE) measures for patients who are diagnosed with a VTE after hospital discharge.

- Nonphysician/multidisciplinary post-hospital care measures.
- Measures focused on women and heart disease, including prevention (e.g., preeclampsia), diagnosis, and treatment.
- Measures that encourage more humane hospital care for cardiovascular patients (e.g., using pediatric tubes for blood draws to decrease anemia; allowing patients to get better sleep while in the hospital; and mobilizing patients).
- Cross-cutting measures that decrease treatment burden and encourage care coordination across multiple providers for different conditions.

Cardiovascular Measure Evaluation

On July 12, 2016, the Cardiovascular Standing Committee evaluated two newly submitted measures and four measures undergoing maintenance review against NQF's standard evaluation criteria.

Comments Received

NQF solicits comments on endorsed measures on an ongoing basis through the Quality Positioning System (QPS). In addition, NQF solicits comments prior to the evaluation of the measures via an online tool located on the project webpage. For this evaluation cycle, the pre-evaluation comment period closed on June 14, 2016 for the six measures under review. Two pre-evaluation comments and four post-evaluation comments were received. (See the comment table.)

All submitted comments were provided to the Committee prior to its deliberations.

During deliberations at the in-person meeting on July 12, 2016, the Standing Committee recommended four measures for endorsement. However, the Committee did not reach consensus on one measure and deferred the discussion on another measure until the post-comment call.

On October 7, 2016, the Committee reconvened to discuss comments received and reevaluate one measure where consensus was not reached and resume voting on the measure that was deferred during the in-person meeting. Ultimately, the Committee did not recommend the two measures for endorsement.

On November 9, 2016, the CSAC voted to recommend four measures for endorsement and not recommend two measures. The CSAC's recommendations did not differ from the Standing Committee's recommendations. The Executive Committee met on December 8, 2016, and ratified the endorsement of the four measures recommended by the Committee.

Table 2 summarizes the results of the Committee's evaluation.

Table 2. Cardiovascular Measure Evaluation Summary

	Maintenance	New	Total
Measures under consideration	4	2	6
Measures endorsed	3	1	4
Measures not endorsed	1	1	2
Measures withdrawn from consideration	0	1	1
Reasons for not recommending	Importance – 0 Scientific Acceptability – 0 Overall – 1 Competing Measure – 0	Importance – 0 Scientific Acceptability – 1 Overall – 0 Competing Measure – 0	

Overarching Issues

During the Standing Committee's discussion of the measures, several overarching issues emerged and were factored into the Committee's ratings and recommendations for multiple measures; these issues are not repeated in detail for each individual measure.

Quality of Data and Collection

The Standing Committee expressed concerns with the quality of performance data and reliability and validity testing results for many of the newly submitted and currently endorsed measures reviewed within the cardiovascular portfolio over time. The Committee noted that often, currently endorsed measures return for maintenance endorsement without resolving previously discussed issues (e.g., insufficient testing, data availability, abstraction and/or transmission). The Committee encouraged measure developers to improve data collection efforts and the quality of data presented to the Committee for future endorsement considerations.

Disparities Data

NQF requires disparities data from the measure as specified (current and over time) by population group (e.g., race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability) for endorsement maintenance. Several of the currently endorsed measures that have been in use for several years did not include disparities data. The Standing Committee encouraged measure developers to provide stratified disparities data to adequately evaluate performance among these population groups. Additionally, the Standing Committee noted the value of disparities data associated with cardiovascular and diabetes measures to better understand clinical responses to treatments based on race and ethnicity.

Outcome Measures

The majority of the measures in the cardiovascular portfolio are process measures. The Standing Committee encouraged the measurement community to develop outcome measures, specifically for processes that are not closely related to the outcome. The Committee also encouraged the

development of outcome measures related to process measures whose performance rates have shown little to no room for further improvement, or "topped-out."

Summary of Measure Evaluation

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

Endorsed 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%) (American Heart Association): Endorsed

Description: Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who also have diabetes OR a current or prior Left Ventricular Ejection Fraction (LVEF) < 40% who were prescribed ACE inhibitor or ARB therapy; **Measure Type**: Process; **Level of Analysis**: Clinician: Group/Practice, Clinician: Individual; **Setting of Care**: Ambulatory Care: Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility, Behavioral Health/Psychiatric: Outpatient, Ambulatory Care: Urgent Care; **Data Source**: Electronic Clinical Data: Registry

Nonadherence to cardioprotective medications is prevalent among outpatients with coronary artery disease (CAD) and can be associated with a broad range of adverse outcomes. In the absence of contraindications, angiotensin-converting enzyme (ACE) inhibitors or angiotensin receptor blocker (ARB) therapy are recommended for all patients with a diagnosis of CAD and diabetes or reduced left ventricular systolic function (LVEF). Both pharmacologic agents have been shown to decrease the risk of death, myocardial infarction, and stroke. Additional benefits of ACE inhibitors include the reduction of diabetic symptoms and complications for patients with diabetes. This clinician-level measure, originally endorsed in 2008 and most recently in 2012, calculates the percentage of CAD patients with diabetes or reduced LVEF who were prescribed an ACE inhibitor or ARB therapy. The Physician Quality Reporting System (PQRS) shows that performance rates have increased from 63.5 percent in 2011 to 81.2 percent in 2014. The Standing Committee acknowledged that approximately 20 percent of patients are still not receiving the appropriate therapy. The measure as currently specified does not include data on disparities in care. The Standing Committee strongly encouraged the developer to include disparities data in future iterations of the measure, particularly because of the prevalence of diabetes in minorities. Ultimately, the Committee recommended this measure for endorsement.

0076 Optimal Vascular Care (MN Community Measurement): Endorsed

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

Data Source: Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

Blood pressure control, being tobacco free, and the use of daily aspirin and statin therapy, where appropriate, are the best mechanisms for avoiding or postponing long-term complications for patients diagnosed with ischemic vascular disease (IVD). Patients with IVD are more likely to reduce their overall risk of further IVD complications or additional cardiovascular events and maximize their health outcomes by achieving a combination of several intermediate physiological and medication use targets. This clinician-level, all-or-none, composite measure, originally endorsed in 2009, and most recently in 2012, assesses the percentage of patients whose IVD is optimally managed by prescribing daily aspirin or antiplatelet medication and statin therapy, as appropriate, and maintaining blood pressure control and a tobacco-free status. The Standing Committee agreed that despite the increase in composite performance rates from 38.9 percent in 2007 to 66.1 percent in 2016 for clinics in Minnesota, a performance gap and disparities based on race, gender, and age exist. The Standing Committee thoroughly discussed the reliability and validity of the measure and ultimately concluded that the testing and specifications met both criteria. Overall, the Committee supported the measure and recommended it for endorsement.

0290 Median Time to Transfer to Another Facility for Acute Coronary Intervention (Centers for Medicare & Medicaid Services): Endorsed

Description: This measure calculates the median time from emergency department (ED) arrival to time of transfer to another facility for acute coronary intervention (ACI) for ST-segment myocardial infarction (STEMI) patients that require a percutaneous coronary intervention (PCI). The measure is calculated using chart-abstracted data, on a rolling quarterly basis, and is publically reported, in aggregate, for one calendar year. The measure has been publically reported, annually by CMS as a component of its Hospital Outpatient Quality Reporting (HOQR) Program since 2008; **Measure Type**: Process; **Level of Analysis**: Facility, Population: National; **Setting of Care**: Hospital/Acute Care Facility; **Data Source**: Administrative claims, Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

The early use of acute coronary intervention (ACI) in patients with ST-elevation myocardial infarction (STEMI) results in a significant reduction in mortality and morbidity. The earlier primary percutaneous coronary intervention (PCI) is initiated, the more effective it is.[10] Because elevated transfer time has been shown to be a significant predictor of delay in the initiation of PCI, decreasing transfer time in STEMI patients has the potential to reduce door-to-balloon time.[11] This facility-level measure, originally endorsed in 2007, and most recently in 2012, calculates the median time from emergency department (ED) arrival to time of transfer to a PCI-capable facility for STEMI patients. The developer provided 2010-2014 facility-level performance rates from Hospital Compare. The Standing Committee concluded that a decrease of two minutes (56 minutes to 54 minutes) from 2010 to 2014 was a modest increase in facility performance, therefore, an opportunity for improvement still exists. The Standing Committee did not have any concerns with the reliability of the measure, but did note that the data-element validity testing results indicated three data elements with kappa scores <0.70. Overall, the Committee supported the measure and recommended it for endorsement.

2906 Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%) – Legacy eMeasure (AMA-PCPI): Endorsed

Description: Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who also have a prior MI or a current or prior LVEF <40% who were prescribed beta-blocker therapy; **Measure Type**: Process ; **Level of Analysis**: Clinician: Group/Practice, Clinician: Individual; **Setting of Care**: Ambulatory Care: Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other; **Data Source**: Electronic Clinical Data: Electronic Health Record

Beta-blockers have been shown to reduce the risk of death and are recommended indefinitely for patients with coronary artery disease (CAD) and left ventricular systolic dysfunction (LVEF). Beta-blockers also significantly reduce deaths and recurrent myocardial infarctions (MIs) in patients who have suffered an MI. This "legacy" eMeasure is the eCQM (electronic clinical quality measure) version of the claims-based/registry measure #0070, currently used in federal programs. The Standing Committee reviewed #2906 and #0070 in 2015, and because the information provided for evidence and opportunity for improvement is identical for the two measures, the Committee agreed to assign the previous ratings for these criteria to #2906. The Standing Committee agreed that the data elements are clearly defined and the reliability scores demonstrate that differences in provider performance can be identified. The developer conducted face validity of the measure score and patient-level data element testing. The Standing Committee agreed that the measure met the validity criterion, although some members questioned the ability to document and extract of some of the data elements. The Standing Committee concluded that feasibility of the measure had been demonstrated through the use of five different EHRs and the BONNIE tool. Ultimately, the Committee recommended this measure for endorsement.

Measures Not Endorsed

2939 Statin Therapy in Patients with Clinical Atherosclerotic Disease (American College of Cardiology): Not Endorsed

Description: Percentage of patients 18-75 years of age with clinical atherosclerotic cardiovascular disease (ASCVD) who were offered moderate- to high-intensity statin; **Measure Type**: Process; **Level of Analysis**: Clinician: Individual; **Setting of Care**: Ambulatory Care: Clinician Office/Clinic; **Data Source**: Electronic Clinical Data: Registry

Use of statin therapy as secondary prevention for patients with clinical atherosclerotic cardiovascular disease (ASCVD) can substantially reduce the risk of future cardiovascular events by approximately 30.0 percent for patients treated with moderate-intensity statins and 45.0 percent with high-intensity statins.[12] This newly submitted clinician-level measure calculates the percentage of patients with ASCVD who have been prescribed a moderate- or high-intensity statin or have documentation of a medical reason for not prescribing statin therapy. The Standing Committee agreed that the evidence the developer provided to support moderate- or high-intensity statin therapy in patients with clinical ASCVD demonstrated significant reduction in future cardiovascular events. The developer provided 2013 and 2014 performance rates from the PINNACLE Registry that included 1,701 and 1,890 providers and 209,770 and 239,948 patients, respectively. The mean performance rate was 16.3 percent for 2013 and 20.9 percent for 2014. The Standing Committee noted that more than two-thirds of the PINNACLE data

could not be analyzed for various reasons; therefore, the gap in care may be greater than that indicated by the data provided by the developer. The Standing Committee agreed that the reliability scores demonstrated high reliability but questioned whether the measure can be consistently implemented due to the large number of patients (~70.0 percent) that were excluded in the final dataset due to several missing data elements needed to calculate the measure. The Committee discussed the measure on the post-comment call and re-voted on the validity and feasibility subcriteria. The measure did not pass the validity subcriterion and was not recommended for endorsement.

0288 Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival (Centers for Medicare & Medicaid Services): Not Endorsed

Description: 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; **Measure Type**: Process; **Level of Analysis**: Facility, Population: National; **Setting of Care**: Hospital/Acute Care Facility; **Data Source**: Administrative claims, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

Delays in the treatment of acute myocardial infarction (AMI) lead to an increased risk of in-hospital mortality and morbidity. For every hour of delay in treatment, studies have shown that nearly two lives per 1,000 patients are lost (Fibrinolytic Therapy Trialists' Collaborative Group, 1994). When fibrinolytic therapy is indicated or chosen as the appropriate reperfusion therapy in a patient presenting with a ST-elevation myocardial infarction (STEMI), it should be administered as rapidly as possible, with a recommended time of 30 minutes from hospital arrival to administration. This facility-level measure, originally endorsed in 2007, and most recently in 2012, calculates the percentage of patients that receive fibrinolytic therapy within 30 minutes of arriving in the emergency department (ED) with a STEMI. The Standing Committee agreed that despite the increase in facility-level performance rates from a median of 65 percent in 2010 to 73 percent in 2014, a performance gap remains. The Standing Committee expressed multiple concerns about the specifications, reliability, and validity of the measure and engaged in a thorough discussion. In the end, the Committee decided to defer their endorsement decision until the post-comment call on October 7, 2016, and asked the developer to submit additional clarifying information to support the measure.

The developer provided an algorithm illustrating how to calculate the measure including the initial population, numerator, denominator, and exclusions. The Committee discussed the measure on the post-comment call and voted on the remaining criteria. The measure did not pass overall suitability and was not recommended for endorsement.

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Appendix A: Details of Measure Evaluation

Rating Scale: H=High; **M**=Moderate; **L**=Low; **I**=Insufficient; **NA**=Not Applicable; **Y**=Yes; **N**=No

Endorsed 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%)

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 Left Ventricular Ejection Fraction (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: Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, 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 (eg, patient declined, other patient reasons)

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

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Clinician : Group/Practice, Clinician : Individual

Setting of Care: Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Behavioral Health/Psychiatric : Outpatient, Ambulatory Care : Urgent Care

Type of Measure: Process

Data Source: Electronic Clinical Data : Registry

Measure Steward: American Heart Association

STANDING COMMITTEE MEETING 07/12/2016

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

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

1a. Evidence: **H-17**; **M-0**; **L-1**; **I-0**; 1b. Performance Gap: **H-12**; **M-6**; **L-0**; **I-1**

Rationale:

- For the 2012 endorsement evaluation, the developer provided one clinical practice guideline with two recommendations from the 2007 chronic angina focused update of the ACC/AHA 2002 Guidelines for the Management of Patients with Chronic Stable Angina as evidence to support

ACE inhibitor or ARB therapy for patients with coronary artery disease (CAD) and diabetes or reduced left ventricular systolic function (LVEF).

- For the current evaluation, the developer provided one additional guideline with two recommendations for renin-angiotensin-aldosterone blocker therapy from the 2012 ACCF/AHA/ACP/AATS/PCNA/SCAI/STS Guideline for the Diagnosis and Management of Patients with Stable Ischemic Heart Disease (SIHD) to support ACE inhibitor or ARB therapy for patients with SIHD and diabetes or reduced LVEF. The developer also provided a systematic review of the body of evidence supporting the benefits of ACE inhibitor/ARB therapy for patients with ischemic heart disease that included six randomized controlled trials (RCTs) and two meta-analyses. The Standing Committee agreed that the evidence is strong and the updates support the measure focus; however, one of the Committee members questioned why evidence on minority populations and diabetes was not presented.
- The developer provided average performance rates from the Physician Quality Reporting System (PQRS) Experience report from 2011 – 2014. The average performance rate was 63.5% in 2011, 64.0% in 2012, 70.0% in 2013, and 81.2% in 2014. The developer also cited 2008-2012 ACE/ARB prescription rates from the National Cardiovascular Data Registry (NCDR) PINNACLE Registry that ranged from 69.6% to 77.6%.
- The developer did not provide data on disparities, which is encouraged for endorsement maintenance. The developer explained that although the measure is included in federal reporting programs, those programs have not yet made disparities data available to analyze and report. The developer provided evidence from the literature that demonstrated a slight difference between men and women (72.1% vs.71.7%) with LVSD or diabetes that were prescribed ACEI/ARBs (Chan et al. 2010). A separate analysis by Smolderen (2013) evaluated the impact of CAD patients' insurance status and ACEI/ARB prescription rates: privately-insured: 75.5%; publicly-insured: 69.1%; uninsured: 66.7%.
- The Standing Committee recognized the number of CAD patients with diabetes or heart failure who are receiving ACE/ARB therapy has improved since 2011 but approximately 20.0% of patients are not receiving the appropriate therapy. In addition, according to the data provided from the literature, disparities in care based on insurance status exist. The Standing Committee also stated their interest in receiving data on gender-based disparities.

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

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

2a. Reliability: **H-3**; **M-11**; **L-2**; **I-1;** 2b. Validity: **M-12**; **L-5**; **I-1**

<u>Rationale</u>:

- For the 2012 maintenance of endorsement evaluation, inter-rater reliability was conducted on 100 randomly selected paper medical charts from four physician practices submitted to the Physician Quality Reporting Initiative (PQRI) in 2007. The developer provided Kappa statistics for seven data elements; however, only one data element was relevant to this measure – Diagnosis of CAD. The Kappa statistic for 'Diagnosis of CAD' was 1.00.
- For the current evaluation, the developer provided updated reliability testing. The developer clarified that the data source used for testing was registry data rather than EHR data as indicated on the measure submission form. The developer used patient records from 2,296 providers participating in PQRS and reporting on this measure via the registry option from January 2014 through December 2014. There were 55,272 patients associated with 1,128

(49.1%) providers who had all the required data elements and 10 or more patients eligible for this measure. Reliability testing was conducted at the measure score level, using a beta-binomial model to assess the signal-to-noise ratio. A reliability score of 0.00 implies that all the variability in a measure is attributable to measurement error. A reliability score of 1.00 implies that all the variability is attributable to real differences in performance. The higher the reliability score, the greater is the confidence with which one can distinguish the performance of one provider from another. This is an appropriate test for measure score reliability. A reliability score of 0.70 is generally considered a minimum threshold for reliability. Reliability at the minimum level of quality reporting events (10) was 0.58 and 0.87 at the average number of quality events (49.0).

- The Committee discussed the potential for misclassification of the measure's population due to one of the exclusions included in the list of the medical reasons for not prescribing ACEI or ARB therapy: diseases of the aortic or mitral valve. One of the Committee members explained that ACE inhibitors are beneficial in patients with mitral regurgitation and aortic insufficiency; therefore, the exclusion should be more specific than "diseases of the aortic or mitral valve". Overall, the Standing Committee agreed that the reliability scores were sufficient.
- For the 2012 maintenance of endorsement evaluation, the developer stated that all PCPI measures were assessed for content validity by expert work group members during the development process. Additional input on content validity was obtained through public comment and a panel of consumer, purchaser, and patient representatives convened by PCPI.
- For the current evaluation, the developer conducted face validity testing. A panel comprised of 18 experts from the American Hospital Association (AHA) Council on Clinical Cardiology systematically assessed whether the performance scores from the measure as specified could be used to distinguish good from poor quality. Of the 18 experts, 94.4% (17) of the respondents either agreed or strongly agreed that this measure can accurately distinguish good from poor quality.
- Overall, the Standing Committee agreed the face validity testing results were sufficient. However, in the pre-evaluation comments it was noted that the developer has not conducted empirical validity testing even though this measure has been in use for six years. The Committee encouraged the developer to conduct empirical validity testing of the measure. Another Committee member suggested that it would be beneficial to evaluate outcomes stratified by patients who did and did not receive appropriate ACEI/ARB therapy to determine if the measure has had the intended effect on the measure population.

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3. Feasibility: H-11; M-6; L-0; I-1

(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:

- This measure is based on clinical registry data and the developer stated that all data elements are available in electronic sources. Some of the Standing Committee members noted that a defined field for LVEF may not be available in all EHRs. Ultimately, the Standing Committee concluded that implementation of the measure is feasible.

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4. Usability and Use: H-11; M-4; L-0; I-1

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- The measure is currently used in PQRS for provider incentive payments and the NCDR PINNACLE Registry for quality improvement with benchmarking.
- A member of the Standing Committee noted that in the Medicare program, an African-American patient with CAD and diabetes has a 90.0% hospitalization rate; due to the lack of disparities data this measure would not capture these patients.

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5. Related and Competing Measures

- This measure is related to:
    - #0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy (ACC)
    - #0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF>40%) (AMA-PCPI)
    - #0074: Chronic Stable Coronary Artery Disease: Lipid Control (ACC)
    - #0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD) (AMA-PCPI)
    - #1522: ACE/ARB Therapy at Discharge for ICD implant patients with Left Ventricular Systolic Dysfunction (ACC)
    - #1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy (RPA)
    - #2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus (CMS)
- The developer stated that this measure's specifications are harmonized with existing measures where possible but there are several key differences:
    - #1662, #1522, #0081, and #2467: focus on the prescription of ACEI/ARBS but have different target populations.
    - #0067, #0074, and #0070: focus on antiplatelet therapy, LDL control, and beta blocker therapy for CAD patients.

Standing Committee Recommendation for Endorsement: **Y-17**; **N-1**

6. Public and Member Comment

- One commenter stated they supported this measure for endorsement because it is currently included in the Core Quality Measures Collaborative's Cardiovascular core measure set.

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7. Consensus Standards Approval Committee (CSAC) Vote: Y-12; N-0

Decision: Approved for continued endorsement

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8. Board of Directors Vote: Yes (December 8, 2016)

Decision: Ratified for continued endorsement

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9. Appeals: No appeals were received.

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 to 75 with ischemic vascular disease who have at least two visits for this diagnosis in the last two years (established patient) with at least one visit in the last 12 months.

Exclusions: The following exclusions are allowed to be applied to the eligible population: permanent nursing home residents, receiving hospice or palliative care services, died or diagnosis coded in error.

Adjustment/Stratification: Statistical risk model. No risk stratification.

Level of Analysis: Clinician : Group/Practice

Setting of Care: Ambulatory Care : Clinician Office/Clinic

Type of Measure: Composite

Data Source: Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records

Measure Steward: MN Community Measurement

STANDING COMMITTEE MEETING 07/12/2016

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

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

1a. Evidence: **H-14**; **M-6**; **L-1**; **I-1**; 1b. Performance Gap: **H-14**; **M-7**; **L-1**; **I-0;** Composite: **H-12; M-8; L-1; I-1**

Rationale:

- For the 2012 maintenance of endorsement evaluation, the developer provided the following clinical practice guidelines to support the blood pressure, statin medication, tobacco free (outcome measure), and daily aspirin or anti-platelet medication components:
    - Blood pressure, statin medication, tobacco free, and daily aspirin or anti-platelet medication components: The ICSI Stable Coronary Artery Disease (April 2011), Address Modifiable Risk Factors guideline recommended modifiable risk factors for coronary artery disease such as smoking, inadequate physical activity, stress, hyperlipidemia, obesity, hypertension and diabetes mellitus be evaluated.

    - Blood pressure: The Comorbid Conditions Guideline and the ICSI Hypertension Diagnosis and Treatment Guideline (November 2010) recommended a target blood pressure of 140/90 mmHg or less.
    - Statin medication: The ICSI Lipid Management in Adults (October 2009) guideline recommended target goals for hyperlipidemic patients with coronary artery disease: LDL – less than 100 mg/dL; HDL – 40 mg/dL or greater; Triglycerides – less than 150 mg/dL.
    - Daily aspirin or anti-platelet medication: The ICSI Stable Coronary Artery Disease (April 2011), Address Modifiable Risk Factors guideline recommended the use of one aspirin tablet daily (81-162 mg) unless there are medical contraindications.
- For the current maintenance of endorsement evaluation, the developer provided the following updated evidence for all four components:
    - Blood pressure: The 2015 AHA/ACC/ASH Scientific Statement on the Treatment of Hypertension in Patients with Coronary Artery Disease included 3 recommendations for blood pressure targets, including a blood pressure goal of <140/90 mm Hg for patients with coronary artery disease (CAD).
    - Statin medication: The ICSI Lipid Management in Adults (updated Nov 2013/completed prior to ACC/AHA release) recommends that clinicians initiate statin therapy regardless of LDL in patients with established atherosclerotic cardiovascular disease (ASVCD). The 2013 ACC/AHA Guideline for the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults recommends high-intensity statin therapy be initiated or continued as first-line therapy in women and men <75 years of age who have clinical ASCVD, unless contraindicated. Moderate-intensity therapy should be used as the second option when high-intensity statins are contraindicated or adverse effects are present.
    - Tobacco free outcome measure: 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.
    - Daily aspirin or anti-platelet medication: The developer provided three recommendations for antiplatelet agents/anticoagulants for patients with ischemic vascular disease from the AHA/ACCF Secondary Prevention and Risk Reduction Therapy for Patients with Coronary and Other Atherosclerotic Vascular Disease: 2011 Update.
- The Standing Committee discussed the potential changes to blood pressure parameters based on the results of the Systolic Blood Pressure Intervention Trial (SPRINT), which compared the benefit of treatment of systolic blood pressure to a target of less than 120 mm Hg with treatment to a target of less than 140 mm Hg. The Committee also discussed the anticipated blood pressure guidelines to be released by AHA/ACC sometime in the future. NQF staff asked the Committee to consider the quantity, quality, and consistency of the body of evidence that was presented in the measure submission form. NQF staff reassured the Committee that the NQF process allows for a measure to be reviewed when new evidence becomes available. One of the Committee members noted that the USPSTF recommendations for daily aspirin include patients aged 50 to 70 years old, while the measure includes patients up to 75 years old. Other Committee members noted that the USPSTF recommendations are for primary prevention rather than patients with a diagnosis of ischemic vascular disease (IVD).
- Overall, the Standing Committee agreed that the updated evidence supports blood pressure control, statin use, daily aspirin or anti-platelet medication, and tobacco use assessment and

intervention(s) in patients to avoid or postpone long-term complications associated with a diagnosis with IVD.

- The developer provided composite performance rates from clinics in Minnesota for Report Year 2007-2016 (Dates of Service 2006-2015).
    - In 2007, the rate was 38.9% for 4,662 patients and 33.8% in 2010 for 63,241 patients. In 2011, the blood pressure component target changed from <130/80 to <140/90 and the performance rate increase to 39.7% for 66,910 patients.
    - In 2015, the cholesterol management component was suppressed during redesign of the measure and the performance rate increased to 69.3% for 102,654 patients.
    - In 2016, the cholesterol management component was changed from LDL <100 to appropriate statin use and the performance rate was 66.1% for 104,395 patients.
- The developer also provided performance rates for the individual components.
    - The blood pressure component increased from 84.0% in 2012 to 85.0% in 2016.
    - Daily aspirin use or anti-platelet medication use increased from 92.5% in 2009 to 96.7% in 2016.
    - The number of tobacco free patients increased from 82.4% in 2009 to 83.0 in 2016.
    - Statin use was 95.2% in 2016 (this was the first year the new component was reported).
- The developer provided 2014 disparities data from the measure as specified demonstrating a performance rate of 67.2% for White patients, 47.6% for Black/African-American patients, 51.8% for American Indian/Alaska Native patients, and 53.4% for multi-racial patients. The data also showed a higher performance gap for female patients and younger patients. The Committee asked the developer if there were trend data on disparities that demonstrated a change in performance over time and by individual clinic. The developer did not have additional, specific disparities data. However, according to the developer, some clinics that care for a greater proportion of minority patients have lower performance rates but there are a couple of clinics that are excelling in minimizing disparities.
- The Standing Committee agreed that the data provided demonstrated a performance gap and opportunity for improvement in optimal vascular care for patients with IVD.
- This is an all-or-none composite measure that requires patients to meet all four component targets in the composite measure to be considered 'optimally managed'; all four components are weighted equally. The developer noted that measuring providers on individual targets is not as patient-centric as this composite measure that seeks to reduce multiple risk factors in patients with IVD and maximize health outcomes. One of the members of the Standing Committee noted that the tobacco free component would be more appropriate as a process measure. The Committee member noted that smoking rates are often influenced by geographic location. Providers in areas with high rates of tobacco use will not appear as effective in increasing the number of tobacco free patients as those in areas where tobacco use is less prevalent. In the pre-evaluation comments, another Committee member noted that the absolute benefit of each component is not equal; achieving blood pressure control or smoking cessation is much more difficult than prescribing a statin or aspirin/anti-platelet medication.
- The Standing Committee agreed, that overall, the quality construct and rational for the composite was clearly stated and logical.

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

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

2a. Reliability: **H-6**; **M-16**; **L-0**; **I-0;** 2b. Validity: **H-3**; **M-17**; **L-1**; **I-1; 2d**. Composite Construct: **H-7; M-15; L-0; I-0**

Rationale:

- For the 2012 maintenance of endorsement evaluation, patient-level data element validity testing was conducted on 63,241 patients with IVD from 128 medical groups representing 573 clinics that submitted data to Minnesota Community Measurement for 2009 dates of service reported in 2010. After data submission, in-person validation audits requiring a 90% accuracy rate were conducted to compare the submission to the patient's medical record. Of the 128 medical groups that submitted data in 2010, 17 groups initially failed the audit and remedy plans were developed. All 17 groups resubmitted and passed subsequent audit.
- For the current maintenance of endorsement evaluation, the measure was tested at the measure score level using a dataset that included 104,395 patients with IVD in Minnesota and neighboring communities from 111 medical groups representing 671 clinics for dates of service from January 1, 2015 to December 31, 2015.
- To test the reliability of the measure score, the developer used a beta-binomial model to assess the signal-to-noise ratio. A reliability score of 0.00 implies that all the variability in a measure is attributable to measurement error. A reliability score of 1.00 implies that all the variability is attributable to real differences in performance. The higher the reliability score, the greater is the confidence with which one can distinguish the performance of one facility from another. This is an appropriate test for measure score reliability. A reliability score of 0.70 is generally considered a minimum threshold for reliability. The overall reliability for the composite measure was 0.90 and 0.61 at the minimum number of patients per reportable clinic (≥30). The distribution of reliability scores by number of eligible patients per reportable clinic (≥30) ranged from 0.61 for 30 patients per clinic to 0.99 for 4,441 patients per clinic.
- In the pre-evaluation comments, a member of the Standing Committee mentioned that assessing prescribing behavior of statin therapy (as noted in the specifications) is not consistent with the evidence provided to support the statin component. The Committee member noted that prescribing the lowest dose of the weakest statin would meet the intent of the measure but not generate clinically significant outcomes in the IVD population. Other Committee members questioned why 'permanent nursing home residents' are excluded from the denominator. The Committee discussed the fall risks associated with administering blood pressure medication to nursing home patients, excessive treatment in patients with advanced illness, and the lack of clinical trials for these types of medications in the nursing home population.
- The Standing Committee did not express additional concerns with the reliability of the measure, but ultimately decided the testing results were sufficient.
- For the 2012 maintenance of endorsement evaluation, content and face validity were assessed through the Measurement and Reporting Committee and a panel of experts. There was consensus among the expert workgroup that the target components reflected a quality of care that will reduce patients heart attack and stroke risk.
- For the current maintenance of endorsement evaluation, empirical validity testing of the composite measure score was conducted by testing the correlation of a medical group's performance with their performance on the Optimal Diabetes Care measure (#0729). It is expected that the quality of care provided by a medical group to a patient with ischemic vascular disease would be of similar quality as the care provided to a patient with diabetes, therefore the respective performance measure scores should be similar. This is an appropriate method for assessing conceptually and theoretically sound hypothesized relationships. The Optimal Diabetes Care measure (#0729) includes the same four components as #0074 plus a

component for hemoglobin A1C; it also measures a different population. The linear regression analysis demonstrated an R^2 value of 0.635, which means that 64.0% of the total variation in performance on the Optimal Vascular Care measure can be explained by variation in performance on the Optimal Diabetes Care measure. The remaining 36.0% of total variation on the Optimal Vascular Care measure remains unexplained.

- This measure is risk-adjusted. The final risk factors selected for the risk model were age and insurance product (Medicare, Medicaid, MSHO, Special Needs, Self-pay, Uninsured). The developer analyzed gender and depression as well, but gender did not show sufficient variation between clinics and 'depression' was not selected due to the high cost of collection. The developer stated that race, ethnicity, language, and country of origin (RELO) were not considered for risk adjustment because these variables did not have a high completion rate across all clinics. The developer is continuing to work with the medical community to achieve the goal of evaluating RELO at the clinic level. The developer conducted an Analysis of Maximum Likelihood Estimates on the 2014 Dates of Service to compare the optimal rate of patients by insurance product (Commercial, MHCP, and Uninsured) to patients with Medicare and patient age (18-25; 26-50; 51-65) to patients aged 66-75. The Analysis of Maximum Likelihood Estimates demonstrated that all of the results for both variables, age and insurance product, were significant, except for ages less than 26 due to the small sample size (n = 44). The developer also found that the only two variables that were correlated were age >65 and Medicare.
- The Standing Committee did not express any concerns on the threats to validity and agreed that the testing results satisfied the validity criterion.
- The developer conducted a Pearson Correlation Analysis of the individual components rates and the composite rates. The Pearson correlation coefficient value, r, ranges from +1.00 to -1.00. A value of 0.00 indicates that there is no association between the two variables. A value greater than 0.00 indicates a positive association; that is, as the value of one variable increases, so does the value of the other variable. A value less than 0.00 indicates a negative association; that is, as the value of one variable increases, the value of the other variable decreases. The developer conducted the following Pearson Correlation Analysis for each component:

Variable	Mean	Pearson r coefficient
Blood pressure	0.85048	0.69813
Tobacco Free	0.80901	0.71336
Daily ASA Use	0.96271	0.59223
Statin Use	0.93973	0.62327

Optimal Vascular Care Rate = 0.63919

- The developer concluded that practices in Minnesota demonstrate relatively high compliance for all of the components; however, there is still an opportunity for improvement at the clinic level. The blood pressure control and tobacco free components demonstrated the most variability, opportunity for improvement, and impact the ability to achieve all four components. Another Committee member suggested that if the two variables with the most variability were more heavily weighted than the other components, the measure would be more impactful. Another Committee member pointed out that three of the components were under the direct control of the provider, yet it was not clear how the tobacco free component captured the quality of care provided by the clinician. A member of the Standing Committee questioned whether there was evidence showing that meeting all four component targets would not

generate the same patient outcomes as meeting two or three of the components. The developer pointed out that various combinations of the components and the proportion of patients meeting the different combinations were provided.
- The Standing Committee did not express additional concerns with the construct of the composite measure and agreed the information provided was sufficient to satisfy the criterion for composite construct.

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3. Feasibility: H-12; M-10; L-0; I-0

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

Rationale:

- All of the data elements are in defined fields in electronic sources and there are no fees, licensure, or other requirements necessary to use this measure. The Standing Committee agreed this measure met the feasibility criterion.

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4. Usability and Use: H-13; M-8; L-1; I-0

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- The measure is widely used in Minnesota for public reporting, payment, regulatory and accreditation programs, and quality improvement with external benchmarking to multiple organizations.

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5. Related and Competing Measures

- This measure is related to:
    - #0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy (ACC)
    - #0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet (NCQA)
    - #0073: Ischemic Vascular Disease (IVD): Blood Pressure Control (NCQA)
- The developer stated that #0068 and #0073 focus on the inpatient setting and patients discharged with AMI, CABG, or PCI. #0067 focuses on patients with CAD.

Standing Committee Recommendation for Endorsement: **Y-19**; **N-3**

6. Public and Member Comment

- One commenter did not agree with statin use as a component to address dyslipidemia and believed it would be misleading to include this as a component of "optimal care." The commenter believed including this component would lead to the lowest level of acceptable care being considered optimal care and would do little to move the quality of care forward.
- Developer Response: Thank you for your comment and suggestion for the inclusion of the dose of statin (moderate or high) in the calculation of the cholesterol component of this patient level all-or-none composite measure. While ACC/ AHA guidelines do indicate that most patients with ischemic vascular disease would benefit from high dose intensity statins, there

are provisions for moderate intensity statins for patients who cannot tolerate high intensity doses. The measure development work group thoroughly discussed the pros and cons of specifying a certain dose of the statin medication for numerator component compliance and determined that requiring the submission of the dose of statin would cause undue data collection burden for the practices. Additionally, the cardiologists on the workgroup strongly believe that there is some benefit for patients who can only tolerate a low dose of statin.
We do not discount the role of ongoing LDL monitoring to determine effectiveness of statin therapy, but having a physiological target (e.g. LDL < 100) is no longer supported by evidence. The American College of Cardiology/ American Heart Associate guidelines for the treatment of blood cholesterol indicate the following:
"Treat to target — this strategy has been the most widely used the past 15 years but there are 3 problems with this approach. First, current clinical trial data do not indicate what the target should be. Second, we do not know the magnitude of additional ASCVD risk reduction that would be achieved with one target lower than another. Third, it does not take into account potential adverse effects from multidrug therapy that might be needed to achieve a specific goal. Thus, in the absence of these data, this approach is less useful than it appears (Section 3). It is possible that future clinical trials may provide information warranting reconsideration of this strategy" (pg. 17)
Yes, our component rates for prescribing statins are high in MN, which is a little bit unexpected for the newly re-designed component, however we would like to clarify the cholesterol component of statin use is not reported as a stand-alone measure. The Optimal Vascular Care measure is reported as an all-or-none composite, patients achieving multiple components of modifiable risk factors to reduce or delay long term complications. Statin use is one component, the other three are blood pressure control, tobacco-free and daily aspirin or antiplatelet medication.

- Committee Response: Thank you for your comment. The Committee agrees that monitoring LDL levels remains an important part of providing care for patients with IVD. However, the statin component in this measure aligns with the 2013 ACC/AHA Guideline for the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults.

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7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0

Decision: Approved for continued endorsement

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8. Board of Directors Vote: Yes (December 8, 2016)

Decision: Ratified for continued endorsement

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9. Appeals: No appeals were received.

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

Submission | Specifications

Description: This measure calculates the median time from emergency department (ED) arrival to time of transfer to another facility for acute coronary intervention (ACI) for ST-segment myocardial infarction (STEMI) patients that require a percutaneous coronary intervention (PCI). The measure is calculated using chart-abstracted data, on a rolling quarterly basis, and is publically reported, in aggregate, for one calendar year. The measure has been publically reported, annually by CMS as a component of its Hospital Outpatient Quality Reporting (HOQR) Program since 2008.

Numerator Statement: This measure is reported as a continuous variable statement: time (in minutes) from ED arrival to transfer to another facility for ACI.

The numerator includes patients with AMI and ST-segment elevation on the ECG performed closest to 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 ACI.

Denominator Statement: Time (in minutes) from ED arrival to transfer to another facility for ACI.

Exclusions: Patients are excluded from this measure if they are under 18 years of age, did not have an initial ECG interpretation, received fibrinolytic therapy while in the ED, or were transferred for reasons other than ACI.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Facility, Population : National

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Process

Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records

Measure Steward: Centers for Medicare & Medicaid Services

STANDING COMMITTEE MEETING 07/12/2016

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

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

1a. Evidence: **Previous Evidence Evaluation Accepted**; 1b. Performance Gap: **H-12**; **M-9**; **L-0**; **I-0**

Rationale:

- For the 2012 maintenance of endorsement evaluation, the developer provided one clinical practice guideline from the 2004 ACC/AHA Guidelines for the Management of Patients with ST-Elevation Myocardial Infarction stating the delay from patient contact with the healthcare system to balloon inflation, if percutaneous coronary intervention (PCI) is chosen, should be less than 90 minutes.
- For the current maintenance of endorsement evaluation, the developer provided an update to the 2013 ACCF/AHA Guideline for the Management of ST-Elevation Myocardial Infarction with two recommendations for the transfer of patients who require primary PCI (pPCI), from a non-PCI-capable hospital to a PCI-capable hospital, in cases where pPCI can be performed within 120 minutes of first medical contact. The developer also provided a systematic review of the body of the evidence supporting the timely transfer of ST-elevation myocardial infarction (STEMI)

patients requiring a PCI. Lastly, the developer identified five new studies that were published since the systematic review of the body of evidence (2002-2012) that support the measure's focus. The Standing Committee agreed that the updated guideline supports the measure focus and accepted the prior evaluation of this criterion without further discussion.

- The developer provided facility-level performance rates from Hospital Compare from the April 2010 – March 2015 data collection period:

	2010-11	2011-12	2012-13	2013-14	2014-15
Facilities	421	400	405	409	425
# of patients	8,008	7,621	7,822	7,678	8,166
Minimum time (in minutes)	26	20	14	21	20
Median time (in minutes)	56	54	54	54	54
Maximum time (in minutes)	245	542	307	288	474

- The developer analyzed the relationship of patient and facility characteristics on time to transfer from the emergency department (ED) to another facility for acute coronary intervention (ACI) using 2014 data submitted to the Clinical Data Warehouse (CDW). The results indicated that age, race, sex, and facility characteristics were variables related to timely transfer for ACI.
- The Standing Committee noted that the data presented demonstrate the ongoing quality problem and variation with STEMI patients that arrive at the ED and require transfer to another facility for acute coronary intervention. As a result, the Committee agreed an opportunity for improvement and a gap in care remains.

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

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

2a. Reliability: **H-2**; **M-18**; **L-0**; **I-0;** 2b. Validity: **H-2**; **M-18**; **L-2**; **I-0**

<u>Rationale</u>:

- For the 2012 maintenance of endorsement evaluation, reliability and validity testing were not provided because the measure was undergoing validation through the CMS Clinical Abstraction Center.
- For the current evaluation, the measure was tested at the measure score level using a dataset that included 1,902 facilities that submitted 64,827 cases to Hospital Compare from April 1, 2014-December 31, 2014. Of those, a total of 13,195 cases remained in the denominator after the exclusions were applied. Facilities with fewer than 11 cases were omitted in accordance with Hospital Compare's minimum case count criteria.
- To test the reliability of the measure score, the developer used a beta-binomial model to assess the signal-to-noise ratio. A reliability score of 0.00 implies that all the variability in a measure is attributable to measurement error. A reliability score of 1.00 implies that all the variability is attributable to real differences in performance. The higher the reliability score, the greater is the confidence with which one can distinguish the performance of one facility from another. This is an appropriate test for measure score reliability. A reliability score of 0.70 is generally considered a minimum threshold for reliability. The developer stated that the reliability score

was 0.78, although it is not clear if this was the reliability score for the facilities meeting the minimum case count (11) or overall reliability.

- The Standing Committee did not express any concerns with the reliability of the measure and agreed that testing results were sufficient.
- For the current evaluation, the dataset used for patient-level data element testing included a sample of 462 cases submitted to the Clinical Data Warehouse (CDW) from 65 facilities from April 1, 2014-March 31, 2015. After exclusions, 86 cases remained in the denominator sample. Data element validity was conducted by assessing the level of agreement between facility abstraction and auditor (CMS Clinical Data Abstraction Center or CDAC) abstraction (gold standard) and calculating a Kappa statistic for categorical data elements or Pearson correlation coefficient for continuous data elements. Kappa/Pearson's correlation values range between 0.00 and 1.00 and are interpreted as degree of agreement beyond chance. By convention, a Kappa/Pearson's correlation > 0.70 is considered acceptable. P-values estimate the statistical significance associated with the test statistics. P-values of less than 0.001 suggest high levels of statistical significance and that the degree of agreement was not due to chance. The kappa score and Pearson's correlation coefficient for 5 data elements (E/M Code, Discharge Code, ICD-9 Principal DX Code, Dx Date, Dx Time) was 1.00 (<0.001). The Pearson's correlation for "Arrival Time" was 0.99 (<0.001). The Kappa score for "Fibrinolytic Administration" was 0.93 (<0.001). The Standing Committee noted there were three data elements with scores < 0.70. The Kappa scores for "Initial ECG Interpretation" was 0.63 (<0.001), 0.47 (<0.001) for "Transfer for Acute Coronary Intervention", and 0.39 (<0.001) for "Reason for Not Administering Fibrinolytic Therapy".
- The Standing Committee highlighted the threats to validity due to the large number of exclusions for the data element "Initial ECG Interpretation". For this data element, 38,573 cases out of 64,827 (59.5%) from 1,902 facilities were excluded in 2014. This was due to no ST-elevation on the interpretation of the 12-lead ECG performed closest to ED arrival, no interpretation or report available, or unable to determine (UTD) from documentation. The Committee agreed the overall frequency of the other exclusions and exceptions was reasonable and concluded that the measure met the validity criterion.

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3. Feasibility: H-1; M-18; L-3; 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 developer noted that challenges in interpreting and operationalizing the current measure's algorithm make it difficult to re-specify this measure for an EHR reporting program since some data elements currently rely on logic and inferences that abstractors have been trained to interpret.
- The developer stated that the majority of a five-member expert panel agreed that practical aspects of reporting this chart-abstracted measure do not place undue burden on facilities that collect the data, although the costs of data collection and reporting this measure were not provided.
- Some data elements are in defined fields in electronic sources and there are no fees, licensure, or other requirements necessary to use this measure. The Standing Committee agreed this measure met the feasibility criterion.

4. Usability and Use: H-2; M-15; L-4; I-0

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- This measure is in use in the CMS Hospital Outpatient Quality Reporting program (HOQR) and publicly reported on the Hospital Compare website.
- Overall, the Standing Committee agreed the measure met this criterion since it is currently publicly reported and used in an accountability program. However, the Committee requested data on the impact of the measure to demonstrate that this process has improved patient care.

5. Related and Competing Measures

- This measure is related to:
    - #0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival (CMS)
- The developer stated that #0288 focuses on the timely administration of fibrinolytic therapy. Additionally, the electronically specified version of #0163 (Primary PCI Received Within 90 Minutes of Hospital Arrival), which is no longer NQF-endorsed, is included in the Hospital Inpatient Quality Reporting (HIQR) Program and focuses on the timely initiation of PCI for a patient who arrives at a PCI-capable hospital.

Standing Committee Recommendation for Endorsement: **Y-19**; **N-2**

6. Public and Member Comment

- No comments received.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-12; N-0

Decision: Approved for continued endorsement

8. Board of Directors Vote: Yes (December 8, 2016)

Decision: Ratified for continued endorsement

9. Appeals: No appeals were received.

2906 Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) 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 a prior MI or a current or prior LVEF <40% who were prescribed beta-blocker therapy

Numerator Statement: Patients who were prescribed beta-blocker 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 a prior MI (within the past 3 years) or a current or prior LVEF <40%

Exclusions: Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons)

Documentation of patient reason(s) for not prescribing beta-blocker therapy (eg, patient declined, other patient reasons)

Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system)

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Clinician : Group/Practice, Clinician : Individual

Setting of Care: Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other

Type of Measure: Process

Data Source: Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record

Measure Steward: PCPI Foundation

STANDING COMMITTEE MEETING 07/12/2016

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

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

1a. Evidence: **Measure #0070 Evidence Criteria Evaluation Accepted (2015 votes: H-16; M-0; L-0; IE-0);**

1b. Performance Gap: **Measure #0070 Performance Gap Criteria Evaluation Accepted (2015 votes: H-4; M-12; L-0; I-0)**

Rationale:

- This "legacy" eMeasure is the eCQM version of the claims-based/registry measure #0070, currently used in federal programs. The Standing Committee reviewed #2906 and #0070 in 2015,[a] and because the information provided for evidence and opportunity for improvement is identical for both measures, the Standing Committee agreed to assign the *Importance to Measure and Report* ratings for #0070 to #2906.
    - For the 2015 review of this eMeasure and the endorsement evaluation of #0070, the developer provided one clinical practice guideline with two recommendations and a

[a] Measure #2906 was reviewed in 2015 and did not pass the validity criterion; the developer resubmitted the measure with additional testing for review in 2016.

systematic review of the body of evidence associated with the guideline, to support beta-blocker therapy in patients with coronary artery disease (CAD), prior myocardial infarction (MI), or current or previous heart failure.

- In 2015, during the previous review of this eMeasure and the claims-based/registry version of the measure, the Standing Committee agreed that the evidence provided demonstrates that beta-blocker therapy in patients with CAD leads to a reduced risk of death, reduced angina onset, improved ischemic threshold during exercise and reduced recurrent MIs in patients with prior MIs.
- For the 2015 review of this measure and the endorsement evaluation of #0070, the developer provided average performance rates from the claims-based/registry version of the measure (#0070) from the 2014 Physician Quality Reporting System (PQRS) Experience Report from 2010 to 2014. The average performance rate was 71.4% in 2010, 82.1% in 2011, 69.9% in 2012, 74.2% in 2013, and 79.3% in 2014. The developer provided additional rates of beta-blocker prescriptions among patients with CAD from 2008-2010 from the National Cardiovascular Data Registry (NCDR) PINNACLE Registry®, a national outpatient cardiology practice registry, which demonstrated a median prescription rate of 78.4% at the initial clinic visit and 79.4% within a year of the initial clinic visit. The developer did not provide disparities data from the claims-based, registry, or electronically-specified measure but cited literature showing uninsured patients were less likely to receive beta-blocker therapy after an MI compared to those with private health insurance (73.3% vs. 80.5%).
- In 2015, during the previous review of this eMeasure and the claims-based/registry version of the measure, the Committee agreed that there was an opportunity for improvement based on the data provided from the registry measure but expressed the importance of obtaining performance data to adequately evaluate this eMeasure against this criterion in the future.

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

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

2a. Reliability: **H-12**; **M-6**; **L-0**; **I-0;** 2b. Validity: **M-12**; **L-3**; **I-2**

<u>Rationale</u>:

- The developer used patient records from 2,762 providers participating in the Physician Quality Reporting System (PQRS) and reporting on this measure via the EHR option from January 2014 through December 2014. There were 25,605 patients associated with 473 providers who had all the required data elements, 10 or more patients eligible for this measure and remained after exceptions were removed. Reliability testing was conducted at the measure score level, using a beta-binomial model to assess the signal-to-noise ratio. A reliability score of 0 implies that all the variability in a measure is attributable to measurement error. A reliability score of 1 implies that all the variability is attributable to real differences in performance. The higher the reliability score, the greater is the confidence with which one can distinguish the performance of one provider from another. This is an appropriate test for measure score reliability. A reliability of 0.70 is generally considered a minimum threshold for reliability. Reliability was 0.69 when evaluated at the minimum number of eligible patients (10) and 0.92 at the average number of eligible patients (54.1).

- The Standing Committee agreed that the data elements are clearly defined and the reliability scores demonstrate that differences in provider performance can be identified.
- Face validity of the measure score was systematically assessed using an expert panel of 12 members from the AMA-PCPI Measure Advisory Committee. Nearly 92.0% of the respondents (12) either agreed or strongly agreed that this measure can accurately distinguish good from poor quality.
- Patient-level data element validity testing was conducted by comparing the values obtained from electronic extraction using 2004 data from an academic general internal medicine clinic using a commercial EHR (Epic) to values obtained by manual abstraction from the EHR by a trained investigator (Validity against the Gold Standard); this is an appropriate test for data element testing. A sample of 134 patient charts was selected using random sampling via automated EHR review. Of the 134 patients, the automated EHR review detected 111 patients (82.8%) that met the numerator criteria. An additional 10 patients were detected through comparison of automated and manual EHR review and the percent agreement increased to 90.3%. The developer noted that the discrepancies between the EHR automated review alone and the automated review plus manual review were due to two types of misclassification: failure to correctly identify performance of quality measures among true, eligible patients; and failure to correctly exclude patients. The developer provided percent agreement of one final overall computation for all patients. NQF guidance for eMeasures states that testing at the level of data elements requires that all critical data elements be tested. At a minimum the numerator, denominator, and exclusions/exceptions must be assessed and reported separately. In addition to percent agreement, statistical analyses such as sensitivity and specificity, positive predictive value, and negative predictive value are required.
- NQF currently accepts testing in a simulated dataset (e.g., use of the BONNIE tool) for "legacy" eMeasures used in federal programs. In addition to the patient-level data element testing of the numerator, the developer provided BONNIE testing results for 72 synthetic patient records that demonstrated a 100.0% passing rate and confirmed that all the test cases performed as expected with the following data elements:
    - Age
    - Encounter
    - Diagnosis: Coronary artery disease, No MI
    - Procedure: Cardiac Surgery
    - Population 1: Diagnostic Study, Result: Ejection fraction result <40%
    - Population 1: Diagnosis: LVSD
    - Population 1: Diagnosis: LVSD severity moderate or severe
    - Population 2: Diagnosis Resolved: MI
    - Medication, Order: Beta Blocker Therapy
    - Medication, Active: Beta Blocker Therapy
    - Exceptions
- Some Standing Committee members questioned how exceptions were documented and extracted in the EHR. The developer explained that the exceptions are most likely structured data fields in the majority of EHRs. However, if an EHR uses an organization-specific code or a vendor-specific code those codes can be mapped to the nationally recognized value sets in the measure specifications. One of the Standing Committee members questioned how patients with a MI that occurred over three years ago would be captured in the EHR and/or measure. The developer explained that they have included prior MIs that have occurred ≤ 3 years in the value set and measure logic so only those patients with a prior MI within the past three years will be

included in the denominator. Overall, the Standing Committee agreed the measure met the validity criterion.

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3. Feasibility: H-7; M-11; L-0; I-1

(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:

- Feasibility testing was conducted in 2011 as the first phase of the Physicians Advancing Health Information Technology to Improve Cardiovascular Care (Cardio-HIT) project. Five physician offices, using five different EHRs (NextGen, Allscripts, GE Centricity, Epic, and a hybrid EHR) were included in the feasibility assessment. The developer stated that all of the data elements were successfully identified and exported to a warehouse for measure calculation by all five sites. At the time of the feasibility assessment, individual mapping of the data elements was required because each practice had a unique set of data fields. However, since the conclusion of the testing project in 2011, value sets have been developed to capture data in a standardized manner. The measure logic also performed as expected in BONNIE, the synthetic testing environment.
- The Standing Committee did not note any concerns regarding feasibility.

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4. Usability and Use: H-7; M-10; L-1; I-1

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- The Standing Committee noted that this measure is used in Meaning Use Stage 2 (MU-2).

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5. Related and Competing Measures

- This measure is related to:
    - #0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF<40%) (AMA-PCPI)
    - #0071: Persistence of Beta-Blocker Treatment After a Heart Attack (NCQA)
    - #0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) (AMA-PCPI)
    - #2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) (AMA-PCPI)
- The developer stated that # 0070 is the registry version of this eMeasure and is completely harmonized. #2906 is harmonized with #0071, #0083, and #2908 to the extent possible. As a result, the denominator specifications for the measures differ where needed based on the differing patient populations.

Standing Committee Recommendation for Endorsement: **Y-18**; **N-1**

6. Public and Member Comment

- No comments received.

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7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0
Decision: Approved for endorsement

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8. Board of Directors Vote: Yes (December 8, 2016)
Decision: Ratified for endorsement

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9. Appeals: No appeals were received.

Measures Not Endorsed

2939 Statin Therapy in Patients with Clinical Atherosclerotic Disease

Submission

Description: Percentage of patients 18-75 year of age with clinical atherosclerotic cardiovascular disease (ASCVD) who were offered moderate-to high-intensity statin.

Numerator Statement: Patients in the denominator who have been offered* high-intensity statin† OR have been offered* moderate-intensity statin†.

Definitions:

*A statin is "offered" if it is prescribed or if a patient reason exception for not being prescribed a statin is documented.

†Moderate-intensity and high-intensity statin doses are defined in Table 5 of the 2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adult http://content.onlinejacc.org/article.aspx?articleid=1879710)

Denominator Statement: All patients 18-75 years of age with clinical ASCVD* who were seen within a 12-month period. This measure is designed to apply to chronic care populations and does not apply to patients in acute care hospitals.

Definition:

*Clinical ASCVD includes acute coronary artery syndromes, a history of MI, stable or unstable angina, coronary or other arterial revascularization, stroke, TIA, and peripheral arterial disease presumed to be of atherosclerotic origin.

Exclusions: Exceptions: Documentation of medical reason(s) for not prescribing a statin (e.g., allergy, intolerance to statin[s], other medical reasons).

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Clinician : Individual

Setting of Care: Ambulatory Care : Clinician Office/Clinic

Type of Measure: Process

Data Source: Electronic Clinical Data : Registry

Measure Steward: American College of Cardiology

STANDING COMMITTEE MEETING 07/12/2016

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

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

1a. Evidence: **H-19**; **M-2**; **L-0**; **I-0**; 1b. Performance Gap: **H-16**; **M-5**; **L-0**; **I-0**

Rationale:

- The developer provided a clinical practice guideline from the 2013 ACCF/AHA Guideline for the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults with three secondary prevention recommendations to support moderate- or high-intensity statins for individuals with clinical atherosclerotic cardiovascular disease (ASCVD). Clinical ASCVD includes acute coronary syndrome (ACS), a history of myocardial infarction (MI), stable or unstable angina, coronary or other arterial revascularization, stroke, transient ischemic attack (TIA), and

peripheral arterial disease presumed to be of atherosclerotic origin. The developer also included results of a systematic review of 10 secondary prevention randomized controlled trials (RCTs) and four meta-analyses supporting the recommendations on ASCVD risk reduction in the secondary prevention setting.

- The Committee agreed that the developer presented strong evidence supporting moderate- or high-intensity statin therapy in individuals with clinical ASCVD.
- Since this is a new measure, there are no performance scores on the measure as specified. However, the developer provided differences in provider performance from the 2013 and 2014 PINNACLE Registry that included 1,701 and 1,890 providers and 209,770 and 239,948 patients, respectively. The mean performance rate for 2013 was 16.3% and 20.9% for 2014. The 2013 performance rate for the lower quartile was 4.30% and 8.33% for 2014. The 2013 performance rate for the upper quartile was 25.0% and 29.0% for 2014. The developer also provided additional data from the literature that indicated that patients are not receiving optimal statin doses. Additionally, the developer provided evidence indicating potential disparities in care for ASCVD patients receiving statin therapy based on race (African-American), gender (male), and insurance status (uninsured).
- The Committee noted that more than two-thirds of the PINNACLE data could not be analyzed for various reasons (see discussion below on reliability and validity), therefore, the gap in care and disparities may be greater than the performance and disparities data provided by the developer.

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2. Scientific Acceptability of Measure Properties: <u>The measure does not meet the Scientific Acceptability Criteria</u>

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

2a. Reliability: **H-4**; **M-13**; **L-3**; **I-1;** Initial 2b. Validity: **M-11**; **L-6**; **I-3**

Re-vote on 2. Validity: **M-9; L-6; I-4**

<u>Rationale</u>:

- The final dataset the developer used to calculate the signal-to-noise ratio using a beta-binomial model included PINNACLE Registry data with 1,701 providers and 209,770 patients (121 practices) from 2013 and 1,890 providers and 239,948 patients (136 practices) from 2014. Using 2014 data, the developer described the validation process used to obtain the final datasets (this process was also applied to 2013 data):
    - 2,503,852 patients were treated by 206 practices in 2014. Of those, 68 practices (678,475 patients) were excluded because their EHR did not transmit the data on medication dose.
    - An additional 841,376 patients were excluded due to missing comorbidity data needed to determine the presence of ASCVD as indicated by the measure specifications.
    - Another 205,345 patients were excluded because the developer was unable to define the statin dose or there was a medical exclusion for statins.
    - Lastly, 16,188 patients and two additional practices were excluded because the providers treated <10 eligible patients.
- The reliability score for a minimum of 10 patients was 0.985 for 2013 and 0.986 for 2014. The average number of patients for 2013 was 124 with a reliability score of 0.995; for 2014 it was 127 patients with a reliability score of 0.995. A reliability score of 0.00 implies that all the variability in a measure is attributable to measurement error. A reliability of 1.00 implies that all the variability is attributable to real differences in performance. The higher the reliability score,

the greater is the confidence with which one can distinguish the performance of one provider from another. This is an appropriate test for measure score reliability. A reliability score of 0.70 is generally considered a minimum threshold for reliability.

- The Committee agreed that the data elements are clearly defined and the reliability scores demonstrated sufficient reliability. However, some members questioned whether the measure can be consistently implemented inside and outside of the registry due to the large number of patients that were excluded in the final dataset due to several missing data elements needed to calculate the measure including statin medication and/or dosage and comorbidity data to determine the presence of ASCVD. Other Committee members questioned the representativeness of the sample data obtained from the PINNACLE Registry to generalize for widespread implementation. The developer responded that the PINNACLE data were a convenient sample that was available to test the measure specifications and determine the measure gap, but the data were not intended to be representative of national performance.
- Face validity of the measure score was systematically assessed by members of two existing committees from the ACC and AHA who were not involved in the development of the measure; the developer did not identify the committee members.
- The developer noted that eight committee members completed the survey and 100% of the respondents either agreed or strongly agreed that this measure can accurately distinguish good from poor quality.
- The only exclusion for this measure is documentation of a medical reason(s) for not prescribing a statin (e.g., allergy, intolerance to statin[s], other medical reasons). No patients in either the 2013 or 2014 data had such a contraindication. Although, the developer stated, there were a few patients identified as having patient-centered reasons for not receiving statins, these were not considered exclusions from this performance measure. The Standing Committee questioned the validity of the data because there were no patients with documentation of a medical reason for not prescribing a statin in 2013 or 2014. The developer clarified that documentation of a patient reason for not prescribing a statin, such as patient refusal, would be considered meeting the measure. One of the Committee members noted that many EHRs currently do not have extractable data fields for 'patient refusal' of statin therapy.
- The Standing Committee expressed concern with the significant number of patients (approximately 27.0%) that were excluded because the EHR was not able to transmit the data on statin dose. The measure developer stated that in the future, practices would need to remap their EHRs to the registry to ensure the correct data are transmitted. The Standing Committee also questioned whether the performance gap reported by the measure developer was a true gap in care or due to the inability to capture the critical data elements required to calculate the measure. Another Committee member noted that some patients may be prescribed high-intensity statins but due to economic reasons take half a pill per day or one pill every other day; there is currently no way to distinguish the difference between how medications are *prescribed* and how they are *taken*, potentially impacting the validity of the measure.
- The Standing Committee did not reach consensus on the validity criterion during the in-person meeting and re-voted on the post-comment call. During the call, The Standing Committee reiterated their concerns that the data offered no documentation for medical contraindications for statin therapy, patients who could not tolerate the prescribed dosage, or patient refusal.
- Ultimately, the Standing Committee did not recommend the measure. In addition, the Committee encouraged the developer to improve their data collection efforts and the quality of data presented to the Committee in the future.

3. Feasibility: Initial **H-1; M-10; L-6; I-3**

Re-vote on 3. Feasibility: **H-1; M-10, L-7; I-2 The measure does not meet the Feasibility Criteria**

(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:

- This measure is based on clinical registry data and all data elements are available in electronic sources. The Standing Committee expressed concern with the feasibility as outlined in the validation process used to obtain the final dataset, and therefore, did not pass the feasibility criterion of the measure.
- The Committee noted implementation of the measure was not currently feasible in many EHRs or outside of the PINNACLE Registry and was more 'aspirational'.

4. Usability and Use: H-1; M-12; L-4; I-3

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- The Standing Committee noted that this measure is currently used for internal quality improvement in the PINNACLE Registry.

5. Related and Competing Measures

- This measure is related to:
    - #0074: Chronic Stable Coronary Artery Disease: Lipid Control (ACC)
    - #0118: Anti-Lipid Treatment Discharge (STS)
    - #0439: STK-06: Discharged on Statin Medication (TJC)
    - #1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)
    - #0696: STS CABG Composite Score (STS)
    - #0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients (ACC)
    - #2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy (ACC)
- The developer stated that this new measure, #2939, focuses on optimal treatment of statins. Most measures on statin therapy that are NQF-endorsed address subsets of the patients included in this broad measure and do not yet reflect the updated recommendations and/or are intended to be used in a different setting, level of analysis or different data source.

Standing Committee Recommendation for Endorsement: *Initial Vote* **Y-13**; **N-7**

During the in-person meeting, the Standing Committee did not reach consensus on the validity criterion, but continued voting through overall recommendation for endorsement.

During the post-comment call on October 7, 2016, the measure failed on the validity criterion and was not recommended for endorsement, voiding the initial vote noted above.

6. Public and Member Comment

- One commenter expressed their support for this measure and stated that it would advance the practice of medicine relative to existing statin measures by focusing on a broad population of patience and adherence to guidelines. The commenter also stated that due to the measure already being present in EHR systems, it will likely improve accessibility and interoperability of medication related data.
- Another commenter indicated their support of this measure due to the potential to drive change and impact a broader patient population. The commenter also supported the measure as it is the only measure currently adhering to the multi-society cholesterol guideline recommendation.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-0; N-12

Decision: Measure not recommended for endorsement

0288 Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

Submission

Description: 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.

Numerator Statement: The number of ED AMI patients whose time from ED arrival to fibrinolysis is 30 minutes or less.

Denominator Statement: The number of ED AMI patients with ST-segment elevation on ECG who received fibrinolytic therapy.

Exclusions: 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.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Facility, Population : National

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Process

Data Source: Administrative claims, Electronic Clinical Data : Electronic Health Record, Paper Medical Records

Measure Steward: Centers for Medicare & Medicaid Services

STANDING COMMITTEE MEETING 07/12/2016

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

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

1a. Evidence: **H-12**; **M-6**; **L-3**; **I-1**; 1b. Performance Gap: **H-18**; **M-3**; **L-1**; **I-0**

Rationale:

- For the 2012 maintenance of endorsement evaluation, the developer provided one clinical practice guideline from the 2004 ACC/AHA Guidelines for the Management of Patients with ST-Elevation Myocardial Infarction stating the medical system goal is to facilitate rapid recognition and treatment of patients with ST-elevation myocardial infarction (STEMI) such that door-to-needle (or medical contact–to-needle) time for initiation of fibrinolytic therapy can be achieved within 30 minutes.
- For the current evaluation, the developer provided an update to the 2013 ACCF/AHA Guideline for the Management of ST-Elevation Myocardial Infarction with three recommendations for fibrinolytic therapy when there is an anticipated delay to performing primary PCI within 120 minutes of first medical contact (FMC). The developer also provided a systematic review of the body of the evidence supporting the management of patients with ST-elevation myocardial infarction, specifically with reperfusion therapy. Lastly, the developer identified three new studies that were published since the systematic review of the body of evidence (1986-2012) that support the measure's focus.
- A member of the Standing Committee noted in the pre-evaluation comments and again at the in-person meeting that a preponderance of evidence suggests that in an era where thrombolytic therapy (TT) was first-line therapy for STEMI, TT administered within 30 minutes was associated with modestly improved survival vs. TT administered within 30-60 minutes. However, this calculus might be substantially different for a patient presenting to an institution where percutaneous coronary intervention (PCI) (in-house or via transfer) is sometimes available. If PCI is preferred, then there is a legitimate concern that patients might be better served by a policy which does not promote immediate reflexive action. The Committee member concluded that dichotomizing the outcome as within or not within specified minutes has always been at odds with clinical evidence or statistical theory or practice.
- The Standing Committee agreed that rapid assessment of patients experiencing a STEMI, determining the best reperfusion strategy, and administering fibrinolytic therapy (if indicated/chosen) to STEMI patients as rapidly as possible reduces mortality and morbidity.
- The developer provided facility-level performance rates from Hospital Compare from the April 2010 – March 2015 data collection period:

	2010-11	2011-12	2012-13	2013-14	2014-15
Facilities	121	109	103	79	76
# of patients	1,257	1,691	1,552	1,260	1,221
Minimum	9.0	17.0	9.0	9.0	9.0
Median	65.0	70.0	69.0	73.0	73.0
Maximum	100.0	100.0	100.0	100.0	100.0

- In the pre-evaluation comments, one of the Standing Committee members agreed that the ultimate goal of STEMI process of care is to provide timely reperfusion--whether using PCI or fibrinolytic therapy. The Committee member noted that 94.0% of patients with STEMI in the U.S.

are treated with primary PCI; this measure addresses the remaining 6.0% of patients. However, the Standing Committee member expressed concern with the small proportion of patients treated in a combination of hospitals where fibrinolytic therapy is the primary reperfusion strategy because PCI is not available and hospitals where PCI is available and fibrinolytic therapy is the secondary reperfusion strategy. This is a useful measure for the hospitals where fibrinolytic therapy is the primary reperfusion strategy. However, the measure does not accurately reflect performance of a hospital's STEMI system of care for hospitals that use fibrinolytic therapy as a secondary reperfusion strategy; this is particularly important since this measure is publicly reported.

- Other Standing Committee members agreed that it was difficult to determine which patients are included in the performance rates: patients who presented at facilities where PCI was not available and fibrinolytic therapy was the only treatment option; patients transferred to a PCI-capable facility; or patients who presented at facilities where PCI was available and fibrinolytic therapy was the secondary reperfusion strategy. The developer explained that #0290 captures the patients with STEMI that are transferred to another facility for a PCI. The developer further explained that due to the minimum case count of 10 (required for public reporting) and the sampling algorithm, the facilities reporting on this measure are those where fibrinolytic therapy is the primary reperfusion strategy. The Standing Committee stressed that the information provided by the developer did not clearly state that the facilities included in the performance rates were those where fibrinolytic therapy is the primary reperfusion strategy and minimum case count is not clearly defined in the measure information form (MIF).
- Another member of the Standing Committee noted in the pre-evaluation comments that the data for 2015 represent <1.0% of all STEMIs, <7.0% of patients receiving TT for STEMI, and <3.0% of facilities that treat STEMI patients. This could mean there is room for improvement for these 1,211 patients, but it might also suggest that the 30-minute goal is not appropriate. The use of 30 minutes as a dichotomous outcome is particularly problematic in determining whether there is a clinically-relevant difference. The Standing Committee member concluded that the magnitude of the problem cannot be determined from the available information.
- The developer analyzed the effect of patient and facility characteristics on the likelihood of patients receiving fibrinolytic therapy within 30 minutes of emergency department (ED) arrival. The analysis included 3,844 cases submitted to the Clinical Data Warehouse (CDW) in 2014 that included a principal diagnosis of acute myocardial infarction (AMI), ST-segment elevation on ECG performed closest to ED arrival, and received fibrinolytic therapy. The results indicated that age, race, sex, and facility size were variables related to the timely delivery of fibrinolytic therapy. The Standing Committee agreed that rapid diagnosis of STEMI is measurably worse for nonwhites, females, age <30, and patients treated in smaller hospitals.
- The Standing Committee noted that the data presented demonstrate that there continues to be a quality problem and variation with STEMI patients receiving timely fibrinolytic therapy upon arriving in the ED; therefore, the Committee agreed an opportunity for improvement and a gap in care remains.

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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-3; M-10; L-7; I-0 2**b. Validity: **M-12; L-8; I-0**

Voting on these criteria occurred on the post-comment call on October 7, 2016.

Rationale:

- For the 2012 maintenance of endorsement evaluation, reliability and validity testing were not provided because the measure was undergoing validation through the CMS Clinical Abstraction Center.
- For the current evaluation, the Standing Committee had multiple concerns with the measure specifications including:
    - The specifications do not state that the intended target is facilities that are not PCI-capable; the specifications should be explicit if this is the intent of the measure.
    - The measure only includes patients that received fibrinolytic therapy; it does not capture patients who needed fibrinolytic therapy but did not receive it.
    - It was not clear why presence of ST-elevation on ECG is part of the denominator. If fibrinolytic therapy is given for anything other than stroke symptoms, then it is because the provider interpreted the ECG as showing ST-elevation.
    - The large number cases (59.5%) excluded due to no ST-elevation on the interpretation of the 12-lead ECG performed closest to ED arrival, no interpretation or report available, or unable to determine (UTD) from documentation.
        - ST-elevation is frequently not documented.
        - The potential for misclassifying exceptions and exclusions (e.g., do not record ECG interpretation if fibrinolytic therapy is administered late).
    - The measure should be re-specified for receiving fibrinolytic therapy for suspected STEMI, not ECG (note that the same logic does not apply to the #0290).
- For the current evaluation, the measure was tested for reliability at the measure score level using a dataset that included 76 facilities that submitted 1,221 cases (denominator after exclusions) to Hospital Compare from April 1, 2014-March 31, 2015. Of those, a total of 871 cases met the numerator.
- To test the reliability of the measure score, the developer used a beta-binomial model to assess the signal-to-noise ratio. A reliability score of 0.00 implies that all the variability in a measure is attributable to measurement error. A reliability score of 1.00 implies that all the variability is attributable to real differences in performance. The higher the reliability score, the greater is the confidence with which one can distinguish the performance of one facility from another. This is an appropriate test for measure score reliability. A reliability score of 0.70 is generally considered a minimum threshold for reliability. The developer stated that the distribution of the performance score reliability for the facilities meeting the minimum case count requirements during the April 2014 – March 2015 data collection period ranged from 0.49 to 1.00 with a median reliability of 0.67, though a value for minimum case count was not provided.
- Several of the concerns about the reliability of the measure discussed by the Standing Committee included:
    - No statistical method used to account for facilities with smaller sample sizes, which incorrectly depicts large confident intervals around the estimate, and ultimately making it difficult to distinguish low and high performers from the national estimate.
- For the current evaluation, the dataset used for patient-level data element testing included a sample of 462 (denominator) cases submitted to the Clinical Data Warehouse (CDW) from 23 facilities from April 1, 2014-March 31, 2015. After exclusions, 28 cases remained in the denominator sample; 18 of those cases met all of the numerator requirements. Data element validity was conducted by assessing the level of agreement between facility abstraction and auditor (CMS Clinical Data Abstraction Center or CDAC) abstraction (gold standard) and calculating a kappa statistic for categorical data elements or Pearson correlation coefficient for

continuous data elements. Kappa/Pearson's correlation values range between 0.00 and 1.00 and are interpreted as degree of agreement beyond chance. By convention, a Kappa/Pearson's correlation > 0.70 is considered acceptable. P-values estimate the statistical significance associated with the test statistics. P-values of less than 0.001 suggest high levels of statistical significance and that the degree of agreement was not due to chance. The Kappa/Pearson's correlation for 7 data elements (E/M Code, Discharge Code, ICD-9 Principal DX Code, Fibrinolytic Administration Date, Fibrinolytic Administration Time, Arrival Time, Reason for Delay in Fibrinolytic Therapy) was 1.00 (<0.001). The kappa score for "Fibrinolytic Administration" was 0.93 (<0.001) and 0.63(<0.001) for" Initial ECG Interpretation".

- The Standing Committee voiced several concerns with the validity of the measure including:
    - The small numbers of patients remaining in the population after a total of 94.1% of patients were removed after the denominator exclusions and numerator exceptions were applied.
    - The large number of overall exclusions due to the data element "Initial ECG Interpretation" (59.5%).
    - Do the facilities with the greatest number of excluded cases also have higher performance rates indicating potential data misclassification of the measure?
- The developer provided the following statement with the statistical results from the exclusions analysis, "*The sampled population included 64,826 cases where a patient (age 18 years or older) presented with an acute myocardial infarction **with** ST-segment elevation on the ECG closest to ED arrival*." The Standing Committee requested that the developer clarify if this statement should instead say "***with and without***" which would best describe the data from the exclusions/exceptions analysis.
- The Standing Committee requested that the developer clarify the numerator, denominator, exclusions, and exclusions analysis. Additionally, the Committee requested that the developer provide an analysis of the facilities with the highest number of exclusions and the highest performing facilities to determine if there is potential misclassification of the measure.
- The developer provided an algorithm to clarify the measure specifications including the initial population, numerator, denominator, and exclusions. The Standing Committee expressed the same concerns discussed during the in-person meeting. The Standing Committee resumed voting during the post-comment call.

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3. Feasibility: H-1; M-17; L-1; I-0

Voting on this criterion occurred on the post-comment call on October 7, 2016.

(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:

- Although the data are available through medical records, the Committee recognized the data collection burden for manual chart abstraction that could result in various interpretations.
- The Standing Committee agreed that electronic collection was a likely possibility in the future, greatly increasing the feasibility of the measure when available.
- The Standing Committee agreed this measure meets the feasibility criterion.

4. Usability and Use: H-1; M-14; L-5; I-0

Voting for this criterion occurred on the post-comment call on October 7, 2016.

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- This measure is currently publicly reported and in use in the CMS HOQR (Hospital Outpatient Quality Reporting Program) accountability program.
- The Standing Committee asked the developer for threshold percentages to determine what percentage of hospitals this measure would apply to, but this information was not readily available during the Standing Committee discussion of this measure during the in-person meeting or the post-comment call.
- The Standing Committee agreed this measure meets the Usability and Use criterion.

5. Related and Competing Measures

- This measure is related to:
    - #0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention (CMS)
- The developer stated that #0290 focuses on the timely transfer of patients who require PCI. Additionally, the electronically specified version of #0163, which is no longer NQF-endorsed, is included in the Hospital Inpatient Quality Reporting (HIQR) Program and focuses on the timely initiation of PCI for a patient who arrives at a PCI-capable hospital.

Standing Committee Recommendation for Endorsement: **Y-9**; **N-11**

Voting for this criterion occurred on the post-comment call on October 7, 2016.

Rationale

- Although the Standing Committee agreed the measure met the criteria, they ultimately did not recommend the measure for endorsement. The Standing Committee voiced several concerns with the specifications of the measure including the measure population and the exclusions.

6. Public and Member Comment

- No comments received.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-0; N-12

Decision: Measure not recommended for continued endorsement

Measures Withdrawn from Consideration

One new measure has been withdrawn during the endorsement evaluation process.

Measure	Reason for withdrawal
2763: Ischemic Vascular Disease Care All-or-None Outcome Measure – Optimal Control	Measure withdrawn from consideration.

Measures with Endorsement Removed

Three measures previously endorsed by NQF have not been re-submitted for maintenance of endorsement. Endorsement for these measures will be removed.

Measure	Reason for withdrawal
0092: Emergency Medicine: Aspirin at Arrival for Acute Myocardial Infarction (AMI)	Measure was not submitted for maintenance review. Measure is considered "topped out, meaning it no longer addresses a performance gap area
0163: Primary PCI received within 90 minutes of hospital arrival	Measure was not submitted for maintenance review. Measure is considered "topped out, meaning it no longer addresses a performance gap area.
0164: Fibrinolytic Therapy received within 30 minutes of hospital arrival	Measure was not submitted for maintenance review. Measure is considered "topped out, meaning it no longer addresses a performance gap area.

Appendix B: NQF Cardiovascular Portfolio and Related Measures

Measures in the Cardiovascular Portfolio

**Denotes measures that were evaluated in the Cardiovascular Project 2016-2017*

Atrial Fibrillation/Atrial Flutter

1525: Atrial Fibrillation and Atrial Flutter: Chronic Anticoagulation Therapy

2474: Cardiac Tamponade and/or Pericardiocentesis Following Atrial Fibrillation Ablation

Blood Pressure Control

0018: Controlling High Blood Pressure

Coronary Artery Disease

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

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy—Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Cardiac Catheterization

0355: Bilateral Cardiac Catheterization Rate (IQI 25)

0715: Standardized adverse event ratio for children < 18 years of age undergoing cardiac catheterization

Cardiac Imaging

0669: Cardiac Imaging for Preoperative Risk Assessment for Non-Cardiac, Low Risk Surgery

0672: Cardiac stress imaging not meeting appropriate use criteria: Testing in asymptomatic, low risk patients

0670: Cardiac stress imaging not meeting appropriate use criteria: Preoperative evaluation in low risk surgery patients

Heart Failure

0277: Heart Failure Admission Rate (PQI 8)

2438: Beta-Blocker Therapy (i.e., Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate) for LVSD Prescribed at Discharge

2443: Post-Discharge Evaluation for Heart Failure Patients

2455: Heart Failure: Post-Discharge Appointment for Heart Failure Patients

2450: Heart Failure: Symptom and Activity Assessment

2439: Post-Discharge Appointment for Heart Failure Patients

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

2907: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD) (eMeasure paired with 0081)

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

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) (eMeasure paired with 0083)

0079: Heart Failure: Left Ventricular Ejection Fraction Assessment (Outpatient Setting)

2764: Combination of Hydralazine and Isosorbide Dinitrate Therapy for Self-identified Black or African American Patients with Heart Failure and LVEF <40% on ACEI or ARB and Beta-blocker Therapy (*Trial Use eMeasure*)

0229: Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following heart failure (HF) hospitalization for patients 18 and older

0358: Heart Failure Mortality Rate (IQI 16)

Implantable Cardioverter Defibrillator (ICD)

0965: Patients with an ICD implant who receive ACE-I/ARB and beta blocker therapy at discharge

0694: Hospital Risk-Standardized Complication Rate following Implantation of Implantable Cardioverter-Defibrillator (ICD)

Cardiovascular Implantable Electronic Device (CIED)

2461: In-Person Evaluation Following Implantation of a Cardiovascular Implantable Electronic Device (CIED)

Ischemic Vascular Disease

0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic

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

0076: Optimal Vascular Care*

Acute Myocardial Infarction (MI)

0090: Emergency Medicine: 12-Lead Electrocardiogram (ECG) Performed for Non-Traumatic Chest Pain

0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention*

0142: Aspirin prescribed at discharge for AMI

0642: Cardiac Rehabilitation Patient Referral from an Inpatient Setting

0643: Cardiac Rehabilitation Patient Referral from an Outpatient Setting

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

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

2377: Defect Free Care for AMI

2473: Hospital 30-Day Risk-Standardized Acute Myocardial Infarction (AMI) Mortality eMeasure

0730: Acute Myocardial Infarction (AMI) Mortality Rate

0230: Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following acute myocardial infarction (AMI) hospitalization for patients 18 and older.

Percutaneous Coronary Intervention (PCI)

2411: Percutaneous Coronary Intervention (PCI): Comprehensive Documentation of Indications for PCI

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

0671: Cardiac stress imaging not meeting appropriate use criteria: Routine testing after percutaneous coronary intervention (PCI)

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

0536: 30-day all-cause risk-standardized mortality rate following Percutaneous Coronary Intervention (PCI) for patients with ST segment elevation myocardial infarction (STEMI) or cardiogenic shock

0535: 30-day all-cause risk-standardized mortality rate following percutaneous coronary intervention (PCI) for patients without ST segment elevation myocardial infarction (STEMI) and without cardiogenic shock

0133: In-Hospital Risk Adjusted Rate of Mortality for Patients Undergoing PCI

2459: Risk Adjusted Rate of Bleeding Events for patients undergoing PCI

Statin Use

2712: Statin Use in Persons with Diabetes

Stent Placement

2379: Adherence to Antiplatelet Therapy after Stent Implantation

2396: Carotid artery stenting: Evaluation of Vital Status and NIH Stroke Scale at Follow Up

Additional measures related to cardiovascular conditions that are in other portfolios.

Surgery

0114: Risk-Adjusted Post-Operative Renal Failure

0115: Risk-Adjusted Surgical Re-exploration

0116: Anti-Platelet Medication at Discharge

0117: Beta Blockade at Discharge

0118: Anti-Lipid Treatment Discharge

0119: Risk-Adjusted Operative Mortality for CABG

0122: Risk-Adjusted Operative Mortality MV Replacement + CABG Surgery

0123: Risk-Adjusted Operative Mortality for Aortic Valve Replacement (AVR) + CABG Surgery

0126: Selection of Antibiotic Prophylaxis for Cardiac Surgery Patients

0127: Preoperative Beta Blockade

0128: Duration of Antibiotic Prophylaxis for Cardiac Surgery Patients

0129: Risk-Adjusted Prolonged Intubation (Ventilation)

0130: Risk-Adjusted Deep Sternal Wound Infection Rate

0131: Risk-Adjusted Stroke/Cerebrovascular Accident

0134: Use of Internal Mammary Artery (IMA) in Coronary Artery Bypass Graft (CABG)

0696: The STS CABG Composite Score

1502: Risk-Adjusted Operative Mortality for MV Repair + CABG Surgery

Cost and Resource Use

1558: Relative Resource Use for People with Cardiovascular Conditions

Health and Well-Being

2020: Adult Current Smoking Prevalence

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

1933: Cardiovascular Monitoring for People with Cardiovascular Disease and Schizophrenia

Readmissions

0505: Hospital 30-Day All-Cause, Risk-Standardized Readmission Rate (RSSR) Following Acute Myocardial Infarction (AMI) Hospitalization

0330: Hospital 30-Day, All-Cause, Risk-Standardized Readmission Rate (RSSR) Following Heart Failure Hospitalization

Appendix C: Cardiovascular Portfolio—Use in Federal Programs

NQF #	Title	Federal Programs: Finalized as of 2015-2016
0018	Controlling High Blood Pressure	Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults; Meaningful Use (EHR Incentive Program) - Eligible Professionals; Medicare Part C Plan Rating; Medicare Shared Savings Program; Physician Compare; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0066	Chronic Stable Coronary Artery Disease: ACE Inhibitor or ARB Therapy--Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%)	Medicare Shared Savings Program; Physician Compare; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0067	Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0068	Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	Meaningful Use (EHR Incentive Program) - Eligible Professionals; Medicare Shared Savings Program; Physician Compare; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0070	Chronic Stable Coronary Artery Disease: Beta-Blocker Therapy--Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	Meaningful Use (EHR Incentive Program) - Eligible Professionals; Physician Feedback;#Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0071	Persistence of Beta-Blocker Treatment After a Heart Attack	Medicare Part C Display Measure
0074	Chronic Stable Coronary Artery Disease: Lipid Control	Physician Compare; Physician Feedback; Value-Based Payment Modifier Program

NQF #	Title	Federal Programs: Finalized as of 2015-2016
0079	Heart Failure: Left Ventricular Ejection Fraction Assessment (Outpatient Setting)	Physician Feedback; Value-Based Payment Modifier Program
0081	Heart Failure: Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction	Meaningful Use (EHR Incentive Program) - Eligible Professionals; Military Health System; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0083	Heart Failure : Beta-blocker therapy for Left Ventricular Systolic Dysfunction	Meaningful Use (EHR Incentive Program) - Eligible Professionals; Medicare Shared Savings Program; Physician Compare; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0090	Electrocardiogram Performed for Non-Traumatic Chest Pain	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0092	Emergency Medicine: Aspirin at Arrival for Acute Myocardial Infarction (AMI)	Physician Feedback; Value-Based Payment Modifier Program
0137	ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients	Hospital Compare
0142	Aspirin prescribed at discharge for AMI	Hospital Compare; Hospital Inpatient Quality Reporting; Meaningful Use (EHR Incentive Program) - Hospitals, CAHs; Military Health System
0163	Primary PCI received within 90 minutes of Hospital Arrival	Hospital Compare; Hospital Inpatient Quality Reporting; Hospital Value-Based Purchasing; Meaningful Use (EHR Incentive Program) - Hospitals, CAHs
0164	Fibrinolytic Therapy received within 30 minutes of hospital arrival	Hospital Compare; Hospital Inpatient Quality Reporting; Hospital Value-Based Purchasing; Meaningful Use (EHR Incentive Program) - Hospitals, CAHs

NQF #	Title	Federal Programs: Finalized as of 2015-2016
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
0288	Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival	Hospital Compare; Hospital Outpatient Quality Reporting; Military Health System
0290	Median Time to Transfer to Another Facility for Acute Coronary Intervention	Hospital Compare; Hospital Outpatient Quality Reporting
0643	Cardiac Rehabilitation Patient Referral From an Outpatient Setting	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
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	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program

NQF #	Title	Federal Programs: Finalized as of 2015-2016
0671	Cardiac stress imaging not meeting appropriate use criteria: Routine testing after percutaneous coronary intervention (PCI)	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0672	Cardiac stress imaging not meeting appropriate use criteria: Testing in asymptomatic, low risk patients	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
1525	Chronic Anticoagulation Therapy	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program

Appendix D: Project Standing Committee and NQF Staff

STANDING COMMITTEE

Mary George, MD, MSPH, FACS, FAHA (Co-Chair)
Centers for Disease Control and Prevention, Division for Heart Disease and Stroke Prevention
Decatur, Georgia

Thomas Kottke, MD, MSPH (Co-Chair)
HealthPartners
Minneapolis, Minnesota

Sana Al-Khatib, MD, MHS
Duke University Medical Center
Durham, North Carolina

Carol Allred, BA
Women Heart: The National Coalition for Women with Heart Disease
Harker Heights, Texas

Linda Baas, PhD, RN
Heart Failure Nurse Practitioner, University of Cincinnati Physicians
Cincinnati, Ohio

Linda Briggs, DNP
George Washington University
Washington, District of Columbia

Leslie Cho, MD
Cleveland Clinic
Cleveland, Ohio

Joseph Cleveland, MD
University of Colorado Denver
Aurora, Colorado

Michael Crouch, MD, MSPH, FAAFP
Texas A & M University School of Medicine
Bryan, Texas

Elizabeth DeLong, PhD
Duke University Medical Center
Durham, North Carolina

Kumar Dharmarajan, MD, MBA
Assistant Professor of Medicine, Yale School of Medicine
New Haven, Connecticut

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

Brian Forrest, MD
Family Physician and CEO of Access Healthcare Direct
Chapel Hill, North Carolina

Ellen Hillegass, PT, EdD, CCS, FAACVPR, FAPTA
American Physical Therapy Association
Sandy Springs, Georgia

Thomas James, MD
Baptist Health Plan and Baptist Health Community Care
Louisville, Kentucky

Charles Mahan, PharmD, PhC, RPh
Presbyterian Healthcare Services, Clinical Assistant Professor of Pharmacy, University of New Mexico
Albuquerque, New Mexico

Joel Marrs, Pharm.D, FNLA, BCPS (AQ Cardiology), CLS
University of Colorado Anschutz Medical Campus
Aurora, Colorado

Gerard Martin, MD
Children's National Health System
Washington, District of Columbia

Kristi Mitchell, MPH
Avalere Health, LLC
Washington, District of Columbia

Gary Puckrein, PhD
President, National Minority Quality Forum
Washington, District of Columbia

Nicholas Ruggiero, MD, FACP, FACC, FSCAI, FSVM, FCPP
Thomas Jefferson University Hospital
Philadelphia, Pennsylvania

Jason Spangler, MD, MPH, FACPM
Amgen, Inc.
Washington, District of Columbia

Mladen Vidovich, MD
Jesse Brown VA Medical Center
Chicago, Illinois

Daniel Waxman, MD, PhD
Natural Scientist for RAND, Visiting Associate Professor at University of California, Los Angeles
Los Angeles, California

NQF STAFF

Helen Burstin, MD, MPH
Chief Scientific Officer

Marcia Wilson, PhD, MBA
Senior Vice President, Quality Measurement

Elisa Munthali, MPH
Vice President, Quality Measurement

Melissa Mariñelarena, RN, MPA
Senior Director

Wunmi Isijola, MPH
Administrative Director

Donna Logan, MPH
Project Manager

Appendix E: Measure Specifications

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

STATUS

Standing Committee Review

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 Left Ventricular Ejection Fraction (LVEF) < 40% who were prescribed ACE inhibitor or ARB therapy

TYPE

Process

DATA SOURCE

Electronic Clinical Data : Registry This measure is currently being used in the ACCF PINNACLE registry for the outpatient office setting

No data collection instrument provided Attachment NQF0066__I9toI10_conversion.xlsx

LEVEL

Clinician : Group/Practice, Clinician : Individual

SETTING

Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Behavioral Health/Psychiatric : Outpatient, Ambulatory Care : Urgent Care

NUMERATOR STATEMENT

Patients who were prescribed ACE inhibitor or ARB therapy

NUMERATOR DETAILS

Numerator 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.

FOR POPULATION 1: Patients who are 18 years and older with a diagnosis of CAD with LVEF < 40%

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

FOR POPULATION 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

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

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

FOR POPULATION 1: Patients who are 18 years and older with a diagnosis of CAD with LVEF < 40%

Denominator Definition:

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

Patients aged >= 18 years

AND

Diagnosis for coronary artery disease (ICD-9-CM) [reportable through 9/30/2015]: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82

Diagnosis for coronary artery disease (ICD-10-CM) [reportable beginning 10/01/2015]: 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, 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 reporting 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

AND

Two Denominator Eligible Visits

AND

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

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

Patients aged >= 18 years

AND

Diagnosis for coronary artery disease (ICD-9-CM) [reportable through 9/30/2015]: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82

Diagnosis for coronary artery disease (ICD-10-CM) [reportable beginning 10/01/2015]: 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, 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-9-CM) [reportable through 9/30/2015]: 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.70, 250.71, 250.72, 250.73, 250.80, 250.81, 250.82, 250.83, 250.90, 250.91, 250.92, 250.93

Diagnosis for diabetes (ICD-10-CM) [reportable beginning 10/01/2015]: 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, E10.36, 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, E11.21, E11.22, E11.29, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E11.36, 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, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.359, E13.36, 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

AND

Patient encounter during the reporting 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

AND

Two Denominator Eligible Visits

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

EXCLUSIONS

Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, 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 (eg, patient declined, other patient reasons)

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

EXCLUSION DETAILS

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 ACC/AHA/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 #0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy-Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%), exceptions may include medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, patient declined, other patient reasons), or system reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, lack of drug availability, other reasons attributable to the health care system).Although this methodology does not require the external reporting of more detailed exception data, the ACC/AHA/PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The ACC/AHA/PCPI 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 are as follows:

FOR POPULATION 1: Patients who are 18 years and older with a diagnosis of CAD with 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 POPULATION 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

Not applicable. No risk adjustment or risk stratification

STRATIFICATION

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.

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

To calculate performance rates:

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 (ie, 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 (ie, 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) for not prescribing ACE inhibitor or ARB therapy (eg, allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, patient declined, other patient reasons), or system reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, lack of drug availability, other reasons attributable to the health care system)]. 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 (ie, 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. No diagram provided

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

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

2467 : Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

0074 : Chronic Stable Coronary Artery Disease: Lipid Control

0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

1522 : ACE/ARB Therapy at Discharge for ICD implant patients with Left Ventricular Systolic Dysfunction

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: While this measure's specifications are harmonized with existing measures where possible, there are several key differences between this measure and other existing related measures. The first group of related measures (NQF #1662, 1522, 0081, 2467)all have a similar focus on the prescription of ACEI/ARBs. However they all have different target populations, with measure #1662 focusing on patients with chronic kidney disease (CKD), measure #1522 being a facility-level measure focusing on patients with an ICD implant, measure #0081 focusing on patients with a diagnosis of heart failure and left ventricular ejection fraction <40%, and measure #2467 focusing on medication adherence among patients with diabetes. This group of measures reflect the importance of ACEI/ARBs among a variety of patient populations, that are distinct from the patient population included in this measure. We believe that the measures are complementary rather than competing, and differences in the measure specifications are a result of the differences in the target patient population. These differences should not result in any additional data collection burden. The second group of related measures (NQF #0067, 0074, and 0070) all focus on different aspects of care for patients with CAD. Measure #0067 focuses on use of antiplatelet therapy, while measure #0074 focuses on LDL control, and measure #0070 focuses on the use of beta-blocker therapy. We view these measures as complementary measures that, when taken together, provide a rounded view of the quality of care for patients with CAD. While these measures share a focus on the patient population with CAD, differences in measure specifications are reflective of the different care processes being targeted in each measure. We don't believe that these differences result in any additional data collection burden.

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.

0076 Optimal Vascular Care

STATUS

Standing Committee Review

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 Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records An excel template with formatted columns for data fields is provided. Many medical groups extract the information from their EMR. Registries can be used as a source of information to create the data file; however groups must ensure that all of their eligible patients are included. Paper abstraction forms are provided for those clinics who wish to use them as an interim step to creating their data file. All data is uploaded in electronic format (.csv file) to a HIPAA secure, encrypted and password protected data portal.

Available at measure-specific web page URL identified in S.1 Attachment MNCM_-0076_Optimal_Vascular_Care_Specs_Fields_RA_2-2016.xlsx

LEVEL

Clinician : Group/Practice

SETTING

Ambulatory Care : Clinician Office/Clinic

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.

* Do NOT enter a test date that occurred in yyyy (beyond measurement period). A date in yyyy will create an ERROR upon submission.

* 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 enter a blood pressure result that is reported by or taken by the patient.

* Do NOT enter a blood pressure result obtained in the following care settings: Inpatient, Emergency Department, Urgent Care, other settings designated for surgical or diagnostic procedures or an office visit associated with acute pain or pain of at least moderate severity (greater than or equal to four on a scale of zero to 10).

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.

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.

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.

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 mm/dd/yyyy and mm/dd/yyyy (five year range including measurement period)

* Do NOT enter a test date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission.

* 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 mm/dd/yyyy and mm/dd/yyyy (five year range including measurement period).

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 at any time during the measurement period.

Please see Appendix C for a list of statin medications.

1 = Yes, patient was prescribed a statin medication or a statin medication was reviewed and active on the patient's medication list.

2 = No, patient was not prescribed a statin medication and a statin medication was not reviewed and active on the patient's medication list.

The following exception to statin medication use will be identified by the portal based on the submitted LDL values

* Patients aged 21 to 75 years and an LDL result less than 40 mg/dL

A blank field will create an ERROR upon submission.

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.

* Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission.

* 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 a statin medication during the measurement period (Field 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 = Other provider documented reason: drug interaction (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.

* Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission.

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 D 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 reviewed and active on the patient's medication list.

2 = No, patient was not prescribed a daily aspirin product or antiplatelet medication and one was not reviewed and active on the patient's medication list.

Aspirin/narcotic combination medications do not qualify as a daily aspirin product.

Blank fields will cause an ERROR upon submission.

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.

* Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission.

* 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.

* Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission.

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.

* Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period)will create an ERROR upon submission.

* 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 to 75 with ischemic vascular disease who have at least two visits for this diagnosis in the last two years (established patient) with at least one visit in the last 12 months.

DENOMINATOR DETAILS

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

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)

Ages:

* 18-75 years of age as of January 1 of the measurement period

Established Patient with Diagnosis:

* Patients are identified as having a diagnosis of ischemic vascular disease (IVD) if they've had at least two face-to-face visits with an eligible provider in an eligible specialty with a diagnosis of IVD (Ischemic Vascular Disease Value Set) during the current or prior measurement period

Event:

* At least one face-to-face visit with 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, died or diagnosis coded in error.

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
* Documentation that diagnosis was coded in error

RISK ADJUSTMENT

Statistical risk model

The statistical risk model is one of Actual to Expected methodology and is estimated using a logistic model implemented in SAS Procedure Glimmix that accounts for the measure's non-continuous (binary) nature.

Actual to Expected methodology is where the actual measure result remains unaltered, instead a risk adjusted comparison is created based on same proportions of the risk factors that the clinic has.

With Actual to Expected, since the expected is not a stable variable for all clinics, it is not valid to compare the clinic's confidence interval to the expected value. Instead to test whether or not there was a statistically significant difference between the expected value and the actual value achieved by the clinic, a one population proportions test was used. This method is employed to test the proportion of optimally managed patients attributed to a clinic compared to a specified value for that clinic. In the MNCM case the specified value is an expected rate calculated taking into account the overall state rate and adjusted for risk factors specific to the measure.

Variables available to testing in a risk adjustment model for this measure include several demographic variables (age, gender, zip, and insurance product as a proxy for socioeconomic status) and clinical variables (depression and diabetes). Currently, only age and product have the statistical strength (t-test) to be included in the risk adjustment model MNCM is evaluating race/ethnicity, country of origin, primary language as variables in the next year.

(See data dictionary Tab = Risk Adjustment).

Available in attached Excel or csv file at S.2b

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 2014 Health Care Disparities Report, a hard copy report available on our corporate website at http://mncm.org/wp-content/uploads/2015/03/2014-Health-Care-Disparities-Report-Final.pdf. This report notes a gap in outcomes of ten percentage points between ischemic vascular disease patients in public programs versus other purchasers.

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

This measure is calculated by submitting a file of individual patient values (e.g. blood pressure, tobacco status, etc) to a HIPAA secure data portal. Programming within the data portal determines if each patient is a numerator case and then a rate is calculated for each clinic site. Please also refer to the measure calculation algorithms submitted within the data dictionary for this measure.

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

Numerator logic is as follows:

Blood Pressure Component:

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

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

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

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

Assess next component.

Cholesterol Statin Use Component:

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

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

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

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

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

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

Assess next component.

Tobacco-Free Component:

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

Daily Aspirin/ Anti-platelet Component:

Is the patient on daily aspirin or an antiplatelet? If yes, and date of most recent aspirin/ 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. Available at measure-specific web page URL identified in S.1

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5.1 Identified measures: 0068 : Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

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

0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease

0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

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 Adherence to statin therapy for individuals with cardiovascular disease. This medication claims based measure's denominator is more aligned with our intent (coronary, cerebrovascular and peripheral artery disease), however 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.

0076 Optimal Vascular Care is superior to the newly submitted measure for consideration because its measure construct additionally includes:

* contraindications and exceptions to statin use

* risk adjustment; actual and expected rates reported

* allowable exclusions for potentially frail older adults age 65 to 75 (hospice or palliative services, nursing home, death)

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

STATUS

Standing Committee Review

STEWARD

Centers for Medicare & Medicaid Services

DESCRIPTION

This measure calculates the median time from emergency department (ED) arrival to time of transfer to another facility for acute coronary intervention (ACI) for ST-segment myocardial infarction (STEMI) patients that require a percutaneous coronary intervention (PCI). The measure is calculated using chart-abstracted data, on a rolling quarterly basis, and is publically reported, in aggregate, for one calendar year. The measure has been publically reported, annually by CMS as a component of its Hospital Outpatient Quality Reporting (HOQR) Program since 2008.

TYPE

Process

DATA SOURCE

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

Available at measure-specific web page URL identified in S.1 Attachment NQF_0290_MeasureCodeSet.xlsx

LEVEL

Facility, Population : National

SETTING

Hospital/Acute Care Facility

NUMERATOR STATEMENT

This measure is reported as a continuous variable statement: time (in minutes) from ED arrival to transfer to another facility for ACI.

The numerator includes patients with AMI and ST-segment elevation on the ECG performed closest to 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 ACI.

NUMERATOR DETAILS

The measure population is defined by six E/M codes and 18 ICD-10-CM diagnosis codes included in the code set for this measure; these detailed lists can be found in the Excel workbook provided for Section S.2b.

The measure population includes patients with AMI and ST-segment elevation on the ECG performed closest to 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. Patients are included in the measure population if:

- Initial ECG Interpretation is equal to "Yes";
- 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."

DENOMINATOR STATEMENT

Time (in minutes) from ED arrival to transfer to another facility for ACI.

DENOMINATOR DETAILS

NQF #0290 is a continuous measure; therefore, the numerator and denominator details contained in Section S.6 and Section S.9 are the same.

The measure population is defined by six E/M codes and 18 ICD-10-CM diagnosis codes included in the code set for this measure; these detailed lists can be found in the Excel workbook provided for Section S.2b.

The measure population includes patients with AMI and ST-segment elevation on the ECG performed closest to 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 ACI. Patients are included in the measure population if:

- Initial ECG Interpretation is equal to "Yes";
- 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

Patients are excluded from this measure if they are under 18 years of age, did not have an initial ECG interpretation, received fibrinolytic therapy while in the ED, or were transferred for reasons other than ACI.

EXCLUSION DETAILS

Cases are excluded for any patients that meet any of the following criteria: Patients less than 18 years of age

- Initial ECG Interpretation is equal to "No"
- Fibrinolytic Administration is equal to "Yes"
- Transfer for Acute Coronary Intervention is equal to "[2] There was documentation the patient was admitted to observation." or "[3] There was documentation the patient was transferred from this facility's emergency department to another facility for reasons other than acute coronary intervention, or the specific reason for transfer was unable to be determined from medical record documentation."

RISK ADJUSTMENT

No risk adjustment or risk stratification

Not applicable; this measure does not risk adjust.

Provided in response box S.15a

STRATIFICATION

Not applicable; this measure does not stratify its results.

TYPE SCORE

Continuous variable better quality = lower score

ALGORITHM

This measure calculates the time (in minutes) from ED arrival to transfer to another facility for ACI. The patient population is determined from two algorithms; the AMI Hospital Outpatient Population algorithm as well as the OP-3 measure-specific algorithm:

1. Check E/M Code; if on Table 1.0 (in the Excel workbook provided for Section S.2b), proceed.
2. Check Discharge Code; include patients with discharge code of 4a or 4d.
3. Calculate Patient Age (Outpatient Encounter Date - Birthdate).
4. Check Patient Age; if >= 18, proceed.
5. Check ICD-10-CM Principal Diagnosis Code; if on Table 1.1 (in the Excel workbook provided for Section S.2b), proceed to the measure-specific algorithm.
6. Check Initial ECG Interpretation. If Initial ECG Interpretation equals YES, the case will proceed to Fibrinolytic Administration.
7. Check Fibrinolytic Administration. If Fibrinolytic Administration equals NO, the case will proceed to Transfer for Acute Coronary Intervention.
8. Check Transfer for Acute Coronary Intervention. If Transfer for Acute Coronary Intervention equals 1 (i.e., there is documentation the patient was transferred from this facility's emergency department to another facility specifically for ACI), the case will proceed to ED Departure Date.
9. Check ED Departure Date. If ED Departure Date equals Non-UTD Value, the case will proceed to ED Departure Time.
10. Check ED Departure Time. If ED Departure Time equals Non-UTD Value, the case will proceed to Arrival Time.
11. Check Arrival Time. If Arrival Time equals Non-UTD Value, the case will proceed to the Measurement Value.
12. 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).
13. Check the Measurement Value. If Measurement Value is greater than or equal to 0 minutes, the case will proceed to Reason for Not Administering Fibrinolytic Therapy.
14. Check Reason for Not Administering Fibrinolytic Therapy. 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.

15. Check Reason for Not Administering Fibrinolytic Therapy. 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. 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. Available at measure-specific web page URL identified in S.1

5.1 Identified measures: 0288 : Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

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 #0290 and NQF #0288 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). While the care settings for the HOQR and HIQR measures differ, all three 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 three measures is different. NQF #0288 focuses on the timely administration of fibrinolytic therapy, NQF# 0290 focuses on the timely transfer of patients who require a PCI, and 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 #0290 were identified.

2906 Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

STATUS

Standing Committee Review

STEWARD

PCPI Foundation

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 a prior MI or a current or prior LVEF <40% who were prescribed beta-blocker therapy

TYPE

Process

DATA SOURCE

Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record Not applicable.

No data collection instrument provided Attachment PCPI_2906_CMS145_CAD-BB_ValueSets.xlsx

LEVEL

Clinician : Group/Practice, Clinician : Individual

SETTING

Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary

NUMERATOR STATEMENT

Patients who were prescribed beta-blocker therapy

NUMERATOR DETAILS

For EHR:

HQMF eMeasure developed and is included in this submission.

We have provided the following definitions and/or guidance for convenience; please see HQMF eMeasure for complete details related to the specification.

NUMERATOR DEFINITION:

Prescribed may include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list.

NUMERATOR GUIDANCE:

Beta-blocker therapy:

- For patients with prior MI, beta-blocker therapy includes any agent within the beta-blocker drug class. As of 2015, no recommendations or evidence are cited in current stable ischemic heart disease guidelines for preferential use of specific agents

- For patients with prior LVEF <40%, beta-blocker therapy includes the following: bisoprolol, carvedilol, or sustained release metoprolol succinate

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 a prior MI (within the past 3 years) or a current or prior LVEF <40%

DENOMINATOR DETAILS

For EHR:

HQMF eMeasure developed and is included in this submission.

We have provided the following definitions and/or guidance for convenience; please see HQMF eMeasure for complete details related to the specification.

DENOMINATOR DEFINITION:

Prior Myocardial Infarction (MI) for denominator 2 is limited to those occurring within the past 3 years.

DENOMINATOR GUIDANCE:

The requirement of "Count >=2 of Encounter, Performed" is to establish that the eligible professional has an existing relationship with the patient.

EXCLUSIONS

Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons)

Documentation of patient reason(s) for not prescribing beta-blocker therapy (eg, patient declined, other patient reasons)

Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system)

EXCLUSION DETAILS

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. This measure was developed using the PCPI exception methodology which 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 this measure, exceptions may include medical reason(s) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system). Where examples of exceptions are included in the measure language, value sets for these examples are developed and included in the

eSpecifications. 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.

Additional details by data source are as follows:

For EHR:

HQMF eMeasure developed and is included in this submission.

RISK ADJUSTMENT

No risk adjustment or risk stratification

No risk adjustment or risk stratification

Provided in response box S.15a

STRATIFICATION

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 and have included these variables as recommended data elements to be collected.

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

To calculate performance rates:

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 (ie, 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 (ie, 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) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system).] 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 (ie, 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. No diagram provided

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5.1 Identified measures: 0071 : Persistence of Beta-Blocker Treatment After a Heart Attack

0083 : Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

2908 : Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: eMeasure 2906 addresses a patient population of patients with CAD and either a recent prior MI or LVSD. This patient population is also covered in part by the following NQF-endorsed measures: NQF 0071: Persistence of Beta-Blocker Treatment After a Heart Attack and NQF 0083 and 2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD). The specifications are harmonized to the extent possible. As a result, the denominator specifications for the measures differ where needed based on the differing patient populations. Measure 0070 is the registry version of this eMeasure and is completely harmonized.

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

Appendix F1: Related and Competing Measures (tabular format)

Comparison of NQF #0066, NQF #0067, NQF #0070, NQF #0074, NQF #0081, NQF #1662, AND NQF #2467

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
Steward	American Heart Association	American College of Cardiology	AMA-convened Physician Consortium for Performance Improvement	American College of Cardiology	AMA-PCPI	Renal Physicians Association	Centers for Medicare & Medicaid Services
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 Left Ventricular Ejection Fraction (LVEF) < 40% who were prescribed ACE inhibitor or ARB therapy	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who were prescribed aspirin or clopidogrel.	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who also have a prior MI or a current or prior LVEF <40% who were prescribed beta-blocker therapy	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who have a LDL-C result <100 mg/dL OR patients who have a LDL-C result >=100 mg/dL and have a documented plan of care to achieve LDL-C <100mg/dL, including at a minimum the prescription of a statin	Percentage of patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40% who were prescribed ACE inhibitor or ARB therapy either within a 12 month period when seen in the outpatient setting or at each hospital discharge	Percentage of patients aged 18 years and older with a diagnosis of CKD (not receiving RRT) and proteinuria who were prescribed ACE inhibitor or ARB therapy within a 12-month period	The measure addresses adherence to angiotensin converting enzyme inhibitors (ACEIs)/angiotensin receptor blockers (ARBs). The measure is reported as the percentage of eligible individuals with diabetes mellitus who had at least two prescriptions for ACEIs/ARBs and who have a Proportion of Days Covered (PDC) of at least 0.8 during the measurement period (12 consecutive months).
Type	Process	Process	Process	Process	Process	Process	Process
Data Source	Electronic Clinical Data : Registry This measure is currently being used in the ACCF PINNACLE registry for the outpatient office setting No data collection instrument provided Attachment NQF0066__I9toI10_conversion.xlsx	Electronic Clinical Data : Registry This measure is currently being used in the ACCF PINNACLE registry for the outpatient office setting. Available in attached appendix at A.1 No data dictionary	Electronic Clinical Data, Electronic Clinical Data : Registry Not applicable. No data collection instrument provided No data dictionary	Electronic administrative data/claims, Electronic Clinical Data, Electronic Health/Medical Record, Registry data This measure, in its previous specifications, is currently being used in the ACCF PINNACLE registry for the outpatient office setting. URL Attachment PCPI_CAD-2_LipidControl NQF 0074.pdf	Electronic Clinical Data, Electronic Clinical Data : Registry not applicable No data collection instrument provided No data dictionary	Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records, Electronic Clinical Data : Registry N/A Attachment ACE_or_ARB_data_file_-_2015.pdf	Administrative claims, Other, Electronic Clinical Data : Pharmacy For measure calculation, the following Medicare files were required: • Denominator tables • Prescription drug benefit (Part D) coverage tables • Beneficiary file • Institutional claims (Part A) • Non-institutional claims (Part B)—physician carrier/non-DME • Prescription drug benefit (Part D) claims For ACO attribution, the following were required: • Denominator tables for Parts A and B enrollment • Prescription drug benefit (Part D) coverage tables • Beneficiary file • Institutional claims (Part A) • Non-institutional claims (Part B)—physician carrier/non-DME • Prescription drug benefit (Part D) claims For physician group attribution, the following were required: • Non-institutional claims (Part B)—physician carrier/non-DME • Denominator tables to determine individual enrollment

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
							• Beneficiary file or coverage table to determine hospice benefit and Medicare as secondary payor status • CMS physician and physician specialty tables • National Plan & Provider Enumeration System (NPPES) database No data collection instrument provided Attachment NQF2467_-_Codes_Table_-_ACEIs_ARBs.xls
Level	Clinician : Group/Practice, Clinician : Individual	Clinician : Individual	Clinician : Group/Practice, Clinician : Individual	Clinicians : Group, Clinicians : Individual	Clinician : Group/Practice, Clinician : Individual	Clinician : Group/Practice, Clinician : Individual, Clinician : Team	Clinician : Group/Practice, Health Plan, Integrated Delivery System, Population : State
Setting	Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Behavioral Health/Psychiatric : Outpatient, Ambulatory Care : Urgent Care	Ambulatory Care : Clinician Office/Clinic	Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary	Assisted Living, Ambulatory Care : Clinic, Group homes, Home, Ambulatory Care : Hospital Outpatient, Nursing home (NH) /Skilled Nursing Facility (SNF), Ambulatory Care : Office	Ambulatory Care : Clinician Office/Clinic, Home Health, Hospital/Acute Care Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary	Ambulatory Care : Clinician Office/Clinic, Dialysis Facility, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary, Rest Home, or Custodial Care Services	Ambulatory Care : Clinician Office/Clinic
Numerator Statement	Patients who were prescribed ACE inhibitor or ARB therapy	Patients who were prescribed* aspirin or clopidogrel within a 12 month period. *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.	See details in multiple formats	Patients who have a LDL-C result <100 mg/dL OR Patients who have a LDL-C result >=100 mg/dL and have a documented plan of care1 to achieve LDL-C <100 mg/dL, including at a minimum the prescription of a statin within a 12 month period Definitions: *Documented plan of care may also include: documentation of discussion of lifestyle modifications (diet, exercise); scheduled re-assessment of LDL-C *Prescribed may include prescription given to the patient for a statin at one or more visits in the measurement period OR patient already taking a statin as documented in current medication list Numerator Instructions: The first numerator option can be reported for patients who have a documented LDL-C < 100 mg/dL at any time	See details in multiple formats	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	Individuals in the denominator with at least two prescriptions for ACEIs/ARBs with a PDC of at least 0.8 for ACEIs/ARBs.

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
				during the measurement period.			
Numerator Details	Numerator 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. FOR POPULATION 1: Patients who are 18 years and older with a diagnosis of CAD with LVEF < 40% Report Quality Data Code G8935: Clinician prescribed angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy FOR POPULATION 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 Note: For reporting, the two populations are combined for a single reported performance score on the combined measure population. If a patient has both diabetes and LVSD, reporting criteria #2 (CAD with diabetes) will count as appropriate reporting for this patient.	For Claims/Administrative: Report CPT II Code 4086F: Aspirin or clopidogrel prescribed.	For Registry: Option 1 – for patients with LVEF < 40%: Definitions: Prescribed- May include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list. Beta-blocker Therapy- For patients with prior LVEF < 40%, beta-blocker therapy includes the following: bisoprolol, carvedilol, or sustained release metoprolol succinate. Report Quality Data Code, G9189: Beta-blocker therapy prescribed or currently being taken Option 2 – for patients with prior MI: Definitions: Prescribed- May include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list. Beta-blocker Therapy- For patients with prior MI, beta-blocker therapy includes any agent within the beta-blocker drug class. As of 2014, no recommendations or evidence are cited in current stable ischemic heart disease guidelines for preferential use of specific agents. Report CPT Category II Code, 4008F: Beta-blocker therapy prescribed or currently being taken	See attached for EHR Specifications. For Claims/Administrative: Report CPT II Code Patients who have LDL-C <100 mg/dL 3048F Most recent LDL-C <100 mg/dL OR Patients who have LDL-C =100 mg/dL and have a documented plan of care to achieve LDL-C <100 mg/dL, including prescription of lipid-lowering therapy • 3049F Most recent LDL-C 100-129 mg/dL OR • 3050F Most recent LDL-C greater than or equal to 130 mg/dL AND • 05XXF (code in development) Lipid lowering therapy plan of care documented AND • 4002F Statin therapy prescribed	For Registry: Definitions: Prescribed – Outpatient setting: 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. Prescribed – Inpatient setting: May include prescription given to the patient for ACE inhibitor or ARB therapy at discharge OR ACE inhibitor or ARB therapy to be continued after discharge as documented in the discharge medication list. Report CPT Category II Code, 4010F : Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy prescribed or currently being taken	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	The numerator is defined as individuals with a PDC of 0.8 or greater. The PDC is calculated as follows: • PDC Numerator: The PDC numerator is the sum of the days covered by the days' supply of all drug claims in each respective drug class. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescriptions with a days' supply that extends beyond the end of the measurement period, count only the days for which the drug was available to the individual during the measurement period. If there are prescriptions for the same drug (generic name) on the same date of service, keep the prescription with the largest days' supply. If prescriptions for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended. • PDC Denominator: The PDC denominator is the number of days from the first prescription date through the end of the measurement period, or death date, whichever comes first.
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%	All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period.	See details in multiple formats	All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period	See details in multiple formats	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	Individuals at least 18 years of age as of the beginning of the measurement period with diabetes mellitus and at least two prescriptions for ACEIs/ARBs during the measurement period (12 consecutive months).

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
						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	FOR POPULATION 1: Patients who are 18 years and older with a diagnosis of CAD with LVEF < 40% Denominator Definition: LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. Patients aged >= 18 years AND Diagnosis for coronary artery disease (ICD-9-CM) [reportable through 9/30/2015]: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82 Diagnosis for coronary artery disease (ICD-10-CM) [reportable beginning 10/01/2015]: 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, 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,	See 'Registry Supplemental Resources' attached in appendix field A.1 for data dictionary and form. Codes that are applicable for the denominator are: Diagnosis for coronary artery disease (ICD-9-CM) 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82 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, 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 Patient encounter during the reporting period (CPT): 99201,	DENOMINATOR DEFINITION: LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. Prior Myocardial Infarction (MI) for denominator 2 is limited to those occurring within the past 3 years. DENOMINATOR NOTES: The requirement of "Count >=2 of Encounter, Performed" is to establish that the eligible professional has an existing relationship with the patient. For Registry: Option 1 -- for patients with LVEF < 40%: Patient aged >= 18 years AND Diagnosis for coronary artery disease (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82 Diagnosis for coronary artery disease (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I20.0, I20.1, I20.8, I20.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, 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,	See attached for EHR Specifications. For Claims/Administrative: See coding tables attached for coding (ICD-9-CM, ICD-10-CM, CPT)	DENOMINATOR DEFINITION: LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. DENOMINATOR NOTES: To meet this measure, it must be reported for all heart failure patients a minimum of once during the measurement period when seen in the outpatient setting AND reported at each hospital discharge during the measurement period. The requirement of "Count >=2 of Encounter, Performed" is to establish that the eligible professional has an existing relationship with the patient. For Registry: Option 1, Outpatient Setting: Patients aged >= 18 years AND Diagnosis for heart failure (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9 Diagnosis for heart failure (ICD-10-CM) [for use 10/01/2015-12/31/2015]: 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, I50.9 AND Patient encounter(s) during reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213,	See attached for EHR specifications. For Claims/Administrative: See coding tables attached for coding (ICD-9-CM, ICD-10-CM, CPT)	Target population meets the following conditions: 1. Continuously enrolled in Part D with no more than a one-month gap in enrollment during the measurement year; 2. Continuously enrolled in Part A and Part B with no more than a one-month gap in Part A enrollment and no more than a one-month gap in Part B enrollment during the measurement year; and, 3. No more than one month of HMO enrollment during the measurement year. IDENTIFICATION OF DIABETES MELLITUS Individuals with diabetes mellitus are identified using diagnosis codes and/or drug proxy to identify diabetes mellitus within the inpatient or outpatient claims data.* Individuals must have: At least two encounters with a principal or secondary diagnosis of diabetes with different dates of service in an outpatient setting or non-acute inpatient setting during the measurement period; OR At least one encounter with a principal or secondary diagnosis of diabetes in an acute inpatient or emergency department setting during the measurement period; OR At least one ambulatory prescription claim for insulin or other oral diabetes medication dispensed during the measurement period. *Adapted from NCQA HEDIS 2012 (2012). Note: HEDIS uses 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%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
	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 reporting 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 AND Two Denominator Eligible Visits AND Report Quality Data Code: G8934: Left Ventricular Ejection Fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function FOR POPULATION 2: Patients who are 18 years and older with a diagnosis of CAD who have diabetes Patients aged >= 18 years AND Diagnosis for coronary artery disease (ICD-9-CM) [reportable through 9/30/2015]: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82 Diagnosis for coronary artery disease (ICD-10-CM) [reportable beginning 10/01/2015]: I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21,	99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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	I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, Z95.1, Z95.5, Z98.61 OR History of cardiac surgery (CPT): 33140, 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92920, 92924, 92928, 92933, 92937, 92941, 92943 AND Patient encounter(s) during reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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 AND Two Denominator Eligible Visits AND Left ventricular ejection fraction (LVEF) < 40%: G8694 Option 2 – for patients with prior MI: Patient aged >= 18 years AND Diagnosis for coronary artery disease (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82 Diagnosis for coronary artery disease (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I20.0, I20.1, I20.8, I20.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, 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,		99214, 99215, 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 AND Two Denominator Eligible Visits AND Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function: 3021F Option 2, Inpatient Setting: Patients aged >= 18 years AND Diagnosis for heart failure (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9 Diagnosis for heart failure (ICD-10-CM) [for use 10/01/2015-12/31/2015]: 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, I50.9 AND Patient encounter during reporting period (CPT): 99238, 99239 AND Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function: 3021F		look-back period of one year for both the prescription data and diagnosis. Table 1. Codes Used to Identify Diabetes Mellitus Diagnosis ICD-9-CM: 250.xx, 357.2, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07, 366.41, 648.00, 648.01, 648.02, 648.03, 648.04 ICD-10-CM: E08.311, E08.319, E08.321, E08.329, E08.331, E08.339, E08.341, E08.349, E08.351, E08.359, E08.40, E08.42, E09.311, E09.319, E09.321, E09.329, E09.331, E09.339, E09.341, E09.349, E09.351, E09.359, E09.36, E09.40, E09.42, 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, E10.36, 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, E11.21, E11.22, E11.29, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E11.36, 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, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.359, E13.36, 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,

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
	I21.29, I21.3, I21.4, 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-9-CM) [reportable through 9/30/2015]: 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.70, 250.71, 250.72, 250.73, 250.80, 250.81, 250.82, 250.83, 250.90, 250.91, 250.92, 250.93 Diagnosis for diabetes (ICD-10-CM) [reportable beginning 10/01/2015]: 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, E10.36, 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, E11.21, E11.22, E11.29, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E11.36, E11.39, E11.40,		I25.83, I25.89, I25.9, Z95.1, Z95.5, Z98.61 OR History of cardiac surgery (CPT): 33140, 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92920, 92924, 92928, 92933, 92937, 92941, 92943 AND Diagnosis for myocardial infarction (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 412 Diagnosis for myocardial infarction (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I22.0, I22.1, I22.2, I22.8, I22.9, I24.1, I25.2 AND Patient encounter(s) during reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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 AND Two Denominator Eligible Visits				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, O24.911, O24.912, O24.913, O24.919, O24.92, O24.93 DRG: 637,638 Codes Used to Identify Encounter Type Table 2.1. Outpatient Setting CPT: 92002, 92004, 92012, 92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456 UB-92 revenue: 051x, 0520-0523, 0526-0529, 057x-059x, 077x, 082x-085x, 088x, 0982, 0983 Table 2.2 Non-Acute Inpatient CPT: 99304-99310, 99315, 99316, 99318, 99324-99328, 99334-99337 UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 019x, 0524, 0525, 055x, 066x Table 2.3 Acute Inpatient CPT: 99221-99223, 99224-99226, 99231-99233, 99238, 99239, 99251-99255, 99291 UB-92 revenue: 010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 080x, 0987 Table 2.4 Emergency Department CPT: 99281-99285 UB-92 revenue: 045x, 0981 The following are the diabetic medications by class for the denominator. The route of administration includes all oral and injectable formulations of the medications listed below.

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
	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, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.359, E13.36, 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 AND Patient encounter during the reporting 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 AND Two Denominator Eligible Visits Note: For reporting, the two populations are combined for a single reported performance score on the combined measure population. If a patient has both diabetes and LVSD, reporting criteria #2 (CAD with diabetes) will count as appropriate reporting for this patient.						Table 3. Codes Used to Identify Diabetic Individuals Alpha-glucosidase inhibitors: acarbose miglitol Anti-diabetic amylin analogs: pramlintide Anti-diabetic combinations: alogliptin-metformin alogliptin-pioglitazone glipizide-metformin glyburide-metformin pioglitazone-glimepiride pioglitazone-metformin rosiglitazone-glimepiride rosiglitazone-metformin saxagliptin-metformin sitagliptin-metformin repaglinide-metformin sitagliptin-simvastatin linagliptin- metformin Dipeptidyl peptidase-4 (dpp-4) inhibitors: alogliptin sitagliptin, saxagliptin, linagliptin Incretin mimetics: exenatide liraglutide Insulin: insulin aspart insulin aspart protamine & aspart (human) insulin detemir insulin glargine insulin glulisine insulin isophane & reg (human) insulin isophane (human) insulin lispro (human) insulin lispro protamine & lispro (human) insulin regular (human) Meglitinides: nateglinide repaglinide Sodium-glucose cotransporter 2 Inhibitors: canagliflozin Sulfonylureas: chlorpropamide glimepiride glipizide glyburide tolazamide tolbutamide glyburide micronized Thiazolidinediones: pioglitazone

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
							rosiglitazone The following are the ACEI/ARB medications by class for the denominator. The route of administration includes all oral formulations of the medications listed below. Table 4. ACEI/ARB Medications Angiotensin-converting enzyme inhibitors (ACEIs): benazepril captopril enalapril fosinopril lisinopril moexipril perindopril quinapril ramipril trandolapril Angiotensin II receptor blockers (ARBs): candesartan eprosartan irbesartan losartan olmesartan telmisartan valsartan azilsartan Antihypertensive combinations: aliskiren-valsartan amlodipine-benazepril amlodipine-olmesartan amlodipine -valsartan amlodipine-valsartan-hydrochlorothiazide benazepril-hydrochlorothiazide candesartan-hydrochlorothiazide captopril-hydrochlorothiazide enalapril maleate-hydrochlorothiazide eprosartan-hydrochlorothiazide fosinopril-hydrochlorothiazide irbesartan-hydrochlorothiazide lisinopril-hydrochlorothiazide lisinopril-dietary management product losartan-hydrochlorothiazide moexipril-hydrochlorothiazide olmesartan-hydrochlorothiazide olmesartan medoxomil-amlodipine-hydrochlorothiazide quinapril-hydrochlorothiazide

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
							telmisartan-amlodipine telmisartan-hydrochlorothiazide trandolapril-verapamil valsartan-hydrochlorothiazide amlodipine-olmesartan-hydrochlorothiazide azilsartan medoxomil-chlorthalidone
Exclusions	Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, 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 (eg, patient declined, other patient reasons) Documentation of system reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, lack of drug availability, other reasons attributable to the health care system)	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)	See details in multiple formats	Documentation of medical reason(s) for not prescribing a statin (eg, allergy, intolerance to statin medication(s), other medical reasons) Documentation of patient reason(s) for not prescribing a statin (eg, patient declined, other patient reasons) Documentation of system reason(s) for not prescribing a statin (eg, financial reasons, other system reasons)	See details in multiple formats	Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, pregnancy, history of angioedema, cough due to ACE Inhibitor or ARB therapy, allergy to medications, other medical reasons) Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB therapy (patient declined, other patient reasons)	We excluded the following individuals from the denominator: Individuals with polycystic ovaries, gestational diabetes, or steroid-induced diabetes who do not have a face-to-face visit with a diagnosis of diabetes in any setting during the measurement period. Exclusion 1 Individuals with a diagnosis of polycystic ovaries who do not have a visit with a diagnosis of diabetes in any setting during the measurement period*; and, Exclusion 2 Individuals with a diagnosis of gestational diabetes or steroid-induced diabetes who do not have a visit with a diagnosis of diabetes mellitus in any setting during the measurement period. *Adapted from NCQA HEDIS 2013 (2013). Note: HEDIS uses a look-back period of one year prior to the measurement period for both the prescription data and diagnosis.
Exclusion Details	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 ACC/AHA/PCPI exception methodology uses	For Claims/Administrative: Documentation of medical reason(s) for not prescribing aspirin or clopidogrel • Append modifier to CPT II code 4086F-1P Documentation of patient reason(s) for not prescribing aspirin or clopidogrel • Append modifier to CPT II code 4086F-2P Documentation of system reason(s) for not prescribing aspirin or clopidogrel • Append modifier to CPT II code 4086F-3P	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. This measure was developed using the PCPI exception	See attached for EHR Specifications. For Claims/Administrative: Documentation of medical reason(s) for not prescribing a statin (eg, allergy, intolerance to statin medication(s), other medical reasons) • Append modifier to CPT II code 4XXXF-1P (in development) Documentation of patient reason(s) for not prescribing a statin (eg, patient declined, other patient reasons) • Append modifier to CPT II code 4XXXF-2P (in development)	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. This measure was developed using PCPI exception	Append modifier to CPT II code 4009F-1P Append modifier to CPT II code 4009F-2P	Table 5. Diagnostic Exclusions for Diabetes Denominator Exclusion 1 Polycystic Ovaries ICD-9-CM: 256.4 ICD-10-CM: E28.2 Exclusion 2 Steroid-Induced Diabetes ICD-9-CM: 249.xx, 251.8, 962.0 ICD-10-CM: E08.00, E08.01, E08.10, E08.11, E08.21, E08.22, E08.29, E08.311, E08.319, E08.321, E08.329, E08.331, E08.339, E08.341, E08.349, E08.351, E08.359, E08.36, E08.39, E08.40, E08.41, E08.42, E08.43,

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
	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: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy-Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%), exceptions may include medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, patient declined, other patient reasons), or system reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, lack of drug availability, other reasons attributable to the health care system).Although this methodology does not require the external reporting of more detailed exception data, the ACC/AHA/PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The ACC/AHA/PCPI also advocates for the systematic review and analysis of each physician's exceptions data to identify		methodology which 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 this measure, exceptions may include medical reason(s) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system). 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. Additional details by data source are as follows: For Registry: Option 1 -- for patients with LVEF < 40%: Report Quality Data Code, G9190: Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons) Report Quality Data Code, G9191: Documentation of patient reason(s) for	Documentation of system reason(s) for not a statin (eg, financial reasons, other system reasons) • Append modifier to CPT II code 4XXXF-3P (in development)	methodology which 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) Therapy for Left Ventricular Systolic Dysfunction, exceptions may include medical reasons (e.g. hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia), patient, and/or system reasons for not prescribing an ACE/ARB. 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. Additional details by data source are as follows: For EHR: HQMF eMeasure developed and is included in this submission. For Registry: Append a modifier to CPT Category II Code: 4010F-1P : Documentation of medical reason(s) for		E08.44, E08.49, E08.51, E08.52, E08.59, E08.610, E08.618, E08.620, E08.621, E08.622, E08.628, E08.630, E08.638, E08.641, E08.649, E08.65, E08.69, E08.8, E08.9, E09.00, E09.01, E09.10, E09.11, E09.21, E09.22, E09.29, E09.311, E09.319, E09.321, E09.329, E09.331, E09.339, E09.341, E09.349, E09.351, E09.359, E09.36, E09.39, E09.40, E09.41, E09.42, E09.43, E09.44, E09.49, E09.51, E09.52, E09.59, E09.610, E09.618, E09.620, E09.621, E09.622, E09.628, E09.630, E09.638, E09.641, E09.649, E09.65, E09.69, E09.8, E09.9, E16.8, T38.0X1A, T38.0X2A, T38.0X3A, T38.0X4A, T50.0X1A, T50.0X2A, T50.0X3A, T50.0X4A Gestational Diabetes ICD-9-CM: 648.80, 648.81, 648.82, 648.83, 648.84 ICD-10-CM: O24.410, O24.414, O24.419, O24.420, O24.424, O24.429, O24.430, O24.434, O24.439, O99.810, O99.814, O99.815

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
	practice patterns and opportunities for quality improvement. Additional details are as follows: FOR POPULATION 1: Patients who are 18 years and older with a diagnosis of CAD with 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 POPULATION 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)		not prescribing beta-blocker therapy (eg, patient declined, other patient reasons) Report Quality Data Code, G9192 : Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system) Option 2 – for patients with prior MI: Append a modifier to CPT Category II Code: 4008F-1P : Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons) 4008F-2P : Documentation of patient reason(s) for not prescribing beta-blocker therapy (eg, patient declined, other patient reasons) 4008F-3P : Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system)		not prescribing angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (eg, 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 angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (eg, patient declined, other patient reasons) 4010F-3P : Documentation of system reason(s) for not prescribing angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (eg, other system reasons)		
Risk Adjustment	No risk adjustment or risk stratification Not applicable. No risk adjustment or risk stratification	No risk adjustment or risk stratification Not Applicable.	No risk adjustment or risk stratification No risk adjustment or risk stratification Provided in response box S.15a	No risk adjustment or risk stratification	No risk adjustment or risk stratification No risk adjustment or risk stratification	No risk adjustment or risk stratification As a process measure, no risk adjustment is necessary.	No risk adjustment or risk stratification Not applicable
Stratification	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	Not Applicable.	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		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	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.	Depending on the operational use of the measure, measure results may be stratified by: • State • Accountable Care Organizations (ACOs)* • Plan

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	stratified by race, ethnicity, administrative sex, and payer.		stratified by race, ethnicity, administrative sex, and payer and have included these variables as recommended data elements to be collected.		stratified by race, ethnicity, administrative sex, and payer and have included these variables as recommended data elements to be collected.		• Physician Group** • Age - Divided into 6 categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years • Race/Ethnicity • Dual Eligibility *ACO attribution methodology is based on where the beneficiary is receiving the plurality of his/her primary care services and subsequently assigned to the participating providers.
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	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	To calculate performance rates: 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 (ie, 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 (ie, 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) for not prescribing ACE	To calculate performance rates: 1) Find the patients who meet the initial patient 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 patient 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 patient population and denominator are identical. 3) Find the patients who quality for exclusions and subtract from the denominator. 4) From the patients within the denominator (after exclusions have been subtracted from the denominator), find the patients who qualify for the Numerator (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 5) From the patients who did not meet the numerator criteria, determine if the physician has	To calculate performance rates: 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 (ie, 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 (ie, 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) (eg, allergy, intolerance, other	See attached for calculation algorithm.	To calculate performance rates: 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 (ie, 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 (ie, 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: Documentation of medical reason(s) for	Calculation algorithm is included in data dictionary/code table attachment (2a1.30).	To calculate Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus, Medicare administrative claims data and related files, as described in detail in Section S.24, will be required. Denominator: Individuals at least 18 years of age as of the beginning of the measurement period with diabetes mellitus and at least two prescriptions for ACEIs/ARBs during the measurement period (12 consecutive months). Create Denominator 1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period. 2. Include individuals who were continuously enrolled in Part D coverage during the measurement year, with no more than a one-month gap in enrollment during the measurement year, or up until their death date if they died during the measurement period. 3. Include individuals who had no more than a one-month gap in Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO enrollment during the current measurement period (FFS individuals only).

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	inhibitor or ARB therapy (eg, allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, patient declined, other patient reasons), or system reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, lack of drug availability, other reasons attributable to the health care system)]. 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 (ie, 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. No diagram provided	documented that the patient meets any criteria for exception when exceptions have been specified [for this measure: medical reason(s)(e.g., eg, allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons) or patient reason(s)(e.g., economic, social, and/or religious impediments, noncompliance, patient refusal, other patient reason)]. 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 of patients 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. No diagram provided	medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system).] 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 (ie, 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. No diagram provided		not prescribing ACE inhibitor or ARB therapy (eg, hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia); Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB therapy; Documentation of system reason(s) 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 (ie, 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. No diagram provided		4. Of those individuals identified in Step 3, keep those who had: At least two face-to-face encounters with a principal or secondary diagnosis of diabetes with different dates of service in an outpatient setting or non-acute inpatient setting during the measurement period; OR At least one face-to-face encounter with a principal or secondary diagnosis of diabetes in an acute inpatient setting or emergency department setting during the measurement period; OR At least one ambulatory prescription claim for insulin or other oral diabetes medication dispensed during the measurement period. 5. Of the individuals identified in Step 4, exclude those with a diagnosis of polycystic ovaries, gestational diabetes, or steroid-induced diabetes who do not have at least one face-to-face visit with a diagnosis of diabetes in any setting during the measurement period. 6. Pull all Part D claims for ACEIs and ARBs. Attach generic name and drug ID to the dataset. 7a. Keep individuals with at least two claims for ACEIs/ARBs on different dates of service during the measurement period. 7b. Of the individuals in Step 5, include those that are also in the ACEIs/ARBs class dataset created in Step 7a. This is the denominator. 7c. For each individual in the dataset created in Step 7b, identify the date of the first prescription in the measurement period as the index event. Numerator: Individuals in the denominator with at least two prescriptions for ACEIs/ARBs with a PDC of at least 0.8 for ACEIs/ARBs. Create Numerator For the individuals in the denominator,

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							calculate the PDC for each individual according to the following methods: 1. Determine the individual's measurement period, defined as the number of days from the index prescription date through the end of the measurement year, or death, whichever comes first. Index date is the date of the first ACEIs/ARBs prescription in the measurement period. 2. Within the measurement period, count the days the individual was covered by at least one drug in the class based on the prescription fill date and days of supply. a. Pull Part D claims for drugs in the respective drug class for individuals in the denominators. Attach drug ID and generic name to the datasets. b. Sort and de-duplicate claims by beneficiary ID, service date, generic name, and descending days' supply. If prescriptions for the same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days' supply. c. Calculate the number of days covered per individual for each drug class. i. For prescriptions with a days' supply that extends beyond the end of the measurement period, count only the days for which the drug was available to the individual during the measurement period. ii. If prescriptions for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended. iii. If prescriptions for different drugs (different generic names) overlap, do not adjust the prescription start date. 3. Calculate the PDC for each individual. Divide the number of covered days found in

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							Step 2 by the number of days in the individual's measurement period found in Step 1. An example of SAS code for Steps 1-3 was adapted from PQA and is also available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf. 4. Of the individuals identified in Numerator Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the ACEIs/ARBs class. This is the numerator. Available in attached appendix at A.1
Submission items	5.1 Identified measures: 1662 : Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy 0081 : Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD) 2467 : Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus 0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy 0074 : Chronic Stable Coronary Artery Disease: Lipid Control 0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%) 1522 : ACE/ARB Therapy at Discharge for ICD implant patients with Left Ventricular Systolic Dysfunction 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: While this measure's specifications are harmonized with existing measures where possible, there are several key differences between this measure and other existing related measures. The first	5.1 Identified measures: 0465 : Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: See 5b.1 for more detailed response due to lack of character spaces in this section. 5b.1 If competing, why superior or rationale for additive value: Measure 0067 looks at whether ASA or clopidogrel where prescribed during a 12 month measurement period. Meanwhile, the two existing NQF endorsed measures (#0465 and #0964) focused on whether the medications were prescribed prior to discharge or prior to s	5.1 Identified measures: 0071 : Persistence of Beta-Blocker Treatment After a Heart Attack 0083 : Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: Measure 0070 addresses a patient population of patients with CAD and either a recent prior MI or LVSD. This patient population is also covered in part by the following NQF-endorsed measures: NQF 0071: Persistence of Beta-Blocker Treatment After a Heart Attack and NQF 0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD). The specifications are harmonized to the extent possible. As a result, the denominator specifications for the measures differ where needed based on the differing patient populations. 5b.1 If competing, why superior or rationale for additive value:	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: Related Measures: Maintenance submission of NQF #0074: Drug Therapy for Lowering LDL-Cholesterol	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:	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	5.1 Identified measures: 0417 : Diabetic Foot & Ankle Care, Peripheral Neuropathy – Neurological Evaluation 0416 : Diabetic Foot & Ankle Care, Ulcer Prevention – Evaluation of Footwear 0057 : Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) testing 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease 0542 : Adherence to Chronic Medications 0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category 0575 : Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%) 0604 : Adult(s) with diabetes mellitus that had a serum creatinine in last 12 reported months. 0619 : Diabetes with Hypertension or Proteinuria - Use of an ACE Inhibitor or ARB 0630 : Diabetes and Elevated HbA1C – Use of Diabetes Medications 0055 : Comprehensive Diabetes Care: Eye Exam (retinal) performed 0056 : Diabetes: Foot Exam 0059 : Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%)

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	group of related measures (NQF #1662, 1522, 0081, 2467)all have a similar focus on the prescription of ACEI/ARBs. However they all have different target populations, with measure #1662 focusing on patients with chronic kidney disease (CKD), measure #1522 being a facility-level measure focusing on patients with an ICD implant, measure #0081 focusing on patients with a diagnosis of heart failure and left ventricular ejection fraction <40%, and measure #2467 focusing on medication adherence among patients with diabetes. This group of measures reflect the importance of ACEI/ARBs among a variety of patient populations, that are distinct from the patient population included in this measure. We believe that the measures are complementary rather than competing, and differences in the measure specifications are a result of the differences in the target patient population. These differences should not result in any additional data collection burden. The second group of related measures (NQF #0067, 0074, and 0070) all focus on different aspects of care for patients with CAD. Measure #0067 focuses on use of antiplatelet therapy, while measure #0074 focuses on LDL control, and measure #0070 focuses on the use of beta-blocker therapy. We view these measures as complementary measures that, when taken together, provide a rounded view of the quality of care for patients with CAD. While these measures share a focus on the patient population with CAD, differences in measure specifications are reflective of the different care					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.	0062 : Comprehensive Diabetes Care: Medical Attention for Nephropathy 0063 : Comprehensive Diabetes Care: LDL-C Screening 0064 : Comprehensive Diabetes Care: LDL-C Control <100 mg/dL 0061 : Comprehensive Diabetes Care: Blood Pressure Control (<140/90 mm Hg) 1879 : Adherence to Antipsychotic Medications for Individuals with Schizophrenia 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: NQF 2467 is related to and completely harmonized with the four NQF-endorsed measure that use the Proportion of Days Covered (PDC) method of calculating adherence. These four measures include one NQF-endorsed measure by PQA (NQF 0541) and three NQF-endorsed measures by CMS (NQF 0542, 0543, and 1879). For the related measures that are not completely harmonized with NQF 2467, the following sections identify differences between these measures and NQF 2467, rationale, and impact on interpretability and data collection burden. Diabetes Measures by National Committee for Quality Assurance (NCQA) and Optum - NQF 2467 has the same target population (i.e., individuals with diabetes mellitus) as the nine Diabetes Measures developed by the National Committee for Quality Assurance (NCQA) and one measure developed by Optum. The nine NCQA measures (NQF 0055, 0056, 0057, 0059, 0061, 0062, 0063, 0064, and 0075) and the Optum measure (NQF 0604) are related to, but are not completely harmonized with, NQF 2467. Differences Between NQF 2467

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
	processes being targeted in each measure. We don't believe that these differences result in any additional data collection burden. 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.						and NCQA and Optum Diabetes Measures - Identification of Individuals with Diabetes Mellitus: NQF 2467 uses the same algorithm for identifying individuals with diabetes as the NCQA and Optum Diabetes Measures, which entails using diagnosis codes and/or drug proxy to identify diabetes mellitus within the inpatient or outpatient claims data. However, NQF 2467 uses only claims for the 12-month measurement period, whereas the NCQA and Optum Diabetes Measures use a look-back period of one year for both the prescription data and diagnosis data. In addition, the Optum measure (NQF 0604) also uses a Disease Registry Input File, if available, to identify patients with diabetes mellitus. Age of Individuals Included in the Measure: NQF 2467 includes individuals who are at least 18 years of age and older as of the beginning of the measurement year, whereas the NCQA and Optum Diabetes Measures include individuals who are 18-75 years as of December 31st of the measurement year. Rationale - NQF 2467 uses a one-year time frame, rather than two years for the NCQA Diabetes measures, which allows more individuals (i.e., those with one year of data) to be included. NQF 2467 includes individuals 18 years and older, rather than 18-75 years for the NCQA and Optum measures, because many Medicare beneficiaries are over 75 years of age, and the guideline recommendations for the medication therapies do not restrict to the 18-75 age group. Impact on interpretability - NQF 2467 is easier to interpret than the NCQA and Optum Diabetes measures because it focuses on a single year and includes all adults 18

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
							years and older. Data collection burden - The target populations of NQF 2467 and the NCQA Diabetes measures are identified using administrative claims or encounter data, so the data collection burden should be similar. The Optum Diabetes measure uses a Disease Registry Input File, if available, and therefore, may require more time and resources than administrative data to identify patients with diabetes mellitus. Diabetes Measures by American Podiatric Medical Association (APMA) - NQF 2467 has the same target population (i.e., individuals with diabetes mellitus) as the two Diabetes Measures by the APMA (NQF 416 and 417). These two APMA measures are related to, but are not completely harmonized with NQF 2467. Differences Between NQF 2467 and APMA Diabetes Measures - Identification of Individuals with Diabetes Mellitus: NQF 2467 uses a different algorithm for identifying individuals with diabetes than the APMA Diabetes Measures. NQF 2467 requires two outpatient or nonacute inpatient visits or one acute inpatient or emergency department visit or a prescription claim for insulin or other anti-diabetic medication. However, the APMA Diabetes Measures require only one claim for an outpatient visit or a nonacute inpatient visit or a selected procedure with a diagnosis of diabetes mellitus, but they do not use acute inpatient data or pharmacy data for identifying individuals with diabetes. Rationale - NQF 2467 requires two claims so the coded outpatient or nonacute inpatient diagnosis is confirmed. Using only one outpatient diagnosis could lead to including

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
							individuals who do not actually have diabetes. NQF 2467 uses acute inpatient and pharmacy data in the definition of diabetes, in addition to outpatient and nonacute inpatient data, to capture as many individuals with a diagnosis of diabetes as possible. Impact on interpretability - Requiring two claims for an outpatient or nonacute inpatient diagnosis of diabetes will eliminate individuals who received a diagnosis of diabetes in error, or if it was coded as a rule-out diagnosis. If the additional data sources (i.e., acute inpatient data and pharmacy data) are not used, only individuals who have an outpatient or nonacute inpatient diagnosis of diabetes would be included in the denominator; those with only an inpatient admission or a prescription for diabetes would not be included. This might result in missing individuals with diabetes. Data collection burden - The target populations of NQF 2467 and the APMA Diabetes measures both are identified using administrative claims or encounter data, so the data collection burden should be similar. Diabetes Measures by ActiveHealth Management - NQF 2467 has the same target population (i.e., individuals with diabetes mellitus) as two Diabetes Measures by ActiveHealth Management, NQF 0619 and 0630. These two ActiveHealth Management measures are related to, but are not completely harmonized with, NQF 2467. Differences Between NQF 2467 and ActiveHealth Management Diabetes Measures - Identification of Individuals with Diabetes Mellitus: NQF 2467 uses an algorithm for identifying individuals

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
							with diabetes, which entails using diagnosis codes and/or drug proxy to identify diabetes mellitus within the inpatient or outpatient claims data during the 12-month measurement period. The two ActiveHealth Management Diabetes Measures require four diabetes mellitus diagnoses from administrative claims in the past 12 months, one diabetes mellitus diagnosis from electronic clinical data anytime in the past, one diabetes mellitus diagnosis in the electronic personal health record, or one diabetes mellitus diagnosis from administrative claims in the past five years plus filled prescriptions for diabetes medications, insulin, or a HbA1C value in the past 12 months. In addition, the target populations in the two ActiveHealth Management Diabetes Measures are further restricted either to those with diabetes mellitus and hypertension or proteinuria (NQF 0619), or to those with diabetes mellitus and at least one elevated HbA1C in the past six months (NQF 0630). Age of Individuals Included in the Measure: NQF 2467 includes individuals who are at least 18 years of age as of the beginning of the measurement year, whereas the ActiveHealth Management Diabetes Measures include individuals who are 18-75 years of age. Rationale - The target population of NQF 2467 is defined on the basis of a diagnosis of diabetes mellitus and at least two prescriptions of ACEI/ARBs (Measure B). This denominator definition of NQF 2467 limits the measure to those individuals who have been on the medication long enough for the prescribing provider to determine that ACEI/ARB therapy is appropriate for the

	0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy	2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus
							patient and is tolerated. NQF 2467 includes individuals 18 years and older, rather than 18-75 years for the ActiveHealth Management Diabetes measures, because many Medicare beneficiaries are over 75 years of age, and the guideline recommendations do not restrict to the 18-75 age group. Impact on interpretability - NQF 2467 is easier to interpret than the ActiveHealth Management Diabetes measures because it estimates adherence to medications among individuals with diabetes mellitus who have had at least two prescriptions, and it includes all adults 18 years and older. Data collection burden - NQF 2467 is based on administrative claims data. The ActiveHealth Management Diabetes measures are based on multiple data sources (e.g., administrative claims, electronic clinical data, patient data from electronic personal health records and feedback, provider survey). Therefore, NQF 2467 presents less of a data collection burden. 5b.1 If competing, why superior or rationale for additive value: Not applicable

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

	0076: Optimal Vascular Care	0067: Chronic Stable Coronary Artery Disease: 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	American College of Cardiology	National Committee for Quality Assurance	National Committee for Quality Assurance
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	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who were prescribed aspirin or clopidogrel.	The percentage of patients 18 years of age and older who were discharged from an inpatient setting with an acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary intervention (PCI) during the 12 months prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year and who had documentation of routine use of aspirin or another antiplatelet during the measurement year.	The 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	Composite	Process	Process	Outcome
Data Source	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records An excel template with formatted columns for data fields is provided. Many medical groups extract the information from their EMR. Registries can be used as a source of information to create the data file; however groups must ensure that all of their eligible patients are included. Paper abstraction forms are provided for those clinics who wish to use them as an interim step to creating their data file. All data is uploaded in electronic format (.csv file) to a HIPAA secure, encrypted and password protected data portal. Available at measure-specific web page URL identified in S.1 Attachment MNCM_-0076_Optimal_Vascular_Care_Specs_Fields_RA_2-2016.xlsx	Electronic Clinical Data : Registry This measure is currently being used in the ACCF PINNACLE registry for the outpatient office setting. Available in attached appendix at A.1 No data dictionary	Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records N/A No data collection instrument provided Attachment 0068_IVD_Value_Sets_Final.xlsx	Administrative claims, Electronic Clinical Data, Paper Medical Records NA Attachment 0073_IVD_Blood_Pressure_Control_Value_Sets-635634189557555751.xlsx
Level	Clinician : Group/Practice	Clinician : Individual	Clinician : Group/Practice, Clinician : Individual	Clinician : Group/Practice, Clinician : Individual
Setting	Ambulatory Care : Clinician Office/Clinic	Ambulatory Care : Clinician Office/Clinic	Ambulatory Care : Clinician Office/Clinic	Ambulatory Care : Clinician Office/Clinic
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	Patients who were prescribed* aspirin or clopidogrel within a 12 month period. *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.	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.
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	For Claims/Administrative: Report CPT II Code 4086F: Aspirin or clopidogrel prescribed.	ADMINISTRATIVE Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year. Refer to Table IVD-E to identify medications for oral anti-platelet therapy. ORAL ANTI-PLATELET THERAPIES (TABLE IVD-E) PRESCRIPTIONS - Aspirin - Clopidogrel - Aspirin-dipyridamole - Prasugrel - Ticagrelor - Ticlopidine --- MEDICAL RECORD	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.

	0076: Optimal Vascular Care	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073: Ischemic Vascular Disease (IVD): Blood Pressure Control
	AND Systolic < 140 AND Diastolic < 90. BP Date Enter the date of the most recent blood pressure result during the measurement period. * Do NOT enter a test date that occurred in yyyy (beyond measurement period). A date in yyyy will create an ERROR upon submission. * 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 enter a blood pressure result that is reported by or taken by the patient. * Do NOT enter a blood pressure result obtained in the following care settings: Inpatient, Emergency Department, Urgent Care, other settings designated for surgical or diagnostic procedures or an office visit associated with acute pain or pain of at least moderate severity (greater than or equal to four on a scale of zero to 10). 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. 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. 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. 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 mm/dd/yyyy and mm/dd/yyyy (five year range including measurement period) * Do NOT enter a test date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission. * 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		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.	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 --- 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	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073: Ischemic Vascular Disease (IVD): Blood Pressure Control
	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 mm/dd/yyyy and mm/dd/yyyy (five year range including measurement period). 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 at any time during the measurement period. Please see Appendix C for a list of statin medications. 1 = Yes, patient was prescribed a statin medication or a statin medication was reviewed and active on the patient's medication list. 2 = No, patient was not prescribed a statin medication and a statin medication was not reviewed and active on the patient's medication list. The following exception to statin medication use will be identified by the portal based on the submitted LDL values * Patients aged 21 to 75 years and an LDL result less than 40 mg/dL A blank field will create an ERROR upon submission. 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. * Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission. * 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 a statin medication during the measurement period (Field 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			

	0076: Optimal Vascular Care	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073: Ischemic Vascular Disease (IVD): Blood Pressure Control
	8 = Other provider documented reason: allergy to statin 9 = Other provider documented reason: drug interaction (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. * Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission. 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 D 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 reviewed and active on the patient's medication list. 2 = No, patient was not prescribed a daily aspirin product or antiplatelet medication and one was not reviewed and active on the patient's medication list. Aspirin/narcotic combination medications do not qualify as a daily aspirin product. Blank fields will cause an ERROR upon submission. Aspirin or Anti-platelet Medication Date Enter the date of the most recent daily aspirin product or anti-platelet medication prescription, order or			

	0076: Optimal Vascular Care	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073: Ischemic Vascular Disease (IVD): Blood Pressure Control
	review of an active medication list that included a daily aspirin product or anti-platelet medication during the measurement period. * Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission. * 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. * Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission. 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. * Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period)will create an ERROR upon submission. * If the patient's tobacco status is not documented or the date of the			

	0076: Optimal Vascular Care	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073: Ischemic Vascular Disease (IVD): Blood Pressure Control
	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 to 75 with ischemic vascular disease who have at least two visits for this diagnosis in the last two years (established patient) with at least one visit in the last 12 months.	All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period.	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 pri	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	Please also refer to all code lists included in the data dictionary attached in S.2b. 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) Ages: * 18-75 years of age as of January 1 of the measurement period Established Patient with Diagnosis: * Patients are identified as having a diagnosis of ischemic vascular disease (IVD) if they've had at least two face-to-face visits with an eligible provider in an eligible specialty with a diagnosis of IVD (Ischemic Vascular Disease Value Set) during the current or prior measurement period Event: * At least one face-to-face visit with an eligible provider in an eligible specialty for any reason during the measurement period	See 'Registry Supplemental Resources' attached in appendix field A.1 for data dictionary and form. Codes that are applicable for the denominator are: Diagnosis for coronary artery disease (ICD-9-CM) 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82 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, 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 Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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	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. --- 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	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.

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			- 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.	
Exclusions	The following exclusions are allowed to be applied to the eligible population: permanent nursing home residents, receiving hospice or palliative care services, died or diagnosis coded in error.	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)	Patients who had documentation of use of anticoagulant medications during the measurement year.	None
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 * Documentation that diagnosis was coded in error	For Claims/Administrative: Documentation of medical reason(s) for not prescribing aspirin or clopidogrel • Append modifier to CPT II code 4086F-1P Documentation of patient reason(s) for not prescribing aspirin or clopidogrel • Append modifier to CPT II code 4086F-2P Documentation of system reason(s) for not prescribing aspirin or clopidogrel • Append modifier to CPT II code 4086F-3P	Patients who had documentation of use of anticoagulant medications during the measurement year. ANTICOAGULANT MEDICATIONS - Apixaban - Argatroban - Bivalirudin - Dabigatran - Dalteparin - Desirudin - Edoxaban - Enoxaparin - Fondaparinux - Heparin - Lepirudin - Rivaroxaban - Tinzaparin - Warfarin	N/A
Risk Adjustment	Statistical risk model The statistical risk model is one of Actual to Expected methodology and is estimated using a logistic model implemented in SAS Procedure Glimmix that accounts for the measure's non-continuous (binary) nature. Actual to Expected methodology is where the actual measure result remains unaltered, instead a risk adjusted comparison is created based on same proportions of the risk factors that the clinic has. With Actual to Expected, since the expected is not a stable variable for all clinics, it is not valid to compare the clinic's confidence interval to the expected value. Instead to test whether or not there was a statistically significant difference between the expected value and the actual value achieved by the clinic, a one population proportions test was used. This method is employed to test the proportion of optimally managed patients attributed to a clinic compared to a specified value for that clinic. In the MNCM case the specified value is an expected rate calculated taking into account the overall state rate and adjusted for risk factors specific to the measure. Variables available to testing in a risk adjustment model for this measure include several demographic variables (age, gender, zip, and insurance product as a	No risk adjustment or risk stratification Not Applicable.	No risk adjustment or risk stratification N/A	No risk adjustment or risk stratification

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	proxy for socioeconomic status) and clinical variables (depression and diabetes). Currently, only age and product have the statistical strength (t-test) to be included in the risk adjustment model MNCM is evaluating race/ethnicity, country of origin, primary language as variables in the next year. (See data dictionary Tab = Risk Adjustment). Available in attached Excel or csv file at S.2b			
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 2014 Health Care Disparities Report, a hard copy report available on our corporate website at http://mncm.org/wp-content/uploads/2015/03/2014-Health-Care-Disparities-Report-Final.pdf. This report notes a gap in outcomes of ten percentage points between ischemic vascular disease patients in public programs versus other purchasers.	Not Applicable.	N/A	NA
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	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	To calculate performance rates: 1) Find the patients who meet the initial patient 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 patient 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 patient population and denominator are identical. 3) Find the patients who quality for exclusions and subtract from the denominator. 4) From the patients within the denominator (after exclusions have been subtracted from the denominator), find the patients who qualify for the Numerator (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 5) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for exception when exceptions have been specified [for this measure: medical reason(s)(e.g., eg, allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons) or patient reason(s)(e.g., economic, social, and/or religious impediments, noncompliance, patient refusal, other patient reason)]. 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 of patients with valid exceptions) should be calculated and reported	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). No diagram provided	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.

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	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. Available at measure-specific web page URL identified in S.1	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. No diagram provided		
Submission items	5.1 Identified measures: 0068 : Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet 0073 : Ischemic Vascular Disease (IVD): Blood Pressure Control 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease 0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy 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):	5.1 Identified measures: 0465 : Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: See 5b.1 for more detailed response due to lack of character spaces in this section. 5b.1 If competing, why superior or rationale for additive value: Measure 0067 looks at whether ASA or clopidogrel where prescribed during a 12 month measurement period. Meanwhile, the two existing NQF endorsed measures (#0465 and #0964) focused on whether the medications were prescribed prior to discharge or prior to s	5.1 Identified measures: 0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy 0142 : Aspirin prescribed at discharge for AMI 0076 : Optimal Vascular Care 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	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	0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet	0073: Ischemic Vascular Disease (IVD): Blood Pressure Control
	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 Adherence to statin therapy for individuals with cardiovascular disease. This medication claims based measure's denominator is more aligned with our intent (coronary, cerebrovascular and peripheral artery disease), however 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. # 0076 Optimal Vascular Care is superior to the newly submitted measure for consideration because its measure construct additionally includes: * contraindications and exceptions to statin use * risk adjustment; actual and expected rates reported * allowable exclusions for potentially frail older adults age 65 to 75 (hospice or palliative services, nursing home, death)		18 years of age and older who were discharged from an inpatient setting with an acute myo	

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 (ED) arrival to time of transfer to another facility for acute coronary intervention (ACI) for ST-segment myocardial infarction (STEMI) patients that require a percutaneous coronary intervention (PCI). The measure is calculated using chart-abstracted data, on a rolling quarterly basis, and is publically reported, in aggregate, for one calendar year. The measure has been publically reported, annually by CMS as a component of its Hospital Outpatient Quality Reporting (HOQR) Program since 2008.	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
Data Source	Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records An electronic data collection tool is made available from vendors or facilities can download the free CMS Abstraction & Reporting Tool (CART). Paper tools for manual abstraction, which are posted on www.QualityNet.org, are also available for the CART tool. These tools are posted on www.QualityNet.org. Available at measure-specific web page URL identified in S.1 Attachment NQF_0290_MeasureCodeSet.xlsx	Administrative claims, Electronic Clinical Data : Electronic Health Record, Paper Medical Records An electronic data collection tool is made available from vendors or facilities can download the free CMS Abstraction & Reporting Tool (CART). Paper tools for manual abstraction, which are posted on www.QualityNet.org, are also available for the CART tool. These tools are posted on www.QualityNet.org. Available at measure-specific web page URL identified in S.1 Attachment NQF_0288_MeasureCodeSet.xlsx
Level	Facility, Population : National	Facility, Population : National
Setting	Hospital/Acute Care Facility	Hospital/Acute Care Facility
Numerator Statement	This measure is reported as a continuous variable statement: time (in minutes) from ED arrival to transfer to another facility for ACI. The numerator includes patients with AMI and ST-segment elevation on the ECG performed closest to 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 ACI.	The number of ED AMI patients whose time from ED arrival to fibrinolysis is 30 minutes or less.
Numerator Details	The measure population is defined by six E/M codes and 18 ICD-10-CM diagnosis codes included in the code set for this measure; these detailed lists can be found in the Excel workbook provided for Section S.2b. The measure population includes patients with AMI and ST-segment elevation on the ECG performed closest to 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. Patients are included in the measure population if: • Initial ECG Interpretation is equal to “Yes”; • 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.”	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	Time (in minutes) from ED arrival to transfer to another facility for ACI.	The number of ED AMI patients with ST-segment elevation on ECG who received fibrinolytic therapy.
Denominator Details	NQF #0290 is a continuous measure; therefore, the numerator and denominator details contained in Section S.6 and Section S.9 are the same. The measure population is defined by six E/M codes and 18 ICD-10-CM diagnosis codes included in the code set for this measure; these detailed lists can be found in the Excel workbook provided for Section S.2b. The measure population includes patients with AMI and ST-segment elevation on the ECG performed closest to 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 ACI. Patients are included in the measure population if: • Initial ECG Interpretation is equal to “Yes”; • 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.”	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	Patients are excluded from this measure if they are under 18 years of age, did not have an initial ECG interpretation, received fibrinolytic therapy while in the ED, or were transferred for reasons other than ACI.	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	Cases are excluded for any patients that meet any of the following criteria: Patients less than 18 years of age • Initial ECG Interpretation is equal to “No” • Fibrinolytic Administration is equal to “Yes” • Transfer for Acute Coronary Intervention is equal to “[2] There was documentation the patient was admitted to observation.” or “[3] There was documentation the patient was transferred from this facility’s emergency department to another facility for reasons other than acute coronary intervention, or the specific reason for transfer was unable to be determined from medical record documentation.”	Cases are excluded for any patients that meet any of the following criteria: • Patients less than 18 years of age. • Patients who did not receive Fibrinolytic Administration within 30 minutes (Fibrinolytic Administration Date and Fibrinolytic Administration Time (in minutes) minus Outpatient Encounter Date and Arrival Time (in minutes) is greater than 30 minutes) AND had a Reason for Delay in Fibrinolytic Therapy, as defined in the Data Dictionary.
Risk Adjustment	No risk adjustment or risk stratification Not applicable; this measure does not risk adjust. Provided in response box S.15a	No risk adjustment or risk stratification Not applicable; this measure does not risk adjust.
Stratification	Not applicable; this measure does not stratify its results.	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	This measure calculates the time (in minutes) from ED arrival to transfer to another facility for ACI. The patient population is determined from two algorithms; the AMI Hospital Outpatient Population algorithm as well as the OP-3 measure-specific algorithm: 1. Check E/M Code; if on Table 1.0 (in the Excel workbook provided for Section S.2b), proceed.	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:

	0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention	0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival
	2. Check Discharge Code; include patients with discharge code of 4a or 4d. 3. Calculate Patient Age (Outpatient Encounter Date - Birthdate). 4. Check Patient Age; if >= 18, proceed. 5. Check ICD-10-CM Principal Diagnosis Code; if on Table 1.1 (in the Excel workbook provided for Section S.2b), proceed to the measure-specific algorithm. 6. Check Initial ECG Interpretation. If Initial ECG Interpretation equals YES, the case will proceed to Fibrinolytic Administration. 7. Check Fibrinolytic Administration. If Fibrinolytic Administration equals NO, the case will proceed to Transfer for Acute Coronary Intervention. 8. Check Transfer for Acute Coronary Intervention. If Transfer for Acute Coronary Intervention equals 1 (i.e., there is documentation the patient was transferred from this facility's emergency department to another facility specifically for ACI), the case will proceed to ED Departure Date. 9. Check ED Departure Date. If ED Departure Date equals Non-UTD Value, the case will proceed to ED Departure Time. 10. Check ED Departure Time. If ED Departure Time equals Non-UTD Value, the case will proceed to Arrival Time. 11. Check Arrival Time. If Arrival Time equals Non-UTD Value, the case will proceed to the Measurement Value. 12. 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). 13. Check the Measurement Value. If Measurement Value is greater than or equal to 0 minutes, the case will proceed to Reason for Not Administering Fibrinolytic Therapy. 14. Check Reason for Not Administering Fibrinolytic Therapy. 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. 15. Check Reason for Not Administering Fibrinolytic Therapy. 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. 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. Available at measure-specific web page URL identified in S.1	1. Check E/M Code; if on Table 1.0 (in the Excel workbook provided for Section S2b), proceed 2. Check Discharge Code; include patients with discharge code of 4a or 4d 3. Calculate Patient Age (Outpatient Encounter Date - Birthdate) 4. Check Patient Age; if >= 18, proceed 5. Check ICD-10-CM Principal Diagnosis Code; if on Table 1.1 (in the Excel workbook provided for Section S2b), proceed to the measure-specific algorithm 6. Check Initial ECG Interpretation; if "Yes," proceed 7. Check Fibrinolytic Administration; if "Yes," proceed, record as the denominator 8. Check Fibrinolytic Administration Date; if a Non-Unable to Determine (UTD) value, proceed 9. Check Fibrinolytic Administration Time; if a Non-UTD value, proceed 10. Check Arrival Time; if a Non-UTD value, proceed 11. Calculate Time to Fibrinolysis (Fibrinolytic Administration Time minus Arrival Time) 12. Check Time to Fibrinolysis; if >= 0 min and <= 30 min, record as the numerator. If > 30 min and = 360 min, proceed 13. Check Reason for Delay in Fibrinolytic Therapy; if "Yes," patient is excluded from measure population. If "No," record in the denominator. Aggregate denominator and numerator counts by Medicare provider number 14. Measure = numerator counts / denominator counts [The value should be recorded as a percentage] Available at measure-specific web page URL identified in S.1
Submission items	5.1 Identified measures: 0288 : Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival 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 #0290 and NQF #0288 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). While the care settings for the HOQR and HIQR measures differ, all three 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 three measures is different. NQF #0288 focuses on the timely administration of fibrinolytic therapy, NQF# 0290 focuses on the timely transfer of patients who require a PCI, and 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 #0290 were identified.	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.

Comparison of NQF #2906, NQF #0070, NQF # 0071, NQF #0083, and NQF #2908

	2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071: Persistence of Beta-Blocker Treatment After a Heart Attack	0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
Steward	PCPI Foundation	AMA-convened Physician Consortium for Performance Improvement	National Committee for Quality Assurance	AMA-PCPI	AMA-PCPI
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 a prior MI or a current or prior LVEF <40% who were prescribed beta-blocker therapy	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who also have a prior MI or a current or prior LVEF <40% who were prescribed beta-blocker therapy	The percentage of patients 18 years of age and older during the measurement year who were hospitalized and discharged from July 1 of the year prior to the measurement year to June 30 of the measurement year with a diagnosis of acute myocardial infarction (AMI) and who received persistent beta-blocker treatment for six months after discharge.	Percentage of patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40% who were prescribed beta-blocker therapy either within a 12 month period when seen in the outpatient setting or at hospital discharge	Percentage of patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40% who were prescribed beta-blocker therapy either within a 12 month period when seen in the outpatient setting or at hospital discharge
Type	Process	Process	Intermediate Clinical Outcome	Process	Process
Data Source	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record Not applicable. No data collection instrument provided Attachment PCPI_2906_CMS145_CAD-BB_ValueSets.xlsx	Electronic Clinical Data, Electronic Clinical Data : Registry Not applicable. No data collection instrument provided No data dictionary	Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Pharmacy This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Management Organization No data collection instrument provided Attachment 0071_PBH_Value_Sets_Final.xlsx	Electronic Clinical Data, Electronic Clinical Data : Registry No data collection instrument provided	Electronic Clinical Data : Electronic Health Record No data collection instrument provided Attachment 0083_AMAPCPI_HF-BB_ValueSets_June2015-635712735683880063-635917579207929971.xlsx
Level	Clinician : Group/Practice, Clinician : Individual	Clinician : Group/Practice, Clinician : Individual	Health Plan, Integrated Delivery System	Clinician : Group/Practice, Clinician : Individual	Clinician : Group/Practice, Clinician : Individual
Setting	Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary	Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary	Ambulatory Care : Clinician Office/Clinic	Ambulatory Care : Clinician Office/Clinic, Home Health, Hospital/Acute Care Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary	Ambulatory Care : Clinician Office/Clinic, Home Health, Hospital/Acute Care Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary
Numerator Statement	Patients who were prescribed beta-blocker therapy	See details in multiple formats	Patients who had a 180-day course of treatment with beta-blockers post discharge.	See details in multiple formats	Patients who were prescribed* beta-blocker therapy** either within a 12 month period when seen in the outpatient setting or at hospital discharge *Prescribed may include: Outpatient setting: prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list Inpatient setting: prescription given to the patient for beta-blocker therapy at discharge OR beta-blocker therapy to be continued after discharge as documented in the discharge medication list **Beta-blocker therapy should include bisoprolol, carvedilol, or sustained release metoprolol succinate. (see technical specifications for additional information on medications)
Numerator Details	For EHR: HQMF eMeasure developed and is included in this submission. We have provided the following definitions and/or guidance for convenience;	For Registry: Option 1 – for patients with LVEF < 40%: Definitions: Prescribed- May include prescription given to the	ADMINISTRATIVE Patients who had a 180-day course of treatment with beta-blockers post-discharge. Post discharge refers to patients discharged from an acute inpatient setting with	For Registry: Definitions: Prescribed – Outpatient Setting - May include prescription given to the patient for beta-blocker therapy at one or more visits	For EHR: HQMF eMeasure developed and is included in this submission.

	2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071: Persistence of Beta-Blocker Treatment After a Heart Attack	0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
	please see HQMF eMeasure for complete details related to the specification. NUMERATOR DEFINITION: Prescribed may include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list. NUMERATOR GUIDANCE: Beta-blocker therapy: - For patients with prior MI, beta-blocker therapy includes any agent within the beta-blocker drug class. As of 2015, no recommendations or evidence are cited in current stable ischemic heart disease guidelines for preferential use of specific agents - For patients with prior LVEF <40%, beta-blocker therapy includes the following: bisoprolol, carvedilol, or sustained release metoprolol succinate	patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list. Beta-blocker Therapy- For patients with prior LVEF < 40%, beta-blocker therapy includes the following: bisoprolol, carvedilol, or sustained release metoprolol succinate. Report Quality Data Code, G9189: Beta-blocker therapy prescribed or currently being taken Option 2 – for patients with prior MI: Definitions: Prescribed- May include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list. Beta-blocker Therapy- For patients with prior MI, beta-blocker therapy includes any agent within the beta-blocker drug class. As of 2014, no recommendations or evidence are cited in current stable ischemic heart disease guidelines for preferential use of specific agents. Report CPT Category II Code, 4008F: Beta-blocker therapy prescribed or currently being taken	an AMI (AMI Value Set) from July 1 of the year prior to the measurement year through June 30 of the measurement year. In order to identify patients with "persistent" beta-blocker treatment, identify all patients in the denominator population whose dispensed days supply is =135 days in the 180-day measurement interval. The measure defines persistence of treatment as at least 75 percent of the days supply filled. To determine continuity of treatment during the 180-day period, identify all prescriptions filled within the 180-day measurement interval, and add the number of allowed gap days (up to 45 days) to the number of treatment days for a maximum of 180 days (i.e., 135 treatment days + 45 gap days = 180 days). To account for patients who are on beta-blockers prior to admission, factor those prescriptions into adherence rates if the actual treatment days fall within the 180-day measurement interval. DEFINITIONS Treatment days (days covered) - The actual number of calendar days covered with prescriptions within the specified 180-day measurement interval (i.e., a prescription of a 90-day supply dispensed on the 100th day will have 80 days counted in the 180-day interval). 180-day measurement interval - The 180 day period that includes the discharge date and the 179 days after discharge. TABLE PBH-B BETA-BLOCKER MEDICATIONS DESCRIPTION / PRESCRIPTION Noncardioselective beta-blockers / Carvedilol; Labetalol; Nadolol; Penbutolol; Pindolol; Propranolol; Timlol; Sotalol Cardioselective beta-blockers / Acebutolol; Atenolol; Betaxolol; Bisoprolol; Metoprolol; Nebivolol Antihypertensive combinations / Atenolol-chlorthalidone; Bendroflumethiazide-nadolol; Bisoprolol-hydrochlorothiazide; Hydrochlorothiazide-metoprolol; Hydrochlorothiazide-propranolol	in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list. Prescribed – Inpatient Setting: May include prescription given to the patient for beta-blocker therapy at discharge OR beta-blocker therapy to be continued after discharge as documented in the discharge medication list. Beta-blocker Therapy - For patients with prior LVEF < 40%, beta-blocker therapy should include bisoprolol, carvedilol, or sustained release metoprolol succinate. Report Quality Data Code, G8450: Beta-blocker 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 a prior MI (within the past 3 years) or a current or prior LVEF <40%	See details in multiple formats	Patients 18 years of age and older as of December 31 of the measurement year who were hospitalized and discharged from July 1 of the year prior to the measurement year to June 30 of the measurement year with diagnosis of AMI. See question S.9 Denominator	See details in multiple formats	All patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40% LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction
Denominator Details	For EHR:	DENOMINATOR DEFINITION:	Patients discharged from an acute inpatient setting with	DENOMINATOR DEFINITION:	For EHR:

	2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071: Persistence of Beta-Blocker Treatment After a Heart Attack	0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
	HQMF eMeasure developed and is included in this submission. We have provided the following definitions and/or guidance for convenience; please see HQMF eMeasure for complete details related to the specification. DENOMINATOR DEFINITION: Prior Myocardial Infarction (MI) for denominator 2 is limited to those occurring within the past 3 years. DENOMINATOR GUIDANCE: The requirement of "Count >=2 of Encounter, Performed" is to establish that the eligible professional has an existing relationship with the patient.	LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. Prior Myocardial Infarction (MI) for denominator 2 is limited to those occurring within the past 3 years. DENOMINATOR NOTES: The requirement of "Count >=2 of Encounter, Performed" is to establish that the eligible professional has an existing relationship with the patient. For Registry: Option 1 -- for patients with LVEF < 40%: Patient aged >= 18 years AND Diagnosis for coronary artery disease (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82 Diagnosis for coronary artery disease (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I20.0, I20.1, I20.8, I20.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, 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 OR History of cardiac surgery (CPT): 33140, 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92920, 92924, 92928, 92933, 92937, 92941, 92943 AND Patient encounter(s) during reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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 AND Two Denominator Eligible Visits AND Left ventricular ejection fraction (LVEF) < 40%: G8694 Option 2 – for patients with prior MI: Patient aged >= 18 years AND Diagnosis for coronary artery disease (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07,	an AMI (AMI Value Set) from July 1 of the year prior to the measurement year through June 30 of the measurement year. Use only facility claims to identify denominator events (including readmissions or direct transfers). Do not use professional claims. If a patient has more than one episode of AMI from July 1 of the year prior to the measurement year through June 30 of the measurement year, only include the first discharge. Transfers to acute facilities: Include hospitalizations in which the patient was transferred directly to another acute inpatient facility for any diagnosis. Count the discharge from the subsequent acute inpatient facility, not the initial discharge. The discharge date from the facility to which the patient was transferred must occur on or before June 30 of the measurement year. Transfers to nonacute facilities. Exclude from the denominator, hospitalizations in which the patient was transferred directly to a nonacute care facility for any diagnosis. Readmissions: If the patient was readmitted to an acute or nonacute care facility for any diagnosis, include the patient in the denominator and use the discharge date from the original hospitalization. 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.	LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. DENOMINATOR NOTES: To meet this measure, it must be reported for all heart failure patients a minimum of once during the measurement period when seen in the outpatient setting AND reported at each hospital discharge during the measurement period. The requirement of "Count >=2 of Encounter, Performed" is to establish that the eligible professional has an existing relationship with the patient. For Registry: Option 1, Outpatient Setting: Patients aged >=18 years AND Diagnosis for heart failure (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9 Diagnosis for heart failure (ICD-10-CM) [for use 10/01/2015-12/31/2015]: 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, I50.9 AND Patient encounter(s) during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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 AND Two Denominator Eligible Visits AND Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function: G8923 Option 2, Inpatient Setting: Patients aged >= 18 years AND Diagnosis for heart failure (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9 Diagnosis for heart failure (ICD-10-CM) [for use 10/01/2015-12/31/2015]: 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, I50.9	HQMF eMeasure developed and is included in this submission. DENOMINATOR DEFINITION: LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. DENOMINATOR NOTES: To meet this measure, it must be reported for all heart failure patients a minimum of once during the measurement period when seen in the outpatient setting AND reported at each hospital discharge during the measurement period. The requirement of "Count >=2 of Encounter, Performed" is to establish that the eligible professional has an existing relationship with the patient.

	2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071: Persistence of Beta-Blocker Treatment After a Heart Attack	0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
		414.2, 414.3, 414.8, 414.9, V45.81, V45.82 Diagnosis for coronary artery disease (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I20.0, I20.1, I20.8, I20.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, 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 OR History of cardiac surgery (CPT): 33140, 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92920, 92924, 92928, 92933, 92937, 92941, 92943 AND Diagnosis for myocardial infarction (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 412 Diagnosis for myocardial infarction (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I22.0, I22.1, I22.2, I22.8, I22.9, I24.1, I25.2 AND Patient encounter(s) during reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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 AND Two Denominator Eligible Visits		AND Patient encounter during reporting period (CPT): 99238, 99239 AND Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function: 3021F	
Exclusions	Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons) Documentation of patient reason(s) for not prescribing beta-blocker therapy (eg, patient declined, other patient reasons) Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system)	See details in multiple formats	Exclude from the denominator, hospitalizations in which the patient was transferred directly to a nonacute care facility for any diagnosis. Exclude patients who are identified as having an intolerance or allergy to beta-blocker therapy. Any of the following anytime during the patient's history through the end of the continuous enrollment period meet criteria: - Asthma (Asthma Value Set). - COPD (COPD Value Set). - Obstructive chronic bronchitis (Obstructive Chronic Bronchitis Value Set).	See details in multiple formats	Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent) Documentation of patient reason(s) for not prescribing beta-blocker therapy Documentation of system reason(s) for not prescribing beta-blocker therapy

	2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071: Persistence of Beta-Blocker Treatment After a Heart Attack	0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
			- Chronic respiratory conditions due to fumes and vapors (Chronic Respiratory Conditions Due to Fumes/Vapors Value Set). - Hypotension, heart block >1 degree or sinus bradycardia (Beta-Blocker Contraindications Value Set). - A medication dispensing event indicative of a history of asthma (Table PBH-D). - Intolerance or allergy to beta-blocker therapy.		
Exclusion Details	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. This measure was developed using the PCPI exception methodology which 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 this measure, exceptions may include medical reason(s) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system). Where examples of exceptions are included in the measure language, value sets for these examples are developed and included in the eSpecifications. 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. Additional details by data source are as follows: For EHR:	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. This measure was developed using the PCPI exception methodology which 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 this measure, exceptions may include medical reason(s) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system). 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. Additional details by data source are as follows: For Registry: Option 1 -- for patients with LVEF < 40%: Report Quality Data Code, G9190: Documentation of medical reason(s) for not	MEDICATIONS TO IDENTIFY EXCLUSIONS (History of Asthma) DESCRIPTION / PRESCRIPTION Bronchodilator combinations / Albuterol-ipratropium; Budesonide-formoterol; Fluticasone-salmeterol; Mometasone-formoterol Inhaled corticosteroids / Beclomethasone; Budesonide; Ciclesonide; Flunisolide; Fluticasone; Fluticasone CFC free; Mometasone; Triamcinolone Due to the extensive volume of codes associated with identifying denominator exclusions for this measure we are attaching a separate file with code value sets (except for medications to identify patients with a history of asthma). See code value sets located in question S.2b.	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. This measure was developed using the PCPI exception methodology which 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 Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction, exceptions may include Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent), Documentation of patient reason(s) for not prescribing beta-blocker therapy, or Documentation of system reason(s) for not prescribing beta-blocker 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. Additional details by data source are as follows:	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. This measure was developed using the PCPI exception methodology which 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 Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction, exceptions may include Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent), Documentation of patient reason(s) for not prescribing beta-blocker therapy, or Documentation of system reason(s) for not prescribing beta-blocker therapy. Where examples of exceptions are included in the measure language, value sets for these examples are developed and included in the eSpecifications. 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

	2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071: Persistence of Beta-Blocker Treatment After a Heart Attack	0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
	HQMF eMeasure developed and is included in this submission.	prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons) Report Quality Data Code, G9191: Documentation of patient reason(s) for not prescribing beta-blocker therapy (eg, patient declined, other patient reasons) Report Quality Data Code, G9192 : Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system) Option 2 – for patients with prior MI: Append a modifier to CPT Category II Code: 4008F-1P : Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons) 4008F-2P : Documentation of patient reason(s) for not prescribing beta-blocker therapy (eg, patient declined, other patient reasons) 4008F-3P : Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system)		For EHR: HQMF eMeasure developed and is included in this submission. For Registry: Report Quality Data Code G8451: Beta-Blocker Therapy for LVEF < 40% not prescribed for reasons documented by the clinician (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent, allergy, intolerance, other medical reasons, patient declined, other patient reasons, other reasons attributable to the healthcare system)	opportunities for quality improvement. Additional details by data source are as follows: For EHR: HQMF eMeasure developed and is included in this submission.
Risk Adjustment	No risk adjustment or risk stratification No risk adjustment or risk stratification Provided in response box S.15a	No risk adjustment or risk stratification No risk adjustment or risk stratification Provided in response box S.15a	No risk adjustment or risk stratification N/A	No risk adjustment or risk stratification n/a	No risk adjustment or risk stratification n/a
Stratification	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 and have included these variables as recommended data elements to be collected.	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 and have included these variables as recommended data elements to be collected.	N/A	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 and have included these variables as recommended data elements to be collected.	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 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	Rate/proportion better quality = higher score
Algorithm	To calculate performance rates: 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 (ie, 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 (ie, the group of patients in the denominator for whom a	To calculate performance rates: 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 (ie, 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 (ie, the group of patients in the denominator for whom a	STEP 1. Determine the eligible population. To do so, identify patients who meet all specified criteria. -AGES: 18 years and older as of December 31 of the measurement year. -EVENT/DIAGNOSIS: Identify patients who were discharged from an acute setting with an AMI (AMI Value Set) from July 1 of the year prior to the measurement year through June 30 of the measurement year. Use only facility claims. STEP 2: Exclude patients who meet the exclusions criteria. SEE S.10 AND S.11 FOR DENOMINATOR EXCLUSION CRITERIA AND DETAILS. STEP 3: Determine the number of patients in the eligible population who were given a 180-day course of	To calculate performance rates: 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 (ie, 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 (ie, the group of patients in the denominator for whom a	To calculate performance rates: 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 (ie, 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 (ie, the group of patients in the denominator for whom a

	2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071: Persistence of Beta-Blocker Treatment After a Heart Attack	0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
	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) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system).] 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 (ie, 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. No diagram provided	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) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system).] 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 (ie, 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. No diagram provided	treatment with beta blockers post discharge. STEP 4: Identify patients whose dispensed days supply is = 135 days in the 180-day measurement interval STEP 5: Calculate the rate by dividing the numerator (Step 4) by the denominator (after exclusions) (Step 2). No diagram provided	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: Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent); Documentation of patient reason(s) for not prescribing beta-blocker therapy; Documentation of system reason(s) for not prescribing beta-blocker 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 (ie, 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. No diagram provided	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: Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent); Documentation of patient reason(s) for not prescribing beta-blocker therapy; Documentation of system reason(s) for not prescribing beta-blocker 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 (ie, 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. No diagram provided
Submission items	5.1 Identified measures: 0071 : Persistence of Beta-Blocker Treatment After a Heart Attack 0083 : Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) 0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%) 2908 : Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: eMeasure 2906 addresses a patient population of patients with CAD and either a recent prior MI or LVSD. This patient population is also covered in part by the following NQF-endorsed measures: NQF 0071: Persistence of Beta-Blocker Treatment After a Heart Attack and NQF 0083 and 2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD). The specifications are harmonized	5.1 Identified measures: 0071 : Persistence of Beta-Blocker Treatment After a Heart Attack 0083 : Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: Measure 0070 addresses a patient population of patients with CAD and either a recent prior MI or LVSD. This patient population is also covered in part by the following NQF-endorsed measures: NQF 0071: Persistence of Beta-Blocker Treatment After a Heart Attack and NQF 0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD). The specifications are harmonized to the extent possible. As a result, the denominator specifications for the measures differ where needed based on the differing patient populations. 5b.1 If competing, why superior or rationale for additive value:	5.1 Identified measures: 0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%) 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 NCQA's current Persistence of Beta Blocker Treatment After a Heart Attack measure (NQF measure 0071) uses health plan-reported data to assess the percentage of patients 18 years of age and older during the measurement year who wer	5.1 Identified measures: 0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%) 0071 : Persistence of Beta-Blocker Treatment After a Heart Attack 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: Measure 0083 addresses a therapy which is also covered in part by the following NQF-endorsed measures: NQF 0071: Persistence of Beta-Blocker Treatment After a Heart Attack and NQF 0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy—Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%). The specifications are harmonized to the extent possible. However, measure 0083 is focused on a patient population with heart failure and therefore the denominator specifications for the measures differ.	5.1 Identified measures: 0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%) 0071 : Persistence of Beta-Blocker Treatment After a Heart Attack 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: Measure 0083 addresses a therapy which is also covered in part by the following NQF-endorsed measures: NQF 0071: Persistence of Beta-Blocker Treatment After a Heart Attack and NQF 0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy—Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%). The specifications are harmonized to the extent possible. However, measure 0083 is focused on a patient population with heart failure and therefore the denominator specifications for the measures differ.

	2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071: Persistence of Beta-Blocker Treatment After a Heart Attack	0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
	to the extent possible. As a result, the denominator specifications for the measures differ where needed based on the differing patient populations. Measure 0070 is the registry version of this eMeasure and is completely harmonized. 5b.1 If competing, why superior or rationale for additive value:			5b.1 If competing, why superior or rationale for additive value:	5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF #2939, NQF #0074, NQF #0964, NQF #0118, NQF #1519, NQF #0696, NQF #2472, and NQF #0439

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
Steward	American College of Cardiology	American College of Cardiology	American College of Cardiology	The Society of Thoracic Surgeons	Society for Vascular Surgery	The Society of Thoracic Surgeons	American College of Cardiology	The Joint Commission
Description	Percentage of patients 18-75 year of age with clinical atherosclerotic cardiovascular disease (ASCVD) who were offered moderate-to high-intensity statin.	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who have a LDL-C result <100 mg/dL OR patients who have a LDL-C result >=100 mg/dL and have a documented plan of care to achieve LDL-C <100mg/dL, including at a minimum the prescription of a statin	Patients undergoing PCI who receive prescriptions for all medications (aspirin, P2Y12 and statins) for which they are eligible for at discharge	Percent of patients aged 18 years and older undergoing isolated CABG who were discharged on a lipid lowering statin	Percentage of patients aged 18 years and older undergoing infrainguinal lower extremity bypass who are prescribed a statin medication at discharge. This measure is proposed for both hospitals and individual providers.	The STS CABG Composite Score comprises four domains consisting of 11 individually NQF-endorsed cardiac surgery measures: Domain 1) Absence of Operative Mortality – Proportion of patients (risk-adjusted) who do not experience operative mortality. Operative mortality is defined as death during the same hospitalization as surgery or after discharge but within 30 days of the procedure; Domain 2) Absence of Major Morbidity – Proportion of patients (risk-adjusted) who do not experience any major morbidity. Major morbidity is defined as having at least one of the following adverse outcomes: 1. reoperations for any cardiac reason, 2. renal failure, 3. deep sternal wound infection, 4. prolonged ventilation/intubation, 5. cerebrovascular accident/permanent stroke; Domain 3) Use of Internal Mammary Artery (IMA) – Proportion of first-time CABG patients who receive at least one IMA graft; Domain 4) Use of All Evidence-based Perioperative Medications – Proportion of patients who receive all required perioperative medications for which they are eligible. The required perioperative medications are: 1. preoperative beta blockade therapy, 2. discharge anti-platelet medication, 3. discharge beta	Percentage of patients aged 18 years and older for whom PCI is performed who are prescribed optimal medical therapy at discharge	"This measure captures the proportion of ischemic stroke patients who are prescribed a statin medication at hospital discharge. This measure is a part of a set of eight nationally implemented measures that address stroke care (STK-1: Venous Thromboembolism (VTE) Prophylaxis, STK-2: Discharged on Antithrombotic Therapy, STK-3: Anticoagulation Therapy for Atrial Fibrillation/Flutter, STK-4: Thrombolytic Therapy, STK-5: Antithrombotic Therapy By End of Hospital Day 2, STK-8: Stroke Education, and STK-10: Assessed for Rehabilitation) that are used in The Joint Commission's hospital accreditation and Disease-Specific Care certification programs."

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
						blockade therapy, and 4. discharge anti-lipid medication. All measures are based on audited clinical data collected in a prospective registry. Participants receive a score for each of the domains, plus an overall composite score. The overall composite score is created by "rolling up" the domain scores into a single number. In addition to receiving a numeric score, participants are assigned to rating categories designated by one star (below average performance), two stars (average performance), or three stars (above average performance). Scores and star ratings are currently publicly reported on STS and Consumer Reports websites.		
Type	Process	Process	Composite	Process	Process	Composite	Composite	Process
Data Source	Electronic Clinical Data : Registry See 'Registry Supplemental Resources' attached in appendix field A.1. Available in attached appendix at A.1 No data dictionary	Electronic administrative data/claims, Electronic Clinical Data, Electronic Health/Medical Record, Registry data This measure, in its previous specifications, is currently being used in the ACCF PINNACLE registry for the outpatient office setting. URL Attachment PCPI_CAD-2_LipidControl NQF 0074.pdf	Electronic Clinical Data : Registry National Cardiovascular Data Registry (NCDR®) CathPCI Registry® Available at measure-specific web page URL identified in S.1 Attachment CathPCI_v4_CodersDictionary_4.4-635230042811280622.pdf	Electronic Clinical Data : Registry STS Adult Cardiac Surgery Database Version 2.73; STS Adult Cardiac Surgery Database Version 2.8 went live on July 1, 2014. Available at measure-specific web page URL identified in S.1 No data dictionary	Electronic Clinical Data : Registry The Society for Vascular Surgery Vascular Quality Initiative Registry The Vascular Study Group of New England Registry Attachment LEB-defs-v.01.09_v1.doc	Electronic Clinical Data : Registry STS Adult Cardiac Surgery Database – Version 2.73; STS Adult Cardiac Surgery Database Version 2.8 went live on July 1, 2014. Available at measure-specific web page URL identified in S.1 Attachment S.15._Isolated_CABG_Risk_Model_Specifications-635570268276168986.docx	Electronic Clinical Data : Registry NCDR® CathPCI Registry® v4.4 Diagnostic Catheterization Data Collection Form Available in attached appendix at A.1 No data dictionary	Electronic Clinical Data, Paper Medical Records Each data element in the data dictionary includes suggested data sources. The data are collected using contracted Performance Measurement Systems (vendors) that develop data collection tools based on the measure specifications. The tools are verified and tested by Joint Commission staff to confirm the accuracy and conformance of the data collection tool with the measure specifications. The vendor may not offer the measure set to hospitals until verification has been passed. No data collection instrument provided Attachment. Appendix_A.1-635878758534627046.xls
Level	Clinician : Individual	Clinicians : Group, Clinicians : Individual	Facility	Facility, Clinician : Group/Practice	Facility, Clinician : Group/Practice,	Facility, Clinician : Group/Practice	Clinician : Individual	Facility, Population : National

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
					Clinician : Individual			
Setting	Ambulatory Care : Clinician Office/Clinic	Assisted Living, Ambulatory Care : Clinic, Group homes, Home, Ambulatory Care : Hospital Outpatient, Nursing home (NH) /Skilled Nursing Facility (SNF), Ambulatory Care : Office	Hospital/Acute Care Facility	Hospital/Acute Care Facility	Hospital/Acute Care Facility	Hospital/Acute Care Facility	Hospital/Acute Care Facility	Hospital/Acute Care Facility
Numerator Statement	Patients in the denominator who have been offered* high-intensity statin† OR have been offered* moderate-intensity statin†. Definitions: *A statin is "offered" if it is prescribed or if a patient reason exception for not being prescribed a statin is documented. †Moderate-intensity and high-intensity statin doses are defined in Table 5 of the 2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adult http://content.onlinejacc.org/article.aspx?articleid=1879710)	Patients who have a LDL-C result <100 mg/dL OR Patients who have a LDL-C result >=100 mg/dL and have a documented plan of care1 to achieve LDL-C <100 mg/dL, including at a minimum the prescription of a statin within a 12 month period Definitions: *Documented plan of care may also include: documentation of discussion of lifestyle modifications (diet, exercise); scheduled re-assessment of LDL-C *Prescribed may include prescription given to the patient for a statin at one or more visits in the measurement period OR patient already taking a statin as documented in current medication list Numerator Instructions: The first numerator option can be reported for patients who have a documented LDL-C < 100 mg/dL at any time during the measurement period.	Patients who receive all medications for which they are eligible. 1. Aspirin prescribed at discharge (if eligible for aspirin as described in denominator) AND 2. P2Y12 agent (clopidogrel, prasurgel, or ticlopidine) prescribed at discharge (if eligible for P2Y12 as described in denominator) AND 3. Statin prescribed at discharge (if eligible for statin as described in denominator)	Number of patients undergoing isolated CABG who were discharged on a lipid lowering statin	Patients undergoing infrainguinal lower extremity bypass who are prescribed a statin medication at discharge.	Please see Appendix	Patients who are prescribed* all of the medications, for which they are eligible, at discharge *Prescribed may include prescription given to the patient for medications at discharge OR patient already taking medications as documented in current medication list	See details in multiple formats
Numerator Details	See Supplemental Resources attached in Appendix Field A.1.	See attached for EHR Specifications. For Claims/Administrative: Report CPT II Code Patients who have LDL-C <100 mg/dL 3048F Most recent	If eligible for Aspirin and given, then code "Yes" If eligible for Aspirin and not given, then code "No, not given" If eligible for P2Y12 and given, then code then "Yes"	Number of isolated CABG procedures in which discharge lipid lowering medication [DCLipid (STS Adult Cardiac Surgery Database Version 2.73)] is marked "yes" and	ANY registry that includes anatomic details or CPT procedure codes is required to identify patients for numerator inclusion. The Society for Vascular Surgery Vascular Quality	Please see Appendix	Electronic Specifications for registry reporting are included in the Appendix, attached to Section A.1 in the 'Additional' tab.	One data element is used to calculate the numerator: • Statin Medication Prescribed at Discharge – Documentation that a statin medication was

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
		LDL-C <100 mg/dL OR Patients who have LDL-C =100 mg/dL and have a documented plan of care to achieve LDL-C <100 mg/dL, including prescription of lipid-lowering therapy • 3049F Most recent LDL-C 100-129 mg/dL OR • 3050F Most recent LDL-C greater than or equal to 130 mg/dL AND • 05XXF (code in development) Lipid lowering therapy plan of care documented AND • 4002F Statin therapy prescribed	If eligible for P2Y12 and not given, then code "No, not given" If eligible for statin and given, then code "Yes" If eligible for statin and not given, then code "No, not given" If any "No, not given" present, then performance not met. Else, performance met. Note: Contraindicated and those participating in blinded studies are also considered as exceptions and performance met.	lipid lowering discharge medication type [DCLipMT (STS Adult Cardiac Surgery Database Version 2.73)] is marked "statin"	Initiative (SVS VQI) and the Vascular Study Group of New England (VSGNE)are examples of registries which capture detailed anatomic information, but the measure is not limited to these registries. It could also be used by other registries that capture this same information. No other registries are required for computation. Infrainguinal lower extremity bypass is defined as a bypass beginning at or below the external iliac artery and extending into the ipsilateral leg. It includes procedures with CPT codes 35656, 35556, 35583, 35666, 35566, 35585, 35671, 35571, 35587. The numerator is calculated as the number of patients age 18 and over undergoing such a procedure who are prescribed a statin medication at the time of discharge, which is also captured in the above registries.			prescribed at hospital discharge. Allowable values: Yes, No/UTD or unable to determine from medical record documentation. Patients are eligible for the numerator population when the allowable value equals "yes" for the data element.
Denominator Statement	All patients 18-75 years of age with clinical ASCVD* who were seen within a 12-month period. This measure is designed to apply to chronic care populations and does not apply to patients in acute care hospitals. Definition: *Clinical ASCVD includes acute coronary artery syndromes, a history of MI, stable or unstable angina, coronary or other arterial revascularization, stroke, TIA, and peripheral arterial disease presumed to be of atherosclerotic origin.	All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period	Patients surviving hospitalization who are eligible to receive any of the three medication classes: 1) Eligibile for aspirin (ASA): Patients undergoing PCI who do not have a contraindication to aspirin documented AND 2) Eligible for P2Y12 agent (clopidogrel, prasugrel, or ticlopidine): Patients undergoing PCI with stenting who do not have a contraindication to P2Y12 agent documented AND 3) Eligible for statin therapy: Patients undergoing PCI who do not have a contraindication to statin therapy.	All patients undergoing isolated CABG	All patients aged 18 years and older undergoing lower extremity bypass as defined above who are discharged alive, excluding those patients who are intolerant to statins.	Please see Appendix	All patients aged 18 years and older for whom PCI is performed who are eligible for any of the following medications (ie, patient has no contraindication, allergy, intolerance): • Aspirin • P2Y12 inhibitor (only for PCIs with stenting) • Statin	See details in multiple formats

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Denominator Details	See 'Registry Supplemental Resources' attached in appendix field A.1 for data dictionary and form.	See attached for EHR Specifications. For Claims/Administrative: See coding tables attached for coding (ICD-9-CM, ICD-10-CM, CPT)		Number of isolated CABG procedures excluding cases with an in-hospital mortality or cases for which discharge anti-lipid treatment use was contraindicated. The SQL code used to create the function used to identify cardiac procedures is provided in the Appendix.	ANY registry that includes anatomic details or CPT procedure codes is required to identify patients for denominator inclusion. The Society for Vascular Surgery Vascular Quality Initiative and the Vascular Study Group of New England are examples of registries that capture detailed anatomic information, but the measure is not limited to these registries. Infrainguinal lower extremity bypass is defined as a bypass beginning at or below the external iliac artery and extending into the ipsilateral leg. It includes procedures with CPT codes 35656, 35556, 35583, 35666, 35566, 35585, 35671, 35571, 35587. Only patients who are discharged alive are included in the denominator, and patients who are intolerant to statins are excluded, as described below.	Please see Appendix	The denominator population is identified as patients who have a PCI performed (procedure codes included below) and who are eligible for at least one discharge medication. Eligibility for medications and electronic specifications for registry reporting are included in the Appendix, attached to Section A.1 in the 'Additional' tab. CPT Codes: 92920 Percutaneous transluminal coronary angioplasty; single major coronary artery or branch 92924 Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; single major coronary artery or branch 92928 Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; single major coronary artery or branch 92933 Percutaneous transluminal coronary atherectomy, with intracoronary stent, with coronary angioplasty when performed; single major coronary artery or branch 92937 Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; single vessel 92941 Percutaneous transluminal revascularization	"Nine data elements are used to calculate the denominator: 1. Admission Date – The month, day and year of admission to acute inpatient care. 2. Birthdate - The month, day and year the patient was born. 3. Clinical Trial - Documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with stroke were being studied. Allowable values: Yes or No/UTD. 4. Comfort Measures Only – The earliest day the physician/APN/PA documented comfort measures only after hospital arrival. Allowable values: 1 (Day 0 or 1); 2 (Day 2 or after); 3 (Timing Unclear); 4 (Not Documented/UTD). 5. Discharge Date – The month day and year the patient was discharged from acute care, left against medical advice or expired during the stay. 6. Discharge Disposition – The place or setting to which the patient was discharged on the day of hospital discharge. 7. Elective Carotid Intervention – Documentation demonstrates that the current admission is solely for the performance of an elective carotid intervention (e.g., elective carotid endarterectomy, angioplasty, carotid stenting). Allowable values: Yes or No/UTD. 8. ICD-10-CM Principal Diagnosis Code - The International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) code associated with the diagnosis established after

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							of acute total/subtotal occlusion during acute myocardial infarction, coronary artery or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty, including aspiration thrombectomy when performed, single vessel 92943 Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; single vessel SNOMED-CT Codes: 11101003 Percutaneous transluminal coronary angioplasty 15256002 Transmyocardial revascularization by laser technique 175066001 Percutaneous transluminal balloon angioplasty of bypass graft of coronary artery 232727003 Percutaneous directional coronary atherectomy 232728008 Percutaneous low speed rotational coronary atherectomy 232729000 Percutaneous high speed rotational coronary atherectomy 397193006 Percutaneous transluminal coronary angioplasty by rotoablation 397431004 Percutaneous transluminal coronary angioplasty with rotoablation, single vessel 414089002 Emergen	study to be chiefly responsible for occasioning the admission of the patient for this hospitalization. 9. Reason For Not Prescribing Statin Medication at Discharge – Documentation of a reason for not prescribing a statin medication at discharge. Allowable values: Yes or No/UTD. Population: Discharges with ICD-10-CM Principal Diagnosis Code for ischemic stroke as defined in Appendix A, Table 8.1."

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
							cy percutaneous coronary intervention 415070008 Percutaneous coronary intervention 428488008 Placement of stent in anterior descending branch of left coronary artery 429499003 Placement of stent in circumflex branch of left coronary artery 429639007 Percutaneous transluminal balloon angioplasty with insertion of stent into coronary artery 431759005 Percutaneous transluminal atherectomy using fluoroscopic guidance 75761004 Infusion of intra-arterial thrombolytic agent with percutaneous transluminal coronary angioplasty 80762004 Infusion of intra-arterial thrombolytic agent with percutaneous transluminal coronary angioplasty, multiple vessels 85053006 Percutaneous transluminal coronary angioplasty, multiple vessels 91338001 Infusion of intra-arterial thrombolytic agent with percutaneous transluminal coronary angioplasty, single vessel	
Exclusions	Exceptions: Documentation of medical reason(s) for not prescribing a statin (e.g., allergy, intolerance to statin[s], other medical reasons).	Documentation of medical reason(s) for not prescribing a statin (eg, allergy, intolerance to statin medication(s), other medical reasons) Documentation of patient reason(s) for not prescribing a statin (eg, patient declined,	Discharge status of expired; patients who left against medical advice, patients discharged to hospice or for whom comfort care measures only is documented; patients discharged to other acute hospital	Cases are removed from the denominator if there was an in-hospital mortality or if discharge anti-lipid treatment was contraindicated.	Chart documentation that patient was not an eligible candidate for statin therapy due to known drug intolerance, or patient died before discharge.	Please see Appendix	Patients who expired Patients who left against medical advice Patient discharged to hospice or for whom comfort care measures only is documented Patient discharged to other acute care hospital	See details in multiple formats

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		other patient reasons) Documentation of system reason(s) for not prescribing a statin (eg, financial reasons, other system reasons)						
Exclusion Details	The ACC and AHA distinguish between measure exceptions and measure exclusions. Exclusions arise when the intervention required by the numerator is not appropriate for a group of patients who are otherwise included in the initial patient or eligible population of a measure (i.e. the denominator). Exclusions are absolute and are to be removed from the denominator of a measure and therefore clinical judgment does not enter the decision. Measure Exceptions: Denominator Exceptions are used to remove a patient from the denominator of the [performance measure when the patient does no receive a therapy or service AND that therapy or service would not be appropriate due to the patient specific reasons, the patient would otherwise meet the denominator. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics or patients. For this measure exception may include medical reasons for not prescribing a statin (e.g., allergy, intolerance to statin[s],other medical reasons). There are no patient or system reasons that would remove a patient from the denominator.	See attached for EHR Specifications. For Claims/Administrative: Documentation of medical reason(s) for not prescribing a statin (eg, allergy, intolerance to statin medication(s), other medical reasons) • Append modifier to CPT II code 4XXXF-1P (in development) Documentation of patient reason(s) for not prescribing a statin (eg, patient declined, other patient reasons) • Append modifier to CPT II code 4XXXF-2P (in development) Documentation of system reason(s) for not a statin (eg, financial reasons, other system reasons) • Append modifier to CPT II code 4XXXF-3P (in development)	NCDR has a clear distinction between absolute "Exclusions" (e.g., death, transfer) and relative "Exceptions", (e.g., contraindications). While patients with exclusions are always automatically removed from the denominator and numerator, exceptions allow clinicians the opportunity to identify an intervention/process/medication as not clinically indicated based on the unique patient scenario. Each of the three medications incorporated into this composite may be coded as Yes (medication prescribed), No (medication not prescribed), Blinded (pt. involved in a clinical trial, medication type unavailable for data entry), and Contraindicated (used to capture many of the medical exceptions used in measure #2452).	Mortality Discharge Status (MtDCStat), Mortality Date (MtDate), and Discharge Date (DischDt) indicate an in-hospital mortality; DCLipid is marked as "Contraindicated"	Chart documentation that patient was not an eligible candidate for statin therapy due to known drug intolerance, or patient died before discharge. These data are captured in the SVS VQI and VSGNE registries.	Please see Appendix	According to the ACCF/AHA/PCPI methodology, exclusions arise when the intervention required by the numerator is not appropriate for a group of patients who are otherwise included in the initial patient or eligible population of a measure (ie, the denominator). Exclusions are absolute and are to be removed from the denominator of a measure and therefore clinical judgment does not enter the decision. For this measure, exclusions include patients who died, etc. etc. Exclusions, including applicable value sets, are included in the measure specifications. Additional details by data source are as follows: The electronic specifications for registry reporting necessary to capture the excluded population are included in the Appendix, attached to Section A.1 in the 'Additional' tab.	"• The patient age in years is equal to the Discharge Date minus the Birthdate. Patients less than 18 years are excluded. • The Length of Stay (LOS) in days is equal to the Discharge Date minus the Admission Date. If the LOS is greater than 120 days, the patient is excluded. • Patients with Comfort Measures Only allowable value of 1 (Day 0 or 1), 2 (Day 2 or after), and 3 (Timing unclear) are excluded. • Patients are excluded if ""Yes"" is selected for Clinical Trial. • Patients with ICD-10-PCS procedure codes for carotid intervention procedures as identified in Appendix A, Table 8.3,, if medical record documentation states that the patient was admitted for the elective performance of this procedure are excluded. • Patients with Discharge Disposition allowable value of 2 (Hospice-Home), 3 (Hospice-Health Care Facility), 4 (Acute Care Facility), 6 (Expired), or 7 (Left Against Medical Advice/AMA) are excluded. • Patients are excluded if ""Yes"" is selected for Reason For Not Prescribing Statin Medication at Discharge."
Risk Adjustment	No risk adjustment or risk stratification Not Applicable	No risk adjustment or risk stratification	No risk adjustment or risk stratification	No risk adjustment or risk stratification N/A	No risk adjustment or risk stratification NA	Statistical risk model The details of risk adjustment model	No risk adjustment or risk stratification Not applicable.	No risk adjustment or risk stratification Not applicable.

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						development were published in 2009. The list of candidate risk predictors were selected by a surgeon panel based on prior research and clinical expertise. Initial models were selected using a backwards approach with a significance criterion of 0.001 for removal. Several variables were preselected and forced into the models. These included all of the continuous variables (age, BSA, date of surgery [in 6-month intervals], creatinine, ejection fraction), plus sex and dialysis. Shahian DM, O'Brien SM, Filardo G, Ferraris VA, et al. The Society of Thoracic Surgeons 2008 cardiac surgery risk models: part 1--coronary artery bypass grafting surgery. Ann Thorac Surg. 2009 Jul;88(1 Suppl):S2-22. The definitions of all the variables in the final 2008 CABG model are provided below. (Note: not all were included in the final model for this measure.) Variable Definition _____ _____ _____ Intercept = 1 for all patients Atrial fibrillation = 1 if patient has history of preoperative atrial fibrillation, = 0 otherwise Age = Patient age in years Age function 1 = max (age–50, 0) Age function 2 = max (age–60, 0) Age by reop function = Age function 1 if surgery is a reoperation, = 0 otherwise Age by status function = Age function 1 if status is emergent or		

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						salvage, = 0 otherwise BSA function 1 = max (1.4, min [2.6, BSA]) – 1.8 BSA function 2 = (BSA function 1)2 CHF but not NYHA IV = 1 if patient has CHF and is not NYHA class IV, = 0 otherwise CHF and NYHA IV = 1 if patient has CHF and is NYHA class IV, = 0 otherwise CLD mild = 1 if patient has mild chronic lung disease, = 0 otherwise CLD moderate = 1 if patient has moderate chronic lung disease, = 0 otherwise CLD severe = 1 if patient has severe chronic lung disease, = 0 otherwise Creatinine function 1 = max (0.5, min [creatinine, 5.0]) if patient is not on dialysis, = 0 otherwise Creatinine function 2 = max ([creatinine function 1] – 1.0, 0) Creatinine function 3 = max ([creatinine function 1] – 1.5, 0) CVD without prior CVA = 1 if patient has history of CVD and no prior CVA, = 0 otherwise CVD and prior CVA = 1 if patient has history of CVD and a prior CVA, = 0 otherwise Diabetes, noninsulin = 1 if patient has diabetes not treated with insulin, = 0 otherwise Diabetes, insulin = 1 if patient has diabetes treated with insulin, = 0 otherwise Ejection fraction function = max		

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
						(50 – ejection fraction, 0) Female = 1 if patient is female, = 0 otherwise Female by BSA function 1 = BSA function 1 if female, = 0 otherwise Female by BSA function 2 = BSA function 2 if female, = 0 otherwise Hypertension = 1 if patient has hypertension, = 0 otherwise IABP or inotropes = 1 if patient requires IABP or inotropes preoperatively, = 0 otherwise Immunosuppressive treatment = 1 if patient given immunosuppressive therapy within 30 days, = 0 otherwise Insufficiency, aortic = 1 if patient has at least moderate aortic insufficiency, = 0 otherwise Insufficiency, mitral = 1 if patient has at least moderate mitral insufficiency, = 0 otherwise Insufficiency, tricuspid = 1 if patient has at least moderate tricuspid insufficiency, = 0 otherwise Left main disease = 1 if patient has left main disease, = 0 otherwise MI 1 to 21 days = 1 if history of MI 1 to 21 days prior to surgery, = 0 otherwise MI > 6 and < 24 hours = 1 if history of MI >6 and <24 hours prior to surgery, = 0 otherwise MI 6 hours = 1 if history of MI 6 hours prior to surgery, = 0 otherwise No. diseased vessel function = 2 if triple-vessel disease, = 1 if double-vessel		

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						disease, = 0 otherwise PCI 6 hours = 1 if patient had PCI 6 hours prior to surgery, = 0 otherwise Peripheral vascular disease = 1 if patient has peripheral vascular disease, = 0 otherwise Race black = 1 if patient is black, = 0 otherwise Race Hispanic = 1 if patient is nonblack Hispanic, = 0 otherwise Race Asian = 1 if patient is nonblack, non-Hispanic, and is Asian, = 0 otherwise Reop, 1 previous operation= 1 if patient has had exactly 1 previous CV surgery, = 0 otherwise Reop, 2 previous operations = 1 if patient has had 2 or more previous CV surgeries, = 0 otherwise Shock = 1 if patient was in shock at time of procedure, = 0 otherwise Status urgent = 1 if status is urgent, = 0 otherwise Status emergent = 1 if status is emergent (but not resuscitation), = 0 otherwise Status salvage = 1 if status is salvage (or emergent plus resuscitation), = 0 otherwise Stenosis aortic = 1 if patient has aortic stenosis, = 0 otherwise Unstable angina = 1 if patient has unstable angina, no MI within 7 days of surgery, = 0 otherwise Available in attached Excel or csv file at S.2b		
Stratification	We encourage that the results of this measure be stratified by race, ethnicity, administrative		N/A	N/A	Not required	N/A	We encourage the results of this measure be stratified by race, ethnicity,	Not applicable, the measure is not stratified.

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
	sex, and payer, consistent with the data elements collected in the Pinnacle Registry.						administrative sex, and payer.	
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	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	To calculate performance rates: 1) Find the patients who meet the initial patient 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 patient 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 patient population and denominator are identical. 3) Find the patients who quality for exclusions and subtract from the denominator. 4) From the patients within the denominator (after exclusions have been subtracted from the denominator), find the patients who qualify for the Numerator (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. 5) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for exception when exceptions have been specified [for this measure: medical	See attached for calculation algorithm.	1) Remove patients whose discharge status is expired 2) Check if given patient is eligible for 1 of the 3 medication therapies. 3) If eligible for at least 1 medication, then keep this patient. 4) If not eligible for any of the 3 medications, then patient is removed from eligibility. 5) If eligible for Aspirin and given, then code “Yes” If eligible for Aspirin and not given, then code “No, not given” If eligible for Aspirin but contraindicated, then code “contraindicated/ blinded” If eligible for P2Y12 and given, then code then “Yes” If eligible for P2Y12 and not given, then code “No, not given” If eligible for P2Y12 but contraindicated, then code “contraindicated/ blinded” If eligible for statin and given, then code “Yes” If eligible for statin and not given, then code “No, not given” If eligible for statin but contraindicated, then code “contraindicated/ blinded” 6) If any “No, not given” present, then performance not met. Else, performance met.	Please refer to numerator and denominator sections for detailed information. No diagram provided	All patients age 18 and older undergoing infrainguinal LEB who were prescribed statin at discharge divided by (all patients over 18 undergoing infrainguinal LEB minus those intolerant to statins minus those who died before discharge).	Please see discussion under section S.4 and attached articles. No diagram provided	To calculate performance rates: 1) Find the patients who meet the initial patient population (ie, the general group of patients that a set of performance measures is designed to address). 2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator. (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical. 3) Find the patients who quality for exclusions and subtract from the denominator. 4) From the patients within the denominator, find the patients who qualify for the Numerator (ie, 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 If the patient does not meet the numerator, this case represents a quality failure. Available in attached appendix at A.1	"1. Start processing. Run cases that are included in the Stroke (STK) Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure. 2. Check ICD-10-CM Principal Diagnosis Code a. If the ICD-10-CM Principal Diagnosis Code is not on Table 8.1, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing. b. If the ICD-10-CM Principal Diagnosis Code is on Table 8.1, continue processing and proceed to Discharge Disposition. 3. Check Discharge Disposition a. If Discharge Disposition equals 2, 3, 4, 6, 7 the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing. b. If Discharge Disposition equals 1, 5, 8, continue processing and proceed to Comfort Measures Only. 4. Check Comfort Measures Only a. If Comfort Measures Only is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing. b. If Comfort Measures Only equals 1, 2, or 3, the case will proceed to a Measure Category Assignment of B and will not be in the Measure

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
	reason(s) (e.g., allergy, intolerance to statin[s], other medical reasons)]. 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 of patients 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. For calculation algorithm, see 'Registry Supplemental Resources' attached in appendix field A.1. Available in attached appendix at A.1							Population. Stop processing. c. If Comfort Measures Only equals 4, continue processing and proceed to Clinical Trial. 5. Check Clinical Trial a. If Clinical Trial is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing. b. If Clinical Trial equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing. c. If Clinical Trial equals No, continue processing and proceed to Elective Carotid Intervention. 6. Check admitted for Elective Carotid Intervention a. If Elective Carotid Intervention is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing. b. If Elective Carotid Intervention equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing. c. If Elective Carotid Intervention equals No, continue processing and proceed to Pre-Arrival Lipid-Lowering Agent. 7. Check Statin Medication Prescribed at Discharge a. If Statin Medication Prescribed at Discharge is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
								b. If Statin Medication Prescribed at Discharge equals Yes, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing. c. If Statin Medication Prescribed at Discharge equals No, continue processing and check Reason for Not Prescribing Statin Medication at Discharge. 8. Check Reason for Not Prescribing Statin Medication at Discharge a. If Reason for Not Prescribing Statin Medication at Discharge is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing. b. If Reason for Not Prescribing Statin Medication at Discharge equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing. c. If Reason for Not Prescribing Statin Medication at Discharge equals No, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing." Available at measure-specific web page URL identified in S.1
Submission items	5.1 Identified measures: 1519 : Statin Therapy at Discharge after Lower Extremity Bypass (LEB) 0439 : STK-06: Discharged on Statin Medication 0118 : Anti-Lipid Treatment Discharge 0074 : Chronic Stable Coronary Artery Disease: Lipid 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: Related Measures:	5.1 Identified measures: 0639 : Statin Prescribed at Discharge 0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy 0074 : Chronic Stable Coronary Artery Disease: Lipid Control 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease	5.1 Identified measures: 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: N/A 5b.1 If competing, why superior or rationale for additive value: N/A	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: Related Measures: 0118 Antilipid therapy at discharge 0439	5.1 Identified measures: 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: N/A 5b.1 If competing, why superior or rationale for additive value: N/A	5.1 Identified measures: 0639 : Statin Prescribed at Discharge 0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy 0074 : Chronic Stable Coronary Artery Disease: Lipid Control 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease	5.1 Identified measures: "0639 : Statin Prescribed at Discharge 0074 : Chronic Stable Coronary Artery Disease: Lipid Control 0547 : Diabetes and Medication Possession Ratio for Statin Therapy 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
	5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: See discussion under 5b.1 5b.1 If competing, why superior or rationale for additive value: This new measure on statin therapy for patients with ASCVD is based on the 2013 ACC/AHA guidelines, which focus on optimal treatment of statins. Most measures on statin therapy that are NQF-endorsed address subsets of the patients included in this broad measure and do not yet reflect the updated recommendations and/or are intended to be used in a different setting, level of analysis or different data source. Specific comments for each measure are below: • 964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients (ACC) • 2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy (ACC) Measures 118 and 696 are STS registry-based measures and Measure 1519 is a SVS registry-based measure; thus, the data source and level of analysis are the same across all of the four measures. These measures are intended to be used at the time of hospital discharge, which differs from this new measure. In addition, based on the information provided on QPS, these measures do not reflect the updated recommendations for statin therapy.	Maintenance submission of NQF #0074: Drug Therapy for Lowering LDL-Cholesterol	0569 : ADHERENCE TO STATINS 0631 : Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy 0142 : Aspirin prescribed at discharge for AMI 0118 : Anti-Lipid Treatment Discharge 0068 : Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: see below for discussion of harmonization and competition. 5b.1 If competing, why superior or rationale for additive value: Statin measures 0543: Adherence to Statin Therapy for Individuals with Coronary Artery Disease is not specific to patients undergoing a PCI. This measure uses claims data and it is not evaluated at the point of discharge. This is a measure using claims data and determines whether patients are filing their prescription. The measure we propose evaluates if the prescription has been provided to the patients. 0569: Adherence to Statin is similar to measure 0543 listed above and is not specific to patients undergoing PCI. This is a measure using claims data and determines whether patients are filing their prescription. The measure we propose evaluates if the prescription has been provided to the patients. 0118: Anti-Lipid Treatment Discharge includes patients undergoing CABG,		Discharged on statin medication		0569 : ADHERENCE TO STATINS 0631 : Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy 0142 : Aspirin prescribed at discharge for AMI 0118 : Anti-Lipid Treatment Discharge 0068 : Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: Statin measures 0543: Adherence to Statin Therapy for Individuals with Coronary Artery Disease is not specific to patients undergoing a PCI. This measure uses claims data and it is not evaluated at the point of discharge. This is a measure using claims data and determines whether patients are filing their prescription. The measure we propose evaluates if the prescription has been provided to the patients. 0569: Adherence to Statin is similar to measure 0543 listed above and is not specific to patients undergoing PCI. This is a measure using claims data and determines whether patients are filing their prescription. The measure we propose evaluates if the prescription has been provided to the patients. 0118: Anti-Lipid Treatment Discharge includes patients undergoing CABG, not PCI. It also includes non statins as well as statins. 0074: Chronic Stable Coronary Artery Disease: Lipid Control includes	0545 : Adherence to Statins for Individuals with Diabetes Mellitus 0118 : Anti-Lipid Treatment Discharge 1519 : Statin Therapy at Discharge after Lower Extremity Bypass (LEB)" 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: Three statin therapy measures were identified from the NQF database. All three measures address target diagnoses other than ischemic stroke or specific surgical procedures for patients 18 years or older: 0074 Coronary Artery Disease; 0118 isolated Coronary Artery Bypass Graft (CABG); and, 1519 Lower Extremity Bypass (LEB). Measure 1519 addresses inpatient organizational performance.. The other two measures, 0074 and 0118 are provider-level measures in the ambulatory care setting. 5b.1 If competing, why superior or rationale for additive value: N/A

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
	Measure 439 is similar to the three measures discussed above with the exception of data source (electronic clinical data, paper medical records) and level of analysis (hospital/acute care facility). Similar concerns with the lack of alignment with the new ACC/AHA guidelines exist. ACC/AHA believe that this new measure should be considered superior as it is aligned with the current recommendations and underlying evidence and is broadly applicable.		not PCI. It also includes non statins as well as statins. 0074: Chronic Stable Coronary Artery Disease: Lipid Control includes all patients with CAD and is not specific to those patients who have had a PCI. 0639: Statin Prescribed at Discharge evaluates patients who have had a myocardial infarction. There may be patient overlap with this measure and the one proposed. The composite measure proposed in this application however contains two other guideline recommended medication. Our measure includes all PCI patients not only those who have had a MI, thus ours is monitoring secondary prevention as well as the tertiary prevention that is measured by CMS. P2Y12/Aspirin component 0142: Aspirin prescribed at discharge for AMI evaluates patients who have had a myocardial infarction. There may be patient overlap with this measure and the one proposed. The composite measure proposed in this application however contains two other guideline recommended medication. Our measure includes all PCI patients not only those who have had a MI, thus ours is monitoring secondary prevention as well as the tertiary prevention that is measured by CMS. 0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy includes all patients with CAD and is not specific to those					all patients with CAD and is not specific to those patients who have had a PCI. 0639: Statin Prescribed at Discharge evaluates patients who have had a myocardial infarction. There may be patient overlap with this measure and the one proposed. The composite measure proposed in this application however contains two other guideline recommended medication. Our measure includes all PCI patients not only those who have had a MI, thus ours is monitoring secondary prevention as well as the tertiary prevention that is measured by CMS. P2Y12/Aspirin component 0142: Aspirin prescribed at discharge for AMI evaluates patients who have had a myocardial infarction. There may be patient overlap with this measure and the one proposed. The composite measure proposed in this application however contains two other guideline recommended medication. Our measure includes all PCI patients not only those who have had a MI, thus ours is monitoring secondary prevention as well as the tertiary prevention that is measured by CMS. 0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy includes all patients with CAD and is not specific to those patients who have had a PCI. 0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic includes a larger patient population of patients who were discharged	

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
			patients who have had a PCI. 0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic includes a larger patient population of patients who were discharged for acute myocardial infarction, coronary artery bypass graft or percutaneous coronary interventions. The measure 0068 measures patients who had documentation of use of aspirin or another antithrombotic during the measurement year. The critical difference is the use of the term "or" that allows patients to be included into the numerator of this measure. Evidence indicates that Dual Antiplatelet Therapy is the ideal medical therapy of choice for this patient population. The composite measure proposed in this application follows the current medical guidelines for treating patients undergoing PCI with both Aspirin and a specifically anti platelets medications within the P2Y12 inhibitor drug class. 0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy The critical difference is the use of the term "or" that allows patients to be included into the numerator of this measure. Evidence indicates that Dual Antiplatelet Therapy is the ideal medical therapy of choice for this patient population. The composite measure proposed in this application follows the current medical guidelines for				for acute myocardial infarction, coronary artery bypass graft or percutaneous coronary interventions. The measure 0068 measures patients who had documentation of use of aspirin or another antithrombotic during the measurement year. The critical difference is the use of the term "or" that allows patients to be included into the numerator of this measure. Evidence indicates that Dual Antiplatelet Therapy is the ideal medical therapy of choice for this patient population. The composite measure proposed in this application follows the current medical guidelines for treating patients undergoing PCI with both Aspirin and a specifically anti platelets medications within the P2Y12 inhibitor drug class. 0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet TherapyThe critical difference is the use of the term "or" that allows patients to be included into the numerator of this measure. Evidence indicates that Dual Antiplatelet Therapy is the ideal medical therapy of choice for this patient population. The composite measure proposed in this application follows the current medical guidelines for treating patients undergoing PCI with both Aspirin and a specifically anti platelets medications within the P2Y12 inhibitor drug class. ACCF/AHA: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge	

	2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease	0074: Chronic Stable Coronary Artery Disease: Lipid Control	0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	0118: Anti-Lipid Treatment Discharge	1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	0696: STS CABG Composite Score	2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy	0439: STK-06: Discharged on Statin Medication
			treating patients undergoing PCI with both Aspirin and a specifically anti platelets medications within the P2Y12 inhibitor drug class.				following PCI in eligible patients The specifications for the measure are harmonized. Though this measure targets the same topic area, encouraging the use of aspirin, P2Y12 inhibitor, and statin at discharge following PCI, the ACCF/AHA measure is measured on the facility level, whereas the measure we are submitting for endorsement here is a physician level measure. 5b.1 If competing, why superior or rationale for additive value:	

Appendix F2: Related and Competing Measures (narrative format)

Comparison of NQF #0066, NQF #0067, NQF #0070, NQF #0074, NQF #0081, NQF #1662, AND NQF #2467

0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy - Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)
0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy
0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)
0074: Chronic Stable Coronary Artery Disease: Lipid Control
0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)
1662: Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy
2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

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

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

American College of Cardiology

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

AMA-convened Physician Consortium for Performance Improvement

0074: Chronic Stable Coronary Artery Disease: Lipid Control

American College of Cardiology

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

AMA-PCPI

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

Renal Physicians Association

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

Centers for Medicare & Medicaid Services

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 Left Ventricular Ejection Fraction (LVEF) < 40% who were prescribed ACE inhibitor or ARB therapy

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

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

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) 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 a prior MI or a current or prior LVEF <40% who were prescribed beta-blocker therapy

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who have a LDL-C result <100 mg/dL OR patients who have a LDL-C result >=100 mg/dL and have a documented plan of care to achieve LDL-C <100mg/dL, including at a minimum the prescription of a statin

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

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

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 (not receiving RRT) and proteinuria who were prescribed ACE inhibitor or ARB therapy within a 12-month period

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

The measure addresses adherence to angiotensin converting enzyme inhibitors (ACEIs)/angiotensin receptor blockers (ARBs). The measure is reported as the percentage of eligible individuals with diabetes mellitus who had at least two prescriptions for ACEIs/ARBs and who have a Proportion of Days Covered (PDC) of at least 0.8 during the measurement period (12 consecutive months).

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

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Process

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Process

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Process

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

Process

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

Process

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

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%)

Electronic Clinical Data : Registry This measure is currently being used in the ACCF PINNACLE registry for the outpatient office setting

No data collection instrument provided Attachment NQF0066__I9toI10_conversion.xlsx

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Electronic Clinical Data : Registry This measure is currently being used in the ACCF PINNACLE registry for the outpatient office setting.

Available in attached appendix at A.1 No data dictionary

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Electronic Clinical Data, Electronic Clinical Data : Registry Not applicable.

No data collection instrument provided No data dictionary

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Electronic administrative data/claims, Electronic Clinical Data, Electronic Health/Medical Record, Registry data This measure, in its previous specifications, is currently being used in the ACCF PINNACLE registry for the outpatient office setting.

URL Attachment PCPI_CAD-2_LipidControl NQF 0074.pdf

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

Electronic Clinical Data, Electronic Clinical Data : Registry not applicable

No data collection instrument provided No data dictionary

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

Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records, Electronic Clinical Data : Registry N/A

Attachment ACE_or_ARB_data_file_-_2015.pdf

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

Administrative claims, Other, Electronic Clinical Data : Pharmacy For measure calculation, the following Medicare files were required:

- Denominator tables
- Prescription drug benefit (Part D) coverage tables
- Beneficiary file
- Institutional claims (Part A)
- Non-institutional claims (Part B)—physician carrier/non-DME
- Prescription drug benefit (Part D) claims

For ACO attribution, the following were required:

- Denominator tables for Parts A and B enrollment
- Prescription drug benefit (Part D) coverage tables
- Beneficiary file
- Institutional claims (Part A)
- Non-institutional claims (Part B)—physician carrier/non-DME
- Prescription drug benefit (Part D) claims

For physician group attribution, the following were required:

- Non-institutional claims (Part B)—physician carrier/non-DME
- Denominator tables to determine individual enrollment
- Beneficiary file or coverage table to determine hospice benefit and Medicare as secondary payor status
- CMS physician and physician specialty tables
- National Plan & Provider Enumeration System (NPPES) database

No data collection instrument provided Attachment NQF2467_-_Codes_Table_-_ACEIs_ARBs.xls

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 : Group/Practice, Clinician : Individual

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Clinician : Individual

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Clinician : Group/Practice, Clinician : Individual

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Clinicians : Group, Clinicians : Individual

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

Clinician : Group/Practice, Clinician : Individual

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

Clinician : Group/Practice, Clinician : Individual, Clinician : Team

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

Clinician : Group/Practice, Health Plan, Integrated Delivery System, Population : State

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%)

Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Behavioral Health/Psychiatric : Outpatient, Ambulatory Care : Urgent Care

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Ambulatory Care : Clinician Office/Clinic

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Assisted Living, Ambulatory Care : Clinic, Group homes, Home, Ambulatory Care : Hospital Outpatient, Nursing home (NH) /Skilled Nursing Facility (SNF), Ambulatory Care : Office

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

Ambulatory Care : Clinician Office/Clinic, Home Health, Hospital/Acute Care Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary

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

Ambulatory Care : Clinician Office/Clinic, Dialysis Facility, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary, Rest Home, or Custodial Care Services

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

Ambulatory Care : Clinician Office/Clinic

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

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Patients who were prescribed* aspirin or clopidogrel within a 12 month period.

*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.

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

See details in multiple formats

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Patients who have a LDL-C result <100 mg/dL

OR

Patients who have a LDL-C result >=100 mg/dL and have a documented plan of care1 to achieve LDL-C <100 mg/dL, including at a minimum the prescription of a statin within a 12 month period

Definitions:

*Documented plan of care may also include: documentation of discussion of lifestyle modifications (diet, exercise); scheduled re-assessment of LDL-C

*Prescribed may include prescription given to the patient for a statin at one or more visits in the measurement period OR patient already taking a statin as documented in current medication list

Numerator Instructions:

The first numerator option can be reported for patients who have a documented LDL-C < 100 mg/dL at any time during the measurement period.

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

See details in multiple formats

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

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

Individuals in the denominator with at least two prescriptions for ACEIs/ARBs with a PDC of at least 0.8 for ACEIs/ARBs.

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%)

Numerator 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.

FOR POPULATION 1: Patients who are 18 years and older with a diagnosis of CAD with LVEF < 40%

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

FOR POPULATION 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

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

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

For Claims/Administrative: Report CPT II Code 4086F: Aspirin or clopidogrel prescribed.

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

For Registry:

Option 1 – for patients with LVEF < 40%:

Definitions:

Prescribed- May include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list.

Beta-blocker Therapy- For patients with prior LVEF < 40%, beta-blocker therapy includes the following: bisoprolol, carvedilol, or sustained release metoprolol succinate.

Report Quality Data Code, G9189: Beta-blocker therapy prescribed or currently being taken

Option 2 – for patients with prior MI:

Definitions:

Prescribed- May include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list.

Beta-blocker Therapy- For patients with prior MI, beta-blocker therapy includes any agent within the beta-blocker drug class. As of 2014, no recommendations or evidence are cited in current stable ischemic heart disease guidelines for preferential use of specific agents.

Report CPT Category II Code, 4008F: Beta-blocker therapy prescribed or currently being taken

0074: Chronic Stable Coronary Artery Disease: Lipid Control

See attached for EHR Specifications.

For Claims/Administrative: Report CPT II Code Patients who have LDL-C <100 mg/dL 3048F Most recent LDL-C <100 mg/dL

OR

Patients who have LDL-C =100 mg/dL and have a documented plan of care to achieve LDL-C <100 mg/dL, including prescription of lipid-lowering therapy

• 3049F Most recent LDL-C 100-129 mg/dL

OR

• 3050F Most recent LDL-C greater than or equal to 130 mg/dL

AND

• 05XXF (code in development) Lipid lowering therapy plan of care documented

AND

• 4002F Statin therapy prescribed

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

For Registry:

Definitions:

Prescribed – Outpatient setting: 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.

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

Report CPT Category II Code, 4010F : Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy prescribed or currently being taken

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

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

The numerator is defined as individuals with a PDC of 0.8 or greater.

The PDC is calculated as follows:

• PDC Numerator: The PDC numerator is the sum of the days covered by the days' supply of all drug claims in each respective drug class. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescriptions with a days' supply that extends beyond the end of the measurement period, count only the days for which the drug was available to the individual during the measurement period. If there are prescriptions for the same drug (generic name) on the same date of service, keep the prescription with the largest days' supply. If prescriptions for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

• PDC Denominator: The PDC denominator is the number of days from the first prescription date through the end of the measurement period, or death date, whichever comes first.

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%

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

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

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

See details in multiple formats

0074: Chronic Stable Coronary Artery Disease: Lipid Control

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

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

See details in multiple formats

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

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

Individuals at least 18 years of age as of the beginning of the measurement period with diabetes mellitus and at least two prescriptions for ACEIs/ARBs during the measurement period (12 consecutive months).

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%)

FOR POPULATION 1: Patients who are 18 years and older with a diagnosis of CAD with LVEF < 40%

Denominator Definition:

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

Patients aged >= 18 years

AND

Diagnosis for coronary artery disease (ICD-9-CM) [reportable through 9/30/2015]: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82

Diagnosis for coronary artery disease (ICD-10-CM) [reportable beginning 10/01/2015]: 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, 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 reporting 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

AND

Two Denominator Eligible Visits

AND

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

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

Patients aged >= 18 years

AND

Diagnosis for coronary artery disease (ICD-9-CM) [reportable through 9/30/2015]: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82

Diagnosis for coronary artery disease (ICD-10-CM) [reportable beginning 10/01/2015]: 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, 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-9-CM) [reportable through 9/30/2015]: 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.70, 250.71, 250.72, 250.73, 250.80, 250.81, 250.82, 250.83, 250.90, 250.91, 250.92, 250.93

Diagnosis for diabetes (ICD-10-CM) [reportable beginning 10/01/2015]: 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, E10.36, 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, E11.21, E11.22, E11.29, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E11.36, 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, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.359, E13.36, 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

AND

Patient encounter during the reporting 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

AND

Two Denominator Eligible Visits

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

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

See 'Registry Supplemental Resources' attached in appendix field A.1 for data dictionary and form.

Codes that are applicable for the denominator are:

Diagnosis for coronary artery disease (ICD-9-CM) 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82

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, 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

Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

DENOMINATOR DEFINITION:

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

Prior Myocardial Infarction (MI) for denominator 2 is limited to those occurring within the past 3 years.

DENOMINATOR NOTES:

The requirement of "Count >=2 of Encounter, Performed" is to establish that the eligible professional has an existing relationship with the patient.

For Registry:

Option 1 -- for patients with LVEF < 40%:

Patient aged >= 18 years

AND

Diagnosis for coronary artery disease (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82

Diagnosis for coronary artery disease (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I20.0, I20.1, I20.8, I20.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, 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

OR

History of cardiac surgery (CPT): 33140, 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92920, 92924, 92928, 92933, 92937, 92941, 92943

AND

Patient encounter(s) during reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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

AND

Two Denominator Eligible Visits

AND

Left ventricular ejection fraction (LVEF) < 40%: G8694

Option 2 – for patients with prior MI:

Patient aged >= 18 years

AND

Diagnosis for coronary artery disease (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82

Diagnosis for coronary artery disease (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I20.0, I20.1, I20.8, I20.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, 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

OR

History of cardiac surgery (CPT): 33140, 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92920, 92924, 92928, 92933, 92937, 92941, 92943

AND

Diagnosis for myocardial infarction (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 412

Diagnosis for myocardial infarction (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I22.0, I22.1, I22.2, I22.8, I22.9, I24.1, I25.2

AND

Patient encounter(s) during reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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

AND

Two Denominator Eligible Visits

0074: Chronic Stable Coronary Artery Disease: Lipid Control

See attached for EHR Specifications.

For Claims/Administrative: See coding tables attached for coding (ICD-9-CM, ICD-10-CM, CPT)

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

DENOMINATOR DEFINITION:

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

DENOMINATOR NOTES:

To meet this measure, it must be reported for all heart failure patients a minimum of once during the measurement period when seen in the outpatient setting AND reported at each hospital discharge during the measurement period.

The requirement of “Count >=2 of Encounter, Performed“ is to establish that the eligible professional has an existing relationship with the patient.

For Registry:

Option 1, Outpatient Setting:

Patients aged >= 18 years

AND

Diagnosis for heart failure (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9

Diagnosis for heart failure (ICD-10-CM) [for use 10/01/2015-12/31/2015]: 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, I50.9

AND

Patient encounter(s) during reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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

AND

Two Denominator Eligible Visits

AND

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

Option 2, Inpatient Setting:

Patients aged >= 18 years

AND

Diagnosis for heart failure (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9

Diagnosis for heart failure (ICD-10-CM) [for use 10/01/2015-12/31/2015]: 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, I50.9

AND

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

AND

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

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-9-CM, ICD-10-CM, CPT)

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

Target population meets the following conditions:

1. Continuously enrolled in Part D with no more than a one-month gap in enrollment during the measurement year;

2. Continuously enrolled in Part A and Part B with no more than a one-month gap in Part A enrollment and no more than a one-month gap in Part B enrollment during the measurement year; and,

3. No more than one month of HMO enrollment during the measurement year.

IDENTIFICATION OF DIABETES MELLITUS

Individuals with diabetes mellitus are identified using diagnosis codes and/or drug proxy to identify diabetes mellitus within the inpatient or outpatient claims data.*

Individuals must have:

At least two encounters with a principal or secondary diagnosis of diabetes with different dates of service in an outpatient setting or non-acute inpatient setting during the measurement period;

OR

At least one encounter with a principal or secondary diagnosis of diabetes in an acute inpatient or emergency department setting during the measurement period;

OR

At least one ambulatory prescription claim for insulin or other oral diabetes medication dispensed during the measurement period.

*Adapted from NCQA HEDIS 2012 (2012). Note: HEDIS uses a look-back period of one year for both the prescription data and diagnosis.

Table 1. Codes Used to Identify Diabetes Mellitus Diagnosis

ICD-9-CM: 250.xx, 357.2, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07, 366.41, 648.00, 648.01, 648.02, 648.03, 648.04

ICD-10-CM: E08.311, E08.319, E08.321, E08.329, E08.331, E08.339, E08.341, E08.349, E08.351, E08.359, E08.40, E08.42, E09.311, E09.319, E09.321, E09.329, E09.331, E09.339, E09.341, E09.349, E09.351, E09.359, E09.36, E09.40, E09.42, 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, E10.36, 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, E11.21, E11.22, E11.29, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E11.36, 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, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.359, E13.36, 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, O24.911, O24.912, O24.913, O24.919, O24.92, O24.93

DRG: 637,638

Codes Used to Identify Encounter Type

Table 2.1. Outpatient Setting

CPT: 92002, 92004, 92012, 92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456

UB-92 revenue: 051x, 0520-0523, 0526-0529, 057x-059x, 077x, 082x-085x, 088x, 0982, 0983

Table 2.2 Non-Acute Inpatient

CPT: 99304-99310, 99315, 99316, 99318, 99324-99328, 99334-99337

UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 019x, 0524, 0525, 055x, 066x

Table 2.3 Acute Inpatient

CPT: 99221-99223, 99224-99226, 99231-99233, 99238, 99239, 99251-99255, 99291

UB-92 revenue: 010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 080x, 0987

Table 2.4 Emergency Department

CPT: 99281-99285

UB-92 revenue: 045x, 0981

The following are the diabetic medications by class for the denominator. The route of administration includes all oral and injectable formulations of the medications listed below.

Table 3. Codes Used to Identify Diabetic Individuals

Alpha-glucosidase inhibitors:

acarbose

miglitol
Anti-diabetic amylin analogs:
pramlintide
Anti-diabetic combinations:
alogliptin-metformin
alogliptin-pioglitazone
glipizide-metformin
glyburide-metformin
pioglitazone-glimepiride
pioglitazone-metformin
rosiglitazone-glimepiride
rosiglitazone-metformin
saxagliptin-metformin
sitagliptin-metformin
repaglinide-metformin
sitagliptin-simvastatin
linagliptin- metformin
Dipeptidyl peptidase-4 (dpp-4) inhibitors:
alogliptin
sitagliptin,
saxagliptin,
linagliptin
Incretin mimetics:
exenatide
liraglutide
Insulin:
insulin aspart
insulin aspart
protamine & aspart (human)
insulin detemir
insulin glargine
insulin glulisine
insulin isophane & reg (human)
insulin isophane (human)
insulin lispro (human)
insulin lispro protamine & lispro (human)
insulin regular (human)
Meglitinides:
nateglinide

repaglinide

Sodium-glucose cotransporter 2 Inhibitors:

canagliflozin

Sulfonylureas:

chlorpropamide

glimepiride

glipizide

glyburide

tolazamide

tolbutamide

glyburide micronized

Thiazolidinediones:

pioglitazone

rosiglitazone

The following are the ACEI/ARB medications by class for the denominator. The route of administration includes all oral formulations of the medications listed below.

Table 4. ACEI/ARB Medications

Angiotensin-converting enzyme inhibitors (ACEIs):

benazepril

captopril

enalapril

fosinopril

lisinopril

moexipril

perindopril

quinapril

ramipril

trandolapril

Angiotensin II receptor blockers (ARBs):

candesartan

eprosartan

irbesartan

losartan

olmesartan

telmisartan

valsartan

azilsartan

Antihypertensive combinations:

aliskiren-valsartan

amlodipine-benazepril

amlodipine-olmesartan

amlodipine -valsartan

amlodipine-valsartan-hydrochlorothiazide

benazepril-hydrochlorothiazide

candesartan-hydrochlorothiazide

captopril-hydrochlorothiazide

enalapril maleate-hydrochlorothiazide

eprosartan-hydrochlorothiazide

fosinopril-hydrochlorothiazide

irbesartan-hydrochlorothiazide

lisinopril- hydrochlorothiazide

lisinopril-dietary management product

losartan-hydrochlorothiazide

moexipril-hydrochlorothiazide

olmesartan-hydrochlorothiazide

olmesartan medoxomil-amlodipine-hydrochlorothiazide

quinapril-hydrochlorothiazide

telmisartan-amlodipine

telmisartan-hydrochlorothiazide

trandolapril-verapamil

valsartan-hydrochlorothiazide

amlodipine-olmesartan-hydrochlorothiazide

azilsartan medoxomil-chlorthalidone

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%)

Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, 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 (eg, patient declined, other patient reasons)

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

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

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)

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

See details in multiple formats

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Documentation of medical reason(s) for not prescribing a statin (eg, allergy, intolerance to statin medication(s), other medical reasons)

Documentation of patient reason(s) for not prescribing a statin (eg, patient declined, other patient reasons)

Documentation of system reason(s) for not prescribing a statin (eg, financial reasons, other system reasons)

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

See details in multiple formats

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

Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB

therapy (eg, pregnancy, history of angioedema, cough due to ACE Inhibitor or

ARB therapy, allergy to medications, other medical reasons)

Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB

therapy (patient declined, other patient reasons)

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

We excluded the following individuals from the denominator:

Individuals with polycystic ovaries, gestational diabetes, or steroid-induced diabetes who do not have a face-to-face visit with a diagnosis of diabetes in any setting during the measurement period.

Exclusion 1

Individuals with a diagnosis of polycystic ovaries who do not have a visit with a diagnosis of diabetes in any setting during the measurement period*; and,

Exclusion 2

Individuals with a diagnosis of gestational diabetes or steroid-induced diabetes who do not have a visit with a diagnosis of diabetes mellitus in any setting during the measurement period.

*Adapted from NCQA HEDIS 2013 (2013). Note: HEDIS uses a look-back period of one year prior to the measurement period for both the prescription data and diagnosis.

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%)

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 ACC/AHA/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 #0066: Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy-Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%), exceptions may include medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, patient declined, other patient reasons), or system reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, lack of drug availability, other reasons attributable to the health care system).Although this methodology does not require the external reporting of more detailed exception data, the ACC/AHA/PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The ACC/AHA/PCPI 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 are as follows:

FOR POPULATION 1: Patients who are 18 years and older with a diagnosis of CAD with 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 POPULATION 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)

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

For Claims/Administrative:

Documentation of medical reason(s) for not prescribing aspirin or clopidogrel

• Append modifier to CPT II code 4086F-1P

Documentation of patient reason(s) for not prescribing aspirin or clopidogrel

• Append modifier to CPT II code 4086F-2P

Documentation of system reason(s) for not prescribing aspirin or clopidogrel

• Append modifier to CPT II code 4086F-3P

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

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. This measure was developed using the PCPI exception methodology which 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 this measure, exceptions may include medical reason(s) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system).

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.

Additional details by data source are as follows:

For Registry:

Option 1 -- for patients with LVEF < 40%:

Report Quality Data Code, G9190: Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons)

Report Quality Data Code, G9191: Documentation of patient reason(s) for not prescribing beta-blocker therapy (eg, patient declined, other patient reasons)

Report Quality Data Code, G9192 : Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system)

Option 2 – for patients with prior MI:

Append a modifier to CPT Category II Code:

4008F-1P : Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons)

4008F-2P : Documentation of patient reason(s) for not prescribing beta-blocker therapy (eg, patient declined, other patient reasons)

4008F-3P : Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system)

0074: Chronic Stable Coronary Artery Disease: Lipid Control

See attached for EHR Specifications.

For Claims/Administrative:

Documentation of medical reason(s) for not prescribing a statin (eg, allergy, intolerance to statin medication(s), other medical reasons)

• Append modifier to CPT II code 4XXXF-1P (in development)

Documentation of patient reason(s) for not prescribing a statin (eg, patient declined, other patient reasons)

• Append modifier to CPT II code 4XXXF-2P (in development)

Documentation of system reason(s) for not a statin (eg, financial reasons, other system reasons)

• Append modifier to CPT II code 4XXXF-3P (in development)

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

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. This measure was developed using PCPI exception methodology which 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) Therapy for Left Ventricular Systolic Dysfunction, exceptions may include medical reasons (e.g. hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia), patient, and/or system reasons for not prescribing an ACE/ARB. 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.

Additional details by data source are as follows:

For EHR:

HQMF eMeasure developed and is included in this submission.

For Registry:

Append a modifier to CPT Category II Code:

4010F-1P : Documentation of medical reason(s) for not prescribing angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (eg, 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 angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (eg, patient declined, other patient reasons)

4010F-3P : Documentation of system reason(s) for not prescribing angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (eg, other system reasons)

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

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

Table 5. Diagnostic Exclusions for Diabetes Denominator

Exclusion 1

Polycystic Ovaries

ICD-9-CM: 256.4

ICD-10-CM: E28.2

Exclusion 2

Steroid-Induced Diabetes

ICD-9-CM: 249.xx, 251.8, 962.0

ICD-10-CM: E08.00, E08.01, E08.10, E08.11, E08.21, E08.22, E08.29, E08.311, E08.319, E08.321, E08.329, E08.331, E08.339, E08.341, E08.349, E08.351, E08.359, E08.36, E08.39, E08.40, E08.41, E08.42, E08.43, E08.44, E08.49, E08.51, E08.52, E08.59, E08.610, E08.618, E08.620, E08.621, E08.622, E08.628, E08.630, E08.638, E08.641, E08.649, E08.65, E08.69, E08.8, E08.9, E09.00, E09.01, E09.10, E09.11, E09.21, E09.22, E09.29, E09.311, E09.319, E09.321, E09.329, E09.331, E09.339, E09.341, E09.349, E09.351, E09.359, E09.36, E09.39, E09.40, E09.41, E09.42, E09.43, E09.44, E09.49, E09.51, E09.52, E09.59, E09.610, E09.618, E09.620, E09.621, E09.622, E09.628, E09.630, E09.638, E09.641, E09.649, E09.65, E09.69, E09.8, E09.9, E16.8, T38.0X1A, T38.0X2A, T38.0X3A, T38.0X4A, T50.0X1A, T50.0X2A, T50.0X3A, T50.0X4A

Gestational Diabetes

ICD-9-CM: 648.80, 648.81, 648.82, 648.83, 648.84

ICD-10-CM: O24.410, O24.414, O24.419, O24.420, O24.424, O24.429, O24.430, O24.434, O24.439, O99.810, O99.814, O99.815

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

Not applicable. No risk adjustment or risk stratification

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

No risk adjustment or risk stratification

Not Applicable.

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

No risk adjustment or risk stratification

No risk adjustment or risk stratification

Provided in response box S.15a

0074: Chronic Stable Coronary Artery Disease: Lipid Control

No risk adjustment or risk stratification

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

No risk adjustment or risk stratification

No risk adjustment or risk stratification

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

No risk adjustment or risk stratification

As a process measure, no risk adjustment is necessary.

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

No risk adjustment or risk stratification

Not applicable

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 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.

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Not Applicable.

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

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 and have included these variables as recommended data elements to be collected.

0074: Chronic Stable Coronary Artery Disease: Lipid Control

0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) 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 and have included these variables as recommended data elements to be collected.

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.

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

Depending on the operational use of the measure, measure results may be stratified by:

- State
- Accountable Care Organizations (ACOs)*
- Plan
- Physician Group**
- Age - Divided into 6 categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years
- Race/Ethnicity
- Dual Eligibility

*ACO attribution methodology is based on where the beneficiary is receiving the plurality of his/her primary care services and subsequently assigned to the participating providers.

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

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Rate/proportion better quality = higher score

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Rate/proportion better quality = higher score

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Rate/proportion better quality = higher score

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

Rate/proportion better quality = higher score

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

Rate/proportion better quality = higher score

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

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%)

To calculate performance rates:

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 (ie, 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 (ie, 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) for not prescribing ACE inhibitor or ARB therapy (eg, allergy, intolerance, pregnancy, renal failure due to ACE inhibitor, diseases of the aortic or mitral valve, other medical reasons), patient reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, patient declined, other patient reasons), or system reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, lack of drug availability, other reasons attributable to the health care system)]. 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 (ie, 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. No diagram provided

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

To calculate performance rates:

1) Find the patients who meet the initial patient 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 patient 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 patient population and denominator are identical.

3) Find the patients who quality for exclusions and subtract from the denominator.

4) From the patients within the denominator (after exclusions have been subtracted from the denominator), find the patients who qualify for the Numerator (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

5) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for exception when exceptions have been specified [for this measure: medical reason(s)(e.g., eg, allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons) or patient reason(s)(e.g., economic, social, and/or religious impediments, noncompliance, patient refusal, other patient reason)]. 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 of patients 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. No diagram provided

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

To calculate performance rates:

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 (ie, 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 (ie, 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) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons

attributable to the health care system).] 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 (ie, 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. No diagram provided

0074: Chronic Stable Coronary Artery Disease: Lipid Control

See attached for calculation algorithm.

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

To calculate performance rates:

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 (ie, 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 (ie, 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: Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia); Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB therapy; Documentation of system reason(s) 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 (ie, 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. No diagram provided

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

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

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

To calculate Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus, Medicare administrative claims data and related files, as described in detail in Section S.24, will be required.

Denominator: Individuals at least 18 years of age as of the beginning of the measurement period with diabetes mellitus and at least two prescriptions for ACEIs/ARBs during the measurement period (12 consecutive months).

Create Denominator

1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period.

2. Include individuals who were continuously enrolled in Part D coverage during the measurement year, with no more than a one-month gap in enrollment during the measurement year, or up until their death date if they died during the measurement period.

3. Include individuals who had no more than a one-month gap in Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO enrollment during the current measurement period (FFS individuals only).

4. Of those individuals identified in Step 3, keep those who had:

At least two face-to-face encounters with a principal or secondary diagnosis of diabetes with different dates of service in an outpatient setting or non-acute inpatient setting during the measurement period;

OR

At least one face-to-face encounter with a principal or secondary diagnosis of diabetes in an acute inpatient setting or emergency department setting during the measurement period;

OR

At least one ambulatory prescription claim for insulin or other oral diabetes medication dispensed during the measurement period.

5. Of the individuals identified in Step 4, exclude those with a diagnosis of polycystic ovaries, gestational diabetes, or steroid-induced diabetes who do not have at least one face-to-face visit with a diagnosis of diabetes in any setting during the measurement period.

6. Pull all Part D claims for ACEIs and ARBs. Attach generic name and drug ID to the dataset.

7a. Keep individuals with at least two claims for ACEIs/ARBs on different dates of service during the measurement period.

7b. Of the individuals in Step 5, include those that are also in the ACEIs/ARBs class dataset created in Step 7a. This is the denominator.

7c. For each individual in the dataset created in Step 7b, identify the date of the first prescription in the measurement period as the index event.

Numerator: Individuals in the denominator with at least two prescriptions for ACEIs/ARBs with a PDC of at least 0.8 for ACEIs/ARBs.

Create Numerator

For the individuals in the denominator, calculate the PDC for each individual according to the following methods:

1. Determine the individual's measurement period, defined as the number of days from the index prescription date through the end of the measurement year, or death, whichever

comes first. Index date is the date of the first ACEIs/ARBs prescription in the measurement period.

2. Within the measurement period, count the days the individual was covered by at least one drug in the class based on the prescription fill date and days of supply.

a. Pull Part D claims for drugs in the respective drug class for individuals in the denominators. Attach drug ID and generic name to the datasets.

b. Sort and de-duplicate claims by beneficiary ID, service date, generic name, and descending days' supply. If prescriptions for the same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days' supply.

c. Calculate the number of days covered per individual for each drug class.

i. For prescriptions with a days' supply that extends beyond the end of the measurement period, count only the days for which the drug was available to the individual during the measurement period.

ii. If prescriptions for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

iii. If prescriptions for different drugs (different generic names) overlap, do not adjust the prescription start date.

3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual's measurement period found in Step 1.

An example of SAS code for Steps 1-3 was adapted from PQA and is also available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf.

4. Of the individuals identified in Numerator Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the ACEIs/ARBs class. This is the numerator. Available in attached appendix at A.1

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

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

2467 : Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

0074 : Chronic Stable Coronary Artery Disease: Lipid Control

0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

1522 : ACE/ARB Therapy at Discharge for ICD implant patients with Left Ventricular Systolic Dysfunction

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: While this measure's specifications are harmonized with existing measures where possible, there are several key differences between this measure and other existing related measures. The first group of related measures (NQF #1662, 1522, 0081, 2467)all have a similar focus on the prescription of ACEI/ARBs. However they all have different target populations, with measure #1662 focusing on patients with chronic kidney disease (CKD), measure #1522 being a facility-level measure focusing on patients with an ICD implant, measure #0081 focusing on patients with a diagnosis of heart failure and left ventricular ejection fraction <40%, and measure #2467 focusing on medication adherence among patients with diabetes. This group of measures reflect the importance of ACEI/ARBs among a variety of patient populations, that are distinct from the patient population included in this measure. We believe that the measures are complementary rather than competing, and differences in the measure specifications are a result of the differences in the target patient population. These differences should not result in any additional data collection burden. The second group of related measures (NQF #0067, 0074, and 0070) all focus on different aspects of care for patients with CAD. Measure #0067 focuses on use of antiplatelet therapy, while measure #0074 focuses on LDL control, and measure #0070 focuses on the use of beta-blocker therapy. We view these measures as complementary measures that, when taken together, provide a rounded view of the quality of care for patients with CAD. While these measures share a focus on the patient population with CAD, differences in measure specifications are reflective of the different care processes being targeted in each measure. We don't believe that these differences result in any additional data collection burden.

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.

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

5.1 Identified measures: 0465 : Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: See 5b.1 for more detailed response due to lack of character spaces in this section.

5b.1 If competing, why superior or rationale for additive value: Measure 0067 looks at whether ASA or clopidogrel where prescribed during a 12 month measurement period. Meanwhile, the two existing NQF endorsed measures (#0465 and #0964) focused on whether the medications were prescribed prior to discharge or prior to s

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

5.1 Identified measures: 0071 : Persistence of Beta-Blocker Treatment After a Heart Attack

0083 : Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: Measure 0070 addresses a patient population of patients with CAD and either a recent prior MI or LVSD.

This patient population is also covered in part by the following NQF-endorsed measures: NQF 0071: Persistence of Beta-Blocker Treatment After a Heart Attack and NQF 0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD). The specifications are harmonized to the extent possible. As a result, the denominator specifications for the measures differ where needed based on the differing patient populations.

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

0074: Chronic Stable Coronary Artery Disease: Lipid 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: Related Measures: Maintenance submission of NQF #0074: Drug Therapy for Lowering LDL-Cholesterol

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

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:

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.

2467: Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus

5.1 Identified measures: 0417 : Diabetic Foot & Ankle Care, Peripheral Neuropathy – Neurological Evaluation

0416 : Diabetic Foot & Ankle Care, Ulcer Prevention – Evaluation of Footwear

0057 : Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) testing

0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease

0542 : Adherence to Chronic Medications

0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category

0575 : Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%)

0604 : Adult(s) with diabetes mellitus that had a serum creatinine in last 12 reported months.

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

0630 : Diabetes and Elevated HbA1C – Use of Diabetes Medications

0055 : Comprehensive Diabetes Care: Eye Exam (retinal) performed

0056 : Diabetes: Foot Exam

0059 : Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%)

0062 : Comprehensive Diabetes Care: Medical Attention for Nephropathy

0063 : Comprehensive Diabetes Care: LDL-C Screening

0064 : Comprehensive Diabetes Care: LDL-C Control <100 mg/dL

0061 : Comprehensive Diabetes Care: Blood Pressure Control (<140/90 mm Hg)

1879 : Adherence to Antipsychotic Medications for Individuals with Schizophrenia

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: NQF 2467 is related to and completely harmonized with the four NQF-endorsed measure that use the Proportion of Days Covered (PDC) method of calculating adherence. These four measures include one NQF-endorsed measure by PQA (NQF 0541) and three NQF-endorsed measures by CMS (NQF 0542, 0543, and 1879). For the related measures that are not completely harmonized with NQF 2467, the following sections identify differences between these measures and NQF 2467, rationale, and impact on interpretability and data collection burden. Diabetes Measures by National Committee for Quality Assurance (NCQA) and Optum - NQF 2467 has the same target population (i.e., individuals with diabetes mellitus) as the nine Diabetes Measures developed by the National Committee for Quality Assurance (NCQA) and one measure developed by Optum. The nine NCQA

measures (NQF 0055, 0056, 0057, 0059, 0061, 0062, 0063, 0064, and 0075) and the Optum measure (NQF 0604) are related to, but are not completely harmonized with, NQF 2467. Differences Between NQF 2467 and NCQA and Optum Diabetes Measures -Identification of Individuals with Diabetes Mellitus: NQF 2467 uses the same algorithm for identifying individuals with diabetes as the NCQA and Optum Diabetes Measures, which entails using diagnosis codes and/or drug proxy to identify diabetes mellitus within the inpatient or outpatient claims data. However, NQF 2467 uses only claims for the 12-month measurement period, whereas the NCQA and Optum Diabetes Measures use a look-back period of one year for both the prescription data and diagnosis data. In addition, the Optum measure (NQF 0604) also uses a Disease Registry Input File, if available, to identify patients with diabetes mellitus. Age of Individuals Included in the Measure: NQF 2467 includes individuals who are at least 18 years of age and older as of the beginning of the measurement year, whereas the NCQA and Optum Diabetes Measures include individuals who are 18-75 years as of December 31st of the measurement year. Rationale - NQF 2467 uses a one-year time frame, rather than two years for the NCQA Diabetes measures, which allows more individuals (i.e., those with one year of data) to be included. NQF 2467 includes individuals 18 years and older, rather than 18-75 years for the NCQA and Optum measures, because many Medicare beneficiaries are over 75 years of age, and the guideline recommendations for the medication therapies do not restrict to the 18-75 age group. Impact on interpretability - NQF 2467 is easier to interpret than the NCQA and Optum Diabetes measures because it focuses on a single year and includes all adults 18 years and older. Data collection burden - The target populations of NQF 2467 and the NCQA Diabetes measures are identified using administrative claims or encounter data, so the data collection burden should be similar. The Optum Diabetes measure uses a Disease Registry Input File, if available, and therefore, may require more time and resources than administrative data to identify patients with diabetes mellitus. Diabetes Measures by American Podiatric Medical Association (APMA) - NQF 2467 has the same target population (i.e., individuals with diabetes mellitus) as the two Diabetes Measures by the APMA (NQF 416 and 417). These two APMA measures are related to, but are not completely harmonized with NQF 2467. Differences Between NQF 2467 and APMA Diabetes Measures - Identification of Individuals with Diabetes Mellitus: NQF 2467 uses a different algorithm for identifying individuals with diabetes than the APMA Diabetes Measures. NQF 2467 requires two outpatient or nonacute inpatient visits or one acute inpatient or emergency department visit or a prescription claim for insulin or other anti-diabetic medication. However, the APMA Diabetes Measures require only one claim for an outpatient visit or a nonacute inpatient visit or a selected procedure with a diagnosis of diabetes mellitus, but they do not use acute inpatient data or pharmacy data for identifying individuals with diabetes. Rationale - NQF 2467 requires two claims so the coded outpatient or nonacute inpatient diagnosis is confirmed. Using only one outpatient diagnosis could lead to including individuals who do not actually have diabetes. NQF 2467 uses acute inpatient and pharmacy data in the definition of diabetes, in addition to outpatient and nonacute inpatient data, to capture as many individuals with a diagnosis of diabetes as possible. Impact on interpretability - Requiring two claims for an outpatient or nonacute inpatient diagnosis of diabetes will eliminate individuals who received a diagnosis of diabetes in error, or if it was coded as a rule-out diagnosis. If the additional data sources (i.e., acute inpatient data and pharmacy data) are not used, only individuals who have an outpatient or nonacute inpatient diagnosis of diabetes would be included in the denominator; those with only an inpatient admission or a prescription for diabetes

would not be included. This might result in missing individuals with diabetes. Data collection burden - The target populations of NQF 2467 and the APMA Diabetes measures both are identified using administrative claims or encounter data, so the data collection burden should be similar. Diabetes Measures by ActiveHealth Management - NQF 2467 has the same target population (i.e., individuals with diabetes mellitus) as two Diabetes Measures by ActiveHealth Management, NQF 0619 and 0630. These two ActiveHealth Management measures are related to, but are not completely harmonized with, NQF 2467. Differences Between NQF 2467 and ActiveHealth Management Diabetes Measures - Identification of Individuals with Diabetes Mellitus: NQF 2467 uses an algorithm for identifying individuals with diabetes, which entails using diagnosis codes and/or drug proxy to identify diabetes mellitus within the inpatient or outpatient claims data during the 12-month measurement period. The two ActiveHealth Management Diabetes Measures require four diabetes mellitus diagnoses from administrative claims in the past 12 months, one diabetes mellitus diagnosis from electronic clinical data anytime in the past, one diabetes mellitus diagnosis in the electronic personal health record, or one diabetes mellitus diagnosis from administrative claims in the past five years plus filled prescriptions for diabetes medications, insulin, or a HbA1C value in the past 12 months. In addition, the target populations in the two ActiveHealth Management Diabetes Measures are further restricted either to those with diabetes mellitus and hypertension or proteinuria (NQF 0619), or to those with diabetes mellitus and at least one elevated HbA1C in the past six months (NQF 0630). Age of Individuals Included in the Measure: NQF 2467 includes individuals who are at least 18 years of age as of the beginning of the measurement year, whereas the ActiveHealth Management Diabetes Measures include individuals who are 18-75 years of age. Rationale - The target population of NQF 2467 is defined on the basis of a diagnosis of diabetes mellitus and at least two prescriptions of ACEI/ARBs (Measure B). This denominator definition of NQF 2467 limits the measure to those individuals who have been on the medication long enough for the prescribing provider to determine that ACEI/ARB therapy is appropriate for the patient and is tolerated. NQF 2467 includes individuals 18 years and older, rather than 18-75 years for the ActiveHealth Management Diabetes measures, because many Medicare beneficiaries are over 75 years of age, and the guideline recommendations do not restrict to the 18-75 age group. Impact on interpretability - NQF 2467 is easier to interpret than the ActiveHealth Management Diabetes measures because it estimates adherence to medications among individuals with diabetes mellitus who have had at least two prescriptions, and it includes all adults 18 years and older. Data collection burden - NQF 2467 is based on administrative claims data. The ActiveHealth Management Diabetes measures are based on multiple data sources (e.g., administrative claims, electronic clinical data, patient data from electronic personal health records and feedback, provider survey). Therefore, NQF 2467 presents less of a data collection burden.

5b.1 If competing, why superior or rationale for additive value: Not applicable

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

0076: Optimal Vascular Care
0067: Chronic Stable Coronary Artery Disease: 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

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

American College of Cardiology

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

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease 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

0067: Chronic Stable Coronary Artery Disease: 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 Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records An excel template with formatted columns for data fields is provided. Many medical groups extract the information from their EMR. Registries can be used as a source of information to create the data file; however groups must ensure that all of their eligible patients are included. Paper abstraction forms are provided for those clinics who wish to use them as an interim step to creating their data file. All data is uploaded in electronic format (.csv file) to a HIPAA secure, encrypted and password protected data portal.

Available at measure-specific web page URL identified in S.1 Attachment MNCM_-0076_Optimal_Vascular_Care_Specs_Fields_RA_2-2016.xlsx

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Electronic Clinical Data : Registry This measure is currently being used in the ACCF PINNACLE registry for the outpatient office setting.

Available in attached appendix at A.1 No data dictionary

0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records N/A

No data collection instrument provided Attachment 0068_IVD_Value_Sets_Final.xlsx

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

Administrative claims, Electronic Clinical Data, Paper Medical Records NA

Attachment 0073_IVD_Blood_Pressure_Control_Value_Sets-635634189557555751.xlsx

Level

0076: Optimal Vascular Care

Clinician : Group/Practice

0067: Chronic Stable Coronary Artery Disease: 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

Ambulatory Care : Clinician Office/Clinic

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Ambulatory Care : Clinician Office/Clinic

0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

Ambulatory Care : Clinician Office/Clinic

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

Ambulatory Care : Clinician Office/Clinic

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

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Patients who were prescribed* aspirin or clopidogrel within a 12 month period.

*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.

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.

* Do NOT enter a test date that occurred in yyyy (beyond measurement period). A date in yyyy will create an ERROR upon submission.

* 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 enter a blood pressure result that is reported by or taken by the patient.

* Do NOT enter a blood pressure result obtained in the following care settings: Inpatient, Emergency Department, Urgent Care, other settings designated for surgical or diagnostic procedures or an office visit associated with acute pain or pain of at least moderate severity (greater than or equal to four on a scale of zero to 10).

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.

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.

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.

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 mm/dd/yyyy and mm/dd/yyyy (five year range including measurement period)

* Do NOT enter a test date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission.

* 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 mm/dd/yyyy and mm/dd/yyyy (five year range including measurement period).

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 at any time during the measurement period.

Please see Appendix C for a list of statin medications.

1 = Yes, patient was prescribed a statin medication or a statin medication was reviewed and active on the patient's medication list.

2 = No, patient was not prescribed a statin medication and a statin medication was not reviewed and active on the patient's medication list.

The following exception to statin medication use will be identified by the portal based on the submitted LDL values

* Patients aged 21 to 75 years and an LDL result less than 40 mg/dL

A blank field will create an ERROR upon submission.

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.

* Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission.

* 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 a statin medication during the measurement period (Field 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 = Other provider documented reason: drug interaction (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.

* Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission.

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 D 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 reviewed and active on the patient's medication list.

2 = No, patient was not prescribed a daily aspirin product or antiplatelet medication and one was not reviewed and active on the patient's medication list.

Aspirin/narcotic combination medications do not qualify as a daily aspirin product.

Blank fields will cause an ERROR upon submission.

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.

* Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission.

* 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.

* Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period) will create an ERROR upon submission.

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.

* Do NOT enter a date that occurred in yyyy. A date in yyyy (beyond measurement period)will create an ERROR upon submission.

* 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.

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

For Claims/Administrative: Report CPT 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.

Refer to Table IVD-E to identify medications for oral anti-platelet therapy.

ORAL ANTI-PLATELET THERAPIES (TABLE IVD-E)

PRESCRIPTIONS

- Aspirin
- Clopidogrel
- Aspirin-dipyridamole
- Prasugrel
- Ticagrelor
- Ticlopidine

MEDICAL RECORD

Patients who had documentation of routine use of aspirin or another antiplatelet during the measurement year.

At a minimum, documentation in the medical record must include a note indicating the date when aspirin or another antiplatelet was prescribed or documentation of prescription from another treating physician.

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

ADMINISTRATIVE CLAIMS

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

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

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

See the corresponding excel document for the following value sets:

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

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 to 75 with ischemic vascular disease who have at least two visits for this diagnosis in the last two years (established patient) with at least one visit in the last 12 months.

0067: Chronic Stable Coronary Artery Disease: 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 pri

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.

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)

Ages:

* 18-75 years of age as of January 1 of the measurement period

Established Patient with Diagnosis:

* Patients are identified as having a diagnosis of ischemic vascular disease (IVD) if they've had at least two face-to-face visits with an eligible provider in an eligible specialty with a diagnosis of IVD (Ischemic Vascular Disease Value Set) during the current or prior measurement period

Event:

* At least one face-to-face visit with an eligible provider in an eligible specialty for any reason during the measurement period

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

See 'Registry Supplemental Resources' attached in appendix field A.1 for data dictionary and form.

Codes that are applicable for the denominator are:

Diagnosis for coronary artery disease (ICD-9-CM) 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82

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, 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

Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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

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.

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, died or diagnosis coded in error.

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

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.

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

* Documentation that diagnosis was coded in error

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

For Claims/Administrative:

Documentation of medical reason(s) for not prescribing aspirin or clopidogrel

• Append modifier to CPT II code 4086F-1P

Documentation of patient reason(s) for not prescribing aspirin or clopidogrel

• Append modifier to CPT II code 4086F-2P

Documentation of system reason(s) for not prescribing aspirin or clopidogrel

• Append modifier to CPT II code 4086F-3P

0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

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

The statistical risk model is one of Actual to Expected methodology and is estimated using a logistic model implemented in SAS Procedure Glimmix that accounts for the measure's non-continuous (binary) nature.

Actual to Expected methodology is where the actual measure result remains unaltered, instead a risk adjusted comparison is created based on same proportions of the risk factors that the clinic has.

With Actual to Expected, since the expected is not a stable variable for all clinics, it is not valid to compare the clinic's confidence interval to the expected value. Instead to test whether or not there was a statistically significant difference between the expected value and the actual value achieved by the clinic, a one population proportions test was used. This method is employed to test the proportion of optimally managed patients attributed to a clinic compared to a specified value for that clinic. In the MNCM case the specified value is an expected rate calculated taking into account the overall state rate and adjusted for risk factors specific to the measure.

Variables available to testing in a risk adjustment model for this measure include several demographic variables (age, gender, zip, and insurance product as a proxy for socioeconomic status) and clinical variables (depression and diabetes). Currently, only age and product have the statistical strength (t-test) to be included in the risk adjustment model MNCM is evaluating race/ethnicity, country of origin, primary language as variables in the next year.

(See data dictionary Tab = Risk Adjustment).

Available in attached Excel or csv file at S.2b

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

No risk adjustment or risk stratification

Not Applicable.

0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

No risk adjustment or risk stratification

N/A

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

No risk adjustment or risk stratification

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 2014 Health Care Disparities Report, a hard copy report available on our corporate website at http://mncm.org/wp-content/uploads/2015/03/2014-Health-Care-Disparities-Report-Final.pdf. This report notes a gap in outcomes of ten percentage points between ischemic vascular disease patients in public programs versus other purchasers.

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Not Applicable.

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

Rate/proportion better quality = higher score

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

Rate/proportion better quality = higher score

0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

Rate/proportion better quality = higher score

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

Rate/proportion better quality = higher score

Algorithm

0076: Optimal Vascular Care

This measure is calculated by submitting a file of individual patient values (e.g. blood pressure, tobacco status, etc) to a HIPAA secure data portal. Programming within the data portal determines if each patient is a numerator case and then a rate is calculated for each clinic site. Please also refer to the measure calculation algorithms submitted within the data dictionary for this measure.

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

Numerator logic is as follows:

Blood Pressure Component:

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

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

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

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

Assess next component.

Cholesterol Statin Use Component:

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

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

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

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

Does the patient have a valid contraindication/ exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, ends stage renal disease on

dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with documentation of trying a statin at least once in the last 5 years)? If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.

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

Assess next component.

Tobacco-Free Component:

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

Daily Aspirin/ Anti-platelet Component:

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

Does the patient have a valid contraindication/ exception to aspirin anti-platelet use defined as one of the following: anti-coagulant medication, history of gastrointestinal bleed, history of intracranial bleed, allergy, or physician documented reasons related to: risk of drug interaction, use of NSAIDS, uncontrolled HTN or gastro-intestinal reflux disease. If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.

Note: Patients are either on daily aspirin (indicated/ prescribed/ ordered) or an 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. Available at measure-specific web page URL identified in S.1

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

To calculate performance rates:

1) Find the patients who meet the initial patient 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 patient 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 patient population and denominator are identical.

3) Find the patients who quality for exclusions and subtract from the denominator.

4) From the patients within the denominator (after exclusions have been subtracted from the denominator), find the patients who qualify for the Numerator (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

5) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for exception when exceptions have

been specified [for this measure: medical reason(s)(e.g., eg, allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons) or patient reason(s)(e.g., economic, social, and/or religious impediments, noncompliance, patient refusal, other patient reason)]. 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 of patients 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. No diagram provided

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). No diagram provided

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.

Submission items

0076: Optimal Vascular Care

5.1 Identified measures: 0068 : Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

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

0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease

0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

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 Adherence to statin therapy for individuals with cardiovascular disease. This medication claims based measure's denominator is more aligned with our intent (coronary, cerebrovascular and peripheral artery disease), however 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.

0076 Optimal Vascular Care is superior to the newly submitted measure for consideration because its measure construct additionally includes:

* contraindications and exceptions to statin use

* risk adjustment; actual and expected rates reported

* allowable exclusions for potentially frail older adults age 65 to 75 (hospice or palliative services, nursing home, death)

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

5.1 Identified measures: 0465 : Perioperative Anti-platelet Therapy for Patients undergoing Carotid Endarterectomy

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: See 5b.1 for more detailed response due to lack of character spaces in this section.

5b.1 If competing, why superior or rationale for additive value: Measure 0067 looks at whether ASA or clopidogrel where prescribed during a 12 month measurement period. Meanwhile, the two existing NQF endorsed measures (#0465 and #0964) focused on whether the medications were prescribed prior to discharge or prior to s

0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

5.1 Identified measures: 0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

0142 : Aspirin prescribed at discharge for AMI

0076 : Optimal Vascular Care

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 myo

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 (ED) arrival to time of transfer to another facility for acute coronary intervention (ACI) for ST-segment myocardial infarction (STEMI) patients that require a percutaneous coronary intervention (PCI). The measure is calculated using chart-abstracted data, on a rolling quarterly basis, and is publically reported, in aggregate, for one calendar year. The measure has been publically reported, annually by CMS as a component of its Hospital Outpatient Quality Reporting (HOQR) Program since 2008.

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

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

Available at measure-specific web page URL identified in S.1 Attachment NQF_0290_MeasureCodeSet.xlsx

0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

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

Available at measure-specific web page URL identified in S.1 Attachment NQF_0288_MeasureCodeSet.xlsx

Level

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

Facility, Population : National

0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

Facility, Population : National

Setting

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

Hospital/Acute Care Facility

0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

Hospital/Acute Care Facility

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 ED arrival to transfer to another facility for ACI.

The numerator includes patients with AMI and ST-segment elevation on the ECG performed closest to 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 ACI.

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

The measure population is defined by six E/M codes and 18 ICD-10-CM diagnosis codes included in the code set for this measure; these detailed lists can be found in the Excel workbook provided for Section S.2b.

The measure population includes patients with AMI and ST-segment elevation on the ECG performed closest to 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. Patients are included in the measure population if:

- Initial ECG Interpretation is equal to “Yes”;
- 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 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

Time (in minutes) from ED arrival to transfer to another facility for ACI.

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.6 and Section S.9 are the same.

The measure population is defined by six E/M codes and 18 ICD-10-CM diagnosis codes included in the code set for this measure; these detailed lists can be found in the Excel workbook provided for Section S.2b.

The measure population includes patients with AMI and ST-segment elevation on the ECG performed closest to 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 ACI. Patients are included in the measure population if:

- Initial ECG Interpretation is equal to "Yes";
- 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

Patients are excluded from this measure if they are under 18 years of age, did not have an initial ECG interpretation, received fibrinolytic therapy while in the ED, or were transferred for reasons other than ACI.

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

Cases are excluded for any patients that meet any of the following criteria: Patients less than 18 years of age

- Initial ECG Interpretation is equal to "No"
- Fibrinolytic Administration is equal to "Yes"
- Transfer for Acute Coronary Intervention is equal to "[2] There was documentation the patient was admitted to observation." or "[3] There was documentation the patient was transferred from this facility's emergency department to another facility for reasons other than acute coronary intervention, or the specific reason for transfer was unable to be determined from medical record documentation."

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

Not applicable; this measure does not risk adjust.

Provided in response box S.15a

0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

No risk adjustment or risk stratification

Not applicable; this measure does not risk adjust.

Stratification

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

Not applicable; this measure does not stratify its results.

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

This measure calculates the time (in minutes) from ED arrival to transfer to another facility for ACI. The patient population is determined from two algorithms; the AMI Hospital Outpatient Population algorithm as well as the OP-3 measure-specific algorithm:

1. Check E/M Code; if on Table 1.0 (in the Excel workbook provided for Section S.2b), proceed.
2. Check Discharge Code; include patients with discharge code of 4a or 4d.
3. Calculate Patient Age (Outpatient Encounter Date - Birthdate).
4. Check Patient Age; if >= 18, proceed.
5. Check ICD-10-CM Principal Diagnosis Code; if on Table 1.1 (in the Excel workbook provided for Section S.2b), proceed to the measure-specific algorithm.
6. Check Initial ECG Interpretation. If Initial ECG Interpretation equals YES, the case will proceed to Fibrinolytic Administration.
7. Check Fibrinolytic Administration. If Fibrinolytic Administration equals NO, the case will proceed to Transfer for Acute Coronary Intervention.
8. Check Transfer for Acute Coronary Intervention. If Transfer for Acute Coronary Intervention equals 1 (i.e., there is documentation the patient was transferred from this facility's emergency department to another facility specifically for ACI), the case will proceed to ED Departure Date.
9. Check ED Departure Date. If ED Departure Date equals Non-UTD Value, the case will proceed to ED Departure Time.
10. Check ED Departure Time. If ED Departure Time equals Non-UTD Value, the case will proceed to Arrival Time.
11. Check Arrival Time. If Arrival Time equals Non-UTD Value, the case will proceed to the Measurement Value.
12. 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).
13. Check the Measurement Value. If Measurement Value is greater than or equal to 0 minutes, the case will proceed to Reason for Not Administering Fibrinolytic Therapy.
14. Check Reason for Not Administering Fibrinolytic Therapy. 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.

15. Check Reason for Not Administering Fibrinolytic Therapy. 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. 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. Available at measure-specific web page URL identified in S.1

0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival

This measure calculates the percentage of ED AMI patients with ST-segment elevation on the ECG closest to arrival time receiving fibrinolytic therapy during the ED stay and having a time from ED arrival to fibrinolysis of 30 minutes or less. The patient population is determined from two algorithms; the AMI Hospital Outpatient Population algorithm as well as the NQF #0288 measure-specific algorithm. The measure is calculated based on four consecutive quarters of hospital outpatient claims data, as follows:

1. Check E/M Code; if on Table 1.0 (in the Excel workbook provided for Section S2b), proceed
2. Check Discharge Code; include patients with discharge code of 4a or 4d
3. Calculate Patient Age (Outpatient Encounter Date - Birthdate)
4. Check Patient Age; if >= 18, proceed
5. Check ICD-10-CM Principal Diagnosis Code; if on Table 1.1 (in the Excel workbook provided for Section S2b), proceed to the measure-specific algorithm
6. Check Initial ECG Interpretation; if “Yes,” proceed
7. Check Fibrinolytic Administration; if “Yes,” proceed, record as the denominator
8. Check Fibrinolytic Administration Date; if a Non-Unable to Determine (UTD) value, proceed
9. Check Fibrinolytic Administration Time; if a Non-UTD value, proceed
10. Check Arrival Time; if a Non-UTD value, proceed
11. Calculate Time to Fibrinolysis (Fibrinolytic Administration Time minus Arrival Time)
12. Check Time to Fibrinolysis; if >= 0 min and <= 30 min, record as the numerator. If > 30 min and = 360 min, proceed
13. Check Reason for Delay in Fibrinolytic Therapy; if “Yes,” patient is excluded from measure population. If “No,” record in the denominator. Aggregate denominator and numerator counts by Medicare provider number
14. Measure = numerator counts / denominator counts [The value should be recorded as a percentage] Available at measure-specific web page URL identified in S.1

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

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 #0290 and NQF #0288 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). While the care settings for the HOQR and HIQR measures differ, all three 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 three measures is different. NQF #0288 focuses on the timely administration of fibrinolytic therapy, NQF# 0290 focuses on the timely transfer of patients who require a PCI, and 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 #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.

Comparison of NQF #2906, NQF #0070, NQF # 0071, NQF #0083, and NQF #2908

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)
0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)
0071: Persistence of Beta-Blocker Treatment After a Heart Attack
0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Steward

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

PCPI Foundation

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

AMA-convened Physician Consortium for Performance Improvement

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

National Committee for Quality Assurance

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

AMA-PCPI

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

AMA-PCPI

Description

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) 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 a prior MI or a current or prior LVEF <40% who were prescribed beta-blocker therapy

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) 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 a prior MI or a current or prior LVEF <40% who were prescribed beta-blocker therapy

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

The percentage of patients 18 years of age and older during the measurement year who were hospitalized and discharged from July 1 of the year prior to the measurement year to June 30 of the measurement year with a diagnosis of acute myocardial infarction (AMI) and who received persistent beta-blocker treatment for six months after discharge.

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Percentage of patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40% who were prescribed beta-blocker therapy either within a 12 month period when seen in the outpatient setting or at hospital discharge

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Percentage of patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40% who were prescribed beta-blocker therapy either within a 12 month period when seen in the outpatient setting or at hospital discharge

Type

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Process

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Process

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

Intermediate Clinical Outcome

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Process

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Process

Data Source

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record Not applicable.

No data collection instrument provided Attachment PCPI_2906_CMS145_CAD-BB_ValueSets.xlsx

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Electronic Clinical Data, Electronic Clinical Data : Registry Not applicable.

No data collection instrument provided No data dictionary

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Pharmacy This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Management Organization

No data collection instrument provided Attachment 0071_PBH_Value_Sets_Final.xlsx

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Electronic Clinical Data, Electronic Clinical Data : Registry

No data collection instrument provided

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Electronic Clinical Data : Electronic Health Record

No data collection instrument provided Attachment 0083_AMAPCPI_HF-BB_ValueSets_June2015-635712735683880063-635917579207929971.xlsx

Level

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Clinician : Group/Practice, Clinician : Individual

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Clinician : Group/Practice, Clinician : Individual

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

Health Plan, Integrated Delivery System

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Clinician : Group/Practice, Clinician : Individual

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Clinician : Group/Practice, Clinician : Individual

Setting

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

Ambulatory Care : Clinician Office/Clinic

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Ambulatory Care : Clinician Office/Clinic, Home Health, Hospital/Acute Care Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Ambulatory Care : Clinician Office/Clinic, Home Health, Hospital/Acute Care Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other Domiciliary

Numerator Statement

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Patients who were prescribed beta-blocker therapy

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

See details in multiple formats

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

Patients who had a 180-day course of treatment with beta-blockers post discharge.

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

See details in multiple formats

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Patients who were prescribed* beta-blocker therapy** either within a 12 month period when seen in the outpatient setting or at hospital discharge

*Prescribed may include:

Outpatient setting: prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list

Inpatient setting: prescription given to the patient for beta-blocker therapy at discharge OR beta-blocker therapy to be continued after discharge as documented in the discharge medication list

**Beta-blocker therapy should include bisoprolol, carvedilol, or sustained release metoprolol succinate. (see technical specifications for additional information on medications)

Numerator Details

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

For EHR:

HQMF eMeasure developed and is included in this submission.

We have provided the following definitions and/or guidance for convenience; please see HQMF eMeasure for complete details related to the specification.

NUMERATOR DEFINITION:

Prescribed may include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list.

NUMERATOR GUIDANCE:

Beta-blocker therapy:

- For patients with prior MI, beta-blocker therapy includes any agent within the beta-blocker drug class. As of 2015, no recommendations or evidence are cited in current stable ischemic heart disease guidelines for preferential use of specific agents

- For patients with prior LVEF <40%, beta-blocker therapy includes the following: bisoprolol, carvedilol, or sustained release metoprolol succinate

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

For Registry:

Option 1 – for patients with LVEF < 40%:

Definitions:

Prescribed- May include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list.

Beta-blocker Therapy- For patients with prior LVEF < 40%, beta-blocker therapy includes the following: bisoprolol, carvedilol, or sustained release metoprolol succinate.

Report Quality Data Code, G9189: Beta-blocker therapy prescribed or currently being taken

Option 2 – for patients with prior MI:

Definitions:

Prescribed- May include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list.

Beta-blocker Therapy- For patients with prior MI, beta-blocker therapy includes any agent within the beta-blocker drug class. As of 2014, no recommendations or evidence are cited in current stable ischemic heart disease guidelines for preferential use of specific agents.

Report CPT Category II Code, 4008F: Beta-blocker therapy prescribed or currently being taken

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

ADMINISTRATIVE

Patients who had a 180-day course of treatment with beta-blockers post-discharge. Post discharge refers to patients discharged from an acute inpatient setting with an AMI (AMI Value Set) from July 1 of the year prior to the measurement year through June 30 of the measurement year.

In order to identify patients with “persistent” beta-blocker treatment, identify all patients in the denominator population whose dispensed days supply is =135 days in the 180-day measurement interval. The measure defines persistence of treatment as at least 75 percent of the days supply filled.

To determine continuity of treatment during the 180-day period, identify all prescriptions filled within the 180-day measurement interval, and add the number of allowed gap days (up to 45 days) to the number of treatment days for a maximum of 180 days (i.e., 135 treatment days + 45 gap days = 180 days).

To account for patients who are on beta-blockers prior to admission, factor those prescriptions into adherence rates if the actual treatment days fall within the 180-day measurement interval.

DEFINITIONS

Treatment days (days covered) - The actual number of calendar days covered with prescriptions within the specified 180-day measurement interval (i.e., a prescription of a 90-day supply dispensed on the 100th day will have 80 days counted in the 180-day interval).

180-day measurement interval - The 180 day period that includes the discharge date and the 179 days after discharge.

TABLE PBH-B BETA-BLOCKER MEDICATIONS

DESCRIPTION / PRESCRIPTION

Noncardioselective beta-blockers / Carvedilol; Labetalol; Nadolol; Penbutolol; Pindolol; Propranolol; Timlol; Sotalol

Cardioselective beta-blockers / Acebutolol; Atenolol; Betaxolol; Bisoprolol; Metoprolol; Nebivolol

Antihypertensive combinations / Atenolol-chlorthalidone; Bendroflumethiazide-nadolol; Bisoprolol-hydrochlorothiazide; Hydrochlorothiazide-metoprolol; Hydrochlorothiazide-propranolol

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

For Registry:

Definitions:

Prescribed – Outpatient Setting - May include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list.

Prescribed – Inpatient Setting: May include prescription given to the patient for beta-blocker therapy at discharge OR beta-blocker therapy to be continued after discharge as documented in the discharge medication list.

Beta-blocker Therapy - For patients with prior LVEF < 40%, beta-blocker therapy should include bisoprolol, carvedilol, or sustained release metoprolol succinate.

Report Quality Data Code, G8450: Beta-blocker therapy prescribed

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

For EHR:

HQMF eMeasure developed and is included in this submission.

Denominator Statement

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) 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 a prior MI (within the past 3 years) or a current or prior LVEF <40%

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

See details in multiple formats

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

Patients 18 years of age and older as of December 31 of the measurement year who were hospitalized and discharged from July 1 of the year prior to the measurement year to June 30 of the measurement year with diagnosis of AMI. See question S.9 Denominator

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

See details in multiple formats

2908: Heart Failure (HF): Beta-Blocker 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%

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

Denominator Details

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

For EHR:

HQMF eMeasure developed and is included in this submission.

We have provided the following definitions and/or guidance for convenience; please see HQMF eMeasure for complete details related to the specification.

DENOMINATOR DEFINITION:

Prior Myocardial Infarction (MI) for denominator 2 is limited to those occurring within the past 3 years.

DENOMINATOR GUIDANCE:

The requirement of "Count >=2 of Encounter, Performed" is to establish that the eligible professional has an existing relationship with the patient.

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

DENOMINATOR DEFINITION:

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

Prior Myocardial Infarction (MI) for denominator 2 is limited to those occurring within the past 3 years.

DENOMINATOR NOTES:

The requirement of “Count >=2 of Encounter, Performed“ is to establish that the eligible professional has an existing relationship with the patient.

For Registry:

Option 1 -- for patients with LVEF < 40%:

Patient aged >= 18 years

AND

Diagnosis for coronary artery disease (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82

Diagnosis for coronary artery disease (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I20.0, I20.1, I20.8, I20.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, 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

OR

History of cardiac surgery (CPT): 33140, 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92920, 92924, 92928, 92933, 92937, 92941, 92943

AND

Patient encounter(s) during reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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

AND

Two Denominator Eligible Visits

AND

Left ventricular ejection fraction (LVEF) < 40%: G8694

Option 2 – for patients with prior MI:

Patient aged >= 18 years

AND

Diagnosis for coronary artery disease (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82

Diagnosis for coronary artery disease (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I20.0, I20.1, I20.8, I20.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, 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

OR

History of cardiac surgery (CPT): 33140, 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92920, 92924, 92928, 92933, 92937, 92941, 92943

AND

Diagnosis for myocardial infarction (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 412

Diagnosis for myocardial infarction (ICD-10-CM) [for use 10/01/2015-12/31/2015]: I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I22.0, I22.1, I22.2, I22.8, I22.9, I24.1, I25.2

AND

Patient encounter(s) during reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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

AND

Two Denominator Eligible Visits

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

Patients discharged from an acute inpatient setting with an AMI (AMI Value Set) from July 1 of the year prior to the measurement year through June 30 of the measurement year.

Use only facility claims to identify denominator events (including readmissions or direct transfers). Do not use professional claims.

If a patient has more than one episode of AMI from July 1 of the year prior to the measurement year through June 30 of the measurement year, only include the first discharge.

Transfers to acute facilities: Include hospitalizations in which the patient was transferred directly to another acute inpatient facility for any diagnosis. Count the discharge from the subsequent acute inpatient facility, not the initial discharge. The discharge date from the facility to which the patient was transferred must occur on or before

June 30 of the measurement year.

Transfers to nonacute facilities. Exclude from the denominator, hospitalizations in which the patient was transferred directly to a nonacute care facility for any diagnosis.

Readmissions: If the patient was readmitted to an acute or nonacute care facility for any diagnosis, include the patient in the denominator and use the discharge date from the original hospitalization.

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.

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

DENOMINATOR DEFINITION:

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

DENOMINATOR NOTES:

To meet this measure, it must be reported for all heart failure patients a minimum of once during the measurement period when seen in the outpatient setting AND reported at each hospital discharge during the measurement period.

The requirement of “Count >=2 of Encounter, Performed“ is to establish that the eligible professional has an existing relationship with the patient.

For Registry:

Option 1, Outpatient Setting:

Patients aged >=18 years

AND

Diagnosis for heart failure (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9

Diagnosis for heart failure (ICD-10-CM) [for use 10/01/2015-12/31/2015]: 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, I50.9

AND

Patient encounter(s) during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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

AND

Two Denominator Eligible Visits

AND

Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function: G8923

Option 2, Inpatient Setting:

Patients aged >= 18 years

AND

Diagnosis for heart failure (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9

Diagnosis for heart failure (ICD-10-CM) [for use 10/01/2015-12/31/2015]: 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, I50.9

AND

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

AND

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

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

For EHR:

HQMF eMeasure developed and is included in this submission.

DENOMINATOR DEFINITION:

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

DENOMINATOR NOTES:

To meet this measure, it must be reported for all heart failure patients a minimum of once during the measurement period when seen in the outpatient setting AND reported at each hospital discharge during the measurement period.

The requirement of “Count >=2 of Encounter, Performed“ is to establish that the eligible professional has an existing relationship with the patient.

Exclusions

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons)

Documentation of patient reason(s) for not prescribing beta-blocker therapy (eg, patient declined, other patient reasons)

Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system)

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

See details in multiple formats

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

Exclude from the denominator, hospitalizations in which the patient was transferred directly to a nonacute care facility for any diagnosis.

Exclude patients who are identified as having an intolerance or allergy to beta-blocker therapy. Any of the following anytime during the patient's history through the end of the continuous enrollment period meet criteria:

- Asthma (Asthma Value Set).

- COPD (COPD Value Set).

- Obstructive chronic bronchitis (Obstructive Chronic Bronchitis Value Set).

- Chronic respiratory conditions due to fumes and vapors (Chronic Respiratory Conditions Due to Fumes/Vapors Value Set).

- Hypotension, heart block >1 degree or sinus bradycardia (Beta-Blocker Contraindications Value Set).

- A medication dispensing event indicative of a history of asthma (Table PBH-D).

- Intolerance or allergy to beta-blocker therapy.

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

See details in multiple formats

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent)

Documentation of patient reason(s) for not prescribing beta-blocker therapy

Documentation of system reason(s) for not prescribing beta-blocker therapy

Exclusion Details

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

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. This measure was developed using the PCPI exception methodology which 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 this measure, exceptions may include medical reason(s) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system). Where examples of exceptions are included in the measure language, value sets for these examples are developed and included in the eSpecifications. 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.

Additional details by data source are as follows:

For EHR:

HQMF eMeasure developed and is included in this submission.

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

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. This measure was developed using the PCPI exception methodology which 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 this measure, exceptions may include medical reason(s) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system).

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.

Additional details by data source are as follows:

For Registry:

Option 1 -- for patients with LVEF < 40%:

Report Quality Data Code, G9190: Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons)

Report Quality Data Code, G9191: Documentation of patient reason(s) for not prescribing beta-blocker therapy (eg, patient declined, other patient reasons)

Report Quality Data Code, G9192 : Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system)

Option 2 – for patients with prior MI:

Append a modifier to CPT Category II Code:

4008F-1P : Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerance, other medical reasons)

4008F-2P : Documentation of patient reason(s) for not prescribing beta-blocker therapy (eg, patient declined, other patient reasons)

4008F-3P : Documentation of system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system)

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

MEDICATIONS TO IDENTIFY EXCLUSIONS (History of Asthma)

DESCRIPTION / PRESCRIPTION

Bronchodilator combinations / Albuterol-ipratropium; Budesonide-formoterol; Fluticasone-salmeterol; Mometasone-formoterol

Inhaled corticosteroids / Beclomethasone; Budesonide; Ciclesonide; Flunisolide; Fluticasone; Fluticasone CFC free; Mometasone; Triamcinolone

Due to the extensive volume of codes associated with identifying denominator exclusions for this measure we are attaching a separate file with code value sets (except for medications to identify patients with a history of asthma). See code value sets located in question S.2b.

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

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. This measure was developed using the PCPI exception methodology which 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 Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction, exceptions may include Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent), Documentation of patient reason(s) for not prescribing beta-blocker therapy, or Documentation of system reason(s) for not prescribing beta-blocker 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.

Additional details by data source are as follows:

For EHR:

HQMF eMeasure developed and is included in this submission.

For Registry:

Report Quality Data Code G8451: Beta-Blocker Therapy for LVEF < 40% not prescribed for reasons documented by the clinician (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent, allergy, intolerance, other medical reasons, patient declined, other patient reasons, other reasons attributable to the healthcare system)

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

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. This measure was developed using the PCPI exception methodology which 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 Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction, exceptions may include Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent), Documentation of patient reason(s) for not prescribing beta-blocker therapy, or Documentation of system reason(s) for not prescribing beta-blocker therapy. Where examples of exceptions are included in the measure language, value sets for these examples are developed and included in the eSpecifications. 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.

Additional details by data source are as follows:

For EHR:

HQMF eMeasure developed and is included in this submission.

Risk Adjustment

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

No risk adjustment or risk stratification

No risk adjustment or risk stratification

Provided in response box S.15a

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

No risk adjustment or risk stratification

No risk adjustment or risk stratification

Provided in response box S.15a

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

No risk adjustment or risk stratification

N/A

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

No risk adjustment or risk stratification

n/a

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

No risk adjustment or risk stratification

n/a

Stratification

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

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 and have included these variables as recommended data elements to be collected.

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

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 and have included these variables as recommended data elements to be collected.

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

N/A

0083: Heart Failure (HF): Beta-Blocker 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 and have included these variables as recommended data elements to be collected.

2908: Heart Failure (HF): Beta-Blocker 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 and have included these variables as recommended data elements to be collected.

Type Score

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Rate/proportion better quality = higher score

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

Rate/proportion better quality = higher score

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

Rate/proportion better quality = higher score

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Rate/proportion better quality = higher score

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Rate/proportion better quality = higher score

Algorithm

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

To calculate performance rates:

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 (ie, 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 (ie, 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) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system).] 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 (ie, 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. No diagram provided

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

To calculate performance rates:

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 (ie, 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 (ie, 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) (eg, allergy, intolerance, other medical reasons), patient reason(s) (eg, patient declined, other patient reasons) or system reason(s) for not prescribing beta-blocker therapy (eg, other reasons attributable to the health care system).] 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 (ie, 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. No diagram provided

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

STEP 1. Determine the eligible population. To do so, identify patients who meet all specified criteria.

-AGES: 18 years and older as of December 31 of the measurement year.

-EVENT/DIAGNOSIS: Identify patients who were discharged from an acute setting with an AMI (AMI Value Set) from July 1 of the year prior to the measurement year through June 30 of the measurement year. Use only facility claims.

STEP 2: Exclude patients who meet the exclusions criteria. SEE S.10 AND S.11 FOR DENOMINATOR EXCLUSION CRITERIA AND DETAILS.

STEP 3: Determine the number of patients in the eligible population who were given a 180-day course of treatment with beta blockers post discharge.

STEP 4: Identify patients whose dispensed days supply is = 135 days in the 180-day measurement interval

STEP 5: Calculate the rate by dividing the numerator (Step 4) by the denominator (after exclusions) (Step 2). No diagram provided

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

To calculate performance rates:

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 (ie, 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 (ie, 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: Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent); Documentation of patient reason(s) for not prescribing beta-blocker therapy; Documentation of system reason(s) for not prescribing beta-blocker 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 (ie, 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. No diagram provided

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

To calculate performance rates:

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 (ie, 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 (ie, 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: Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent); Documentation of patient reason(s) for not prescribing beta-blocker therapy; Documentation of system reason(s) for not prescribing beta-blocker 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 (ie, 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. No diagram provided

Submission items

2906: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

5.1 Identified measures: 0071 : Persistence of Beta-Blocker Treatment After a Heart Attack

0083 : Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

2908 : Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: eMeasure 2906 addresses a patient population of patients with CAD and either a recent prior MI or LVSD. This patient population is also covered in part by the following NQF-endorsed measures: NQF 0071: Persistence of Beta-Blocker Treatment After a Heart Attack and NQF 0083 and 2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD). The specifications are harmonized to the extent possible. As a result, the denominator specifications for the measures differ where needed based on the differing patient populations. Measure 0070 is the registry version of this eMeasure and is completely harmonized.

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

0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

5.1 Identified measures: 0071 : Persistence of Beta-Blocker Treatment After a Heart Attack

0083 : Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: Measure 0070 addresses a patient population of patients with CAD and either a recent prior MI or LVSD. This patient population is also covered in part by the following NQF-endorsed measures: NQF 0071: Persistence of Beta-Blocker Treatment After a Heart Attack and NQF 0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD). The specifications are harmonized to the extent possible. As a result, the denominator specifications for the measures differ where needed based on the differing patient populations.

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

0071: Persistence of Beta-Blocker Treatment After a Heart Attack

5.1 Identified measures: 0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

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

NCQA's current Persistence of Beta Blocker Treatment After a Heart Attack measure (NQF measure 0071) uses health plan-reported data to assess the percentage of patients 18 years of age and older during the measurement year who wer

0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

5.1 Identified measures: 0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

0071 : Persistence of Beta-Blocker Treatment After a Heart Attack

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: Measure 0083 addresses a therapy which is also covered in part by the following NQF-endorsed measures: NQF 0071: Persistence of Beta-Blocker Treatment After a Heart Attack and NQF 0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy—Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%). The specifications are harmonized to the extent possible. However, measure 0083 is focused on a patient population with heart failure and therefore the denominator specifications for the measures differ.

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

2908: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

5.1 Identified measures: 0070 : Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)

0071 : Persistence of Beta-Blocker Treatment After a Heart Attack

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: Measure 0083 addresses a therapy which is also covered in part by the following NQF-endorsed measures: NQF 0071: Persistence of Beta-Blocker Treatment After a Heart Attack and NQF 0070: Coronary Artery Disease (CAD): Beta-Blocker Therapy—Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%). The specifications are

harmonized to the extent possible. However, measure 0083 is focused on a patient population with heart failure and therefore the denominator specifications for the measures differ.

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

Comparison of NQF #2939, NQF #0074, NQF #0964, NQF #0118, NQF #1519, NQF #0696, NQF #2472, and NQF #0439

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease
0074: Chronic Stable Coronary Artery Disease: Lipid Control
0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients
0118: Anti-Lipid Treatment Discharge
1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)
0696: STS CABG Composite Score
2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy
0439: STK-06: Discharged on Statin Medication

Steward

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

American College of Cardiology

0074: Chronic Stable Coronary Artery Disease: Lipid Control

American College of Cardiology

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

American College of Cardiology

0118: Anti-Lipid Treatment Discharge

The Society of Thoracic Surgeons

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

Society for Vascular Surgery

0696: STS CABG Composite Score

The Society of Thoracic Surgeons

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

American College of Cardiology

0439: STK-06: Discharged on Statin Medication

The Joint Commission

Description

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

Percentage of patients 18-75 year of age with clinical atherosclerotic cardiovascular disease (ASCVD) who were offered moderate-to high-intensity statin.

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who have a LDL-C result <100 mg/dL OR patients who have a LDL-C result >=100 mg/dL and have a documented plan of care to achieve LDL-C <100mg/dL, including at a minimum the prescription of a statin

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

Patients undergoing PCI who receive prescriptions for all medications (aspirin, P2Y12 and statins) for which they are eligible for at discharge

0118: Anti-Lipid Treatment Discharge

Percent of patients aged 18 years and older undergoing isolated CABG who were discharged on a lipid lowering statin

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

Percentage of patients aged 18 years and older undergoing infrainguinal lower extremity bypass who are prescribed a statin medication at discharge. This measure is proposed for both hospitals and individual providers.

0696: STS CABG Composite Score

The STS CABG Composite Score comprises four domains consisting of 11 individually NQF-endorsed cardiac surgery measures: Domain 1) Absence of Operative Mortality – Proportion of patients (risk-adjusted) who do not experience operative mortality. Operative mortality is defined as death during the same hospitalization as surgery or after discharge but within 30 days of the procedure; Domain 2) Absence of Major Morbidity – Proportion of patients (risk-adjusted) who do not experience any major morbidity. Major morbidity is defined as having at least one of the following adverse outcomes: 1. reoperations for any cardiac reason, 2. renal failure, 3. deep sternal wound infection, 4. prolonged ventilation/intubation, 5. cerebrovascular accident/permanent stroke; Domain 3) Use of Internal Mammary Artery (IMA) – Proportion of first-time CABG patients who receive at least one IMA graft; Domain 4) Use of All Evidence-based Perioperative Medications – Proportion of patients who receive all required perioperative medications for which they are eligible. The required perioperative medications are: 1. preoperative beta blockade therapy, 2. discharge anti-platelet medication, 3. discharge beta blockade therapy, and 4. discharge anti-lipid medication.

All measures are based on audited clinical data collected in a prospective registry. Participants receive a score for each of the domains, plus an overall composite score. The overall composite score is created by “rolling up” the domain scores into a single number. In addition to receiving a numeric score, participants are assigned to rating categories designated by one star (below average performance), two stars (average performance), or three stars (above average performance). Scores and star ratings are currently publicly reported on STS and Consumer Reports websites.

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

Percentage of patients aged 18 years and older for whom PCI is performed who are prescribed optimal medical therapy at discharge

0439: STK-06: Discharged on Statin Medication

"This measure captures the proportion of ischemic stroke patients who are prescribed a statin medication at hospital discharge.

This measure is a part of a set of eight nationally implemented measures that address stroke care (STK-1: Venous Thromboembolism (VTE) Prophylaxis, STK-2: Discharged on Antithrombotic Therapy, STK-3: Anticoagulation Therapy for Atrial Fibrillation/Flutter, STK-4: Thrombolytic Therapy, STK-5: Antithrombotic Therapy By End of Hospital Day 2, STK-8:

Stroke Education, and STK-10: Assessed for Rehabilitation) that are used in The Joint Commission's hospital accreditation and Disease-Specific Care certification programs."

Type

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

Process

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Process

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

Composite

0118: Anti-Lipid Treatment Discharge

Process

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

Process

0696: STS CABG Composite Score

Composite

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

Composite

0439: STK-06: Discharged on Statin Medication

Process

Data Source

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

Electronic Clinical Data : Registry See 'Registry Supplemental Resources' attached in appendix field A.1.

Available in attached appendix at A.1 No data dictionary

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Electronic administrative data/claims, Electronic Clinical Data, Electronic Health/Medical Record, Registry data This measure, in its previous specifications, is currently being used in the ACCF PINNACLE registry for the outpatient office setting.

URL Attachment PCPI_CAD-2_LipidControl NQF 0074.pdf

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

Electronic Clinical Data : Registry National Cardiovascular Data Registry (NCDR®) CathPCI Registry®

Available at measure-specific web page URL identified in S.1 Attachment CathPCI_v4_CodersDictionary_4.4-635230042811280622.pdf

0118: Anti-Lipid Treatment Discharge

Electronic Clinical Data : Registry STS Adult Cardiac Surgery Database Version 2.73; STS Adult Cardiac Surgery Database Version 2.8 went live on July 1, 2014.

Available at measure-specific web page URL identified in S.1 No data dictionary

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

Electronic Clinical Data : Registry The Society for Vascular Surgery Vascular Quality Initiative Registry

The Vascular Study Group of New England Registry

Attachment LEB-defs-v.01.09_v1.doc

0696: STS CABG Composite Score

Electronic Clinical Data : Registry STS Adult Cardiac Surgery Database – Version 2.73; STS Adult Cardiac Surgery Database Version 2.8 went live on July 1, 2014.

Available at measure-specific web page URL identified in S.1 Attachment S.15._Isolated_CABG_Risk_Model_Specifications-635570268276168986.docx

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

Electronic Clinical Data : Registry NCDR® CathPCI Registry® v4.4 Diagnostic Catheterization Data

Collection Form

Available in attached appendix at A.1 No data dictionary

0439: STK-06: Discharged on Statin Medication

Electronic Clinical Data, Paper Medical Records Each data element in the data dictionary includes suggested data sources. The data are collected using contracted Performance Measurement Systems (vendors) that develop data collection tools based on the measure specifications. The tools are verified and tested by Joint Commission staff to confirm the accuracy and conformance of the data collection tool with the measure specifications. The vendor may not offer the measure set to hospitals until verification has been passed. No data collection instrument provided Attachment. Appendix_A.1-635878758534627046.xls

Level

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

Clinician : Individual

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Clinicians : Group, Clinicians : Individual

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

Facility

0118: Anti-Lipid Treatment Discharge

Facility, Clinician : Group/Practice

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

Facility, Clinician : Group/Practice, Clinician : Individual

0696: STS CABG Composite Score

Facility, Clinician : Group/Practice

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

Clinician : Individual

0439: STK-06: Discharged on Statin Medication

Facility, Population : National

Setting

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

Ambulatory Care : Clinician Office/Clinic

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Assisted Living, Ambulatory Care : Clinic, Group homes, Home, Ambulatory Care : Hospital Outpatient, Nursing home (NH) /Skilled Nursing Facility (SNF), Ambulatory Care : Office

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

Hospital/Acute Care Facility

0118: Anti-Lipid Treatment Discharge

Hospital/Acute Care Facility

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

Hospital/Acute Care Facility

0696: STS CABG Composite Score

Hospital/Acute Care Facility

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

Hospital/Acute Care Facility

0439: STK-06: Discharged on Statin Medication

Hospital/Acute Care Facility

Numerator Statement

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

Patients in the denominator who have been offered* high-intensity statin† OR have been offered* moderate-intensity statin†.

Definitions:

*A statin is “offered” if it is prescribed or if a patient reason exception for not being prescribed a statin is documented.

†Moderate-intensity and high-intensity statin doses are defined in Table 5 of the 2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adult http://content.onlinejacc.org/article.aspx?articleid=1879710)

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Patients who have a LDL-C result <100 mg/dL

OR

Patients who have a LDL-C result >=100 mg/dL and have a documented plan of care1 to achieve LDL-C <100 mg/dL, including at a minimum the prescription of a statin within a 12 month period

Definitions:

*Documented plan of care may also include: documentation of discussion of lifestyle modifications (diet, exercise); scheduled re-assessment of LDL-C

*Prescribed may include prescription given to the patient for a statin at one or more visits in the measurement period OR patient already taking a statin as documented in current medication list

Numerator Instructions:

The first numerator option can be reported for patients who have a documented LDL-C < 100 mg/dL at any time during the measurement period.

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

Patients who receive all medications for which they are eligible.

1. Aspirin prescribed at discharge (if eligible for aspirin as described in denominator)

AND

2. P2Y12 agent (clopidogrel, prasurgel, or ticlopidine) prescribed at discharge (if eligible for P2Y12 as described in denominator)

AND

3. Statin prescribed at discharge (if eligible for statin as described in denominator)

0118: Anti-Lipid Treatment Discharge

Number of patients undergoing isolated CABG who were discharged on a lipid lowering statin

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

Patients undergoing infrainguinal lower extremity bypass who are prescribed a statin medication at discharge.

0696: STS CABG Composite Score

Please see Appendix

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

Patients who are prescribed* all of the medications, for which they are eligible, at discharge

*Prescribed may include prescription given to the patient for medications at discharge OR patient already taking medications as documented in current medication list

0439: STK-06: Discharged on Statin Medication

See details in multiple formats

Numerator Details

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

See Supplemental Resources attached in Appendix Field A.1.

0074: Chronic Stable Coronary Artery Disease: Lipid Control

See attached for EHR Specifications.

For Claims/Administrative: Report CPT II Code Patients who have LDL-C <100 mg/dL 3048F Most recent LDL-C <100 mg/dL

OR

Patients who have LDL-C =100 mg/dL and have a documented plan of care to achieve LDL-C <100 mg/dL, including prescription of lipid-lowering therapy

• 3049F Most recent LDL-C 100-129 mg/dL

OR

• 3050F Most recent LDL-C greater than or equal to 130 mg/dL

AND

• 05XXF (code in development) Lipid lowering therapy plan of care documented

AND

• 4002F Statin therapy prescribed

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

If eligible for Aspirin and given, then code “Yes”

If eligible for Aspirin and not given, then code “No, not given”

If eligible for P2Y12 and given, then code then “Yes”

If eligible for P2Y12 and not given, then code “No, not given”

If eligible for statin and given, then code “Yes”

If eligible for statin and not given, then code “No, not given”

If any “No, not given” present, then performance not met. Else, performance met.

Note: Contraindicated and those participating in blinded studies are also considered as exceptions and performance met.

0118: Anti-Lipid Treatment Discharge

Number of isolated CABG procedures in which discharge lipid lowering medication [DCLipid (STS Adult Cardiac Surgery Database Version 2.73)] is marked "yes" and lipid lowering discharge medication type [DCLipMT (STS Adult Cardiac Surgery Database Version 2.73)] is marked "statin"

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

ANY registry that includes anatomic details or CPT procedure codes is required to identify patients for numerator inclusion. The Society for Vascular Surgery Vascular Quality Initiative (SVS VQI) and the Vascular Study Group of New England (VSGNE)are examples of registries which capture detailed anatomic information, but the measure is not limited to these registries. It could also be used by other registries that capture this same information. No other registries are required for computation. Infrainguinal lower extremity bypass is defined as a bypass beginning at or below the external iliac artery and extending into the ipsilateral leg. It includes procedures with CPT codes 35656, 35556, 35583, 35666, 35566, 35585, 35671, 35571, 35587. The numerator is calculated as the number of patients age 18 and over undergoing such a procedure who are prescribed a statin medication at the time of discharge, which is also captured in the above registries.

0696: STS CABG Composite Score

Please see Appendix

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

Electronic Specifications for registry reporting are included in the Appendix, attached to Section A.1 in the 'Additional' tab.

0439: STK-06: Discharged on Statin Medication

One data element is used to calculate the numerator:

• Statin Medication Prescribed at Discharge – Documentation that a statin medication was prescribed at hospital discharge. Allowable values: Yes, No/UTD or unable to determine from medical record documentation.

Patients are eligible for the numerator population when the allowable value equals "yes" for the data element.

Denominator Statement

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

All patients 18-75 years of age with clinical ASCVD* who were seen within a 12-month period. This measure is designed to apply to chronic care populations and does not apply to patients in acute care hospitals.

Definition:

*Clinical ASCVD includes acute coronary artery syndromes, a history of MI, stable or unstable angina, coronary or other arterial revascularization, stroke, TIA, and peripheral arterial disease presumed to be of atherosclerotic origin.

0074: Chronic Stable Coronary Artery Disease: Lipid Control

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

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

Patients surviving hospitalization who are eligible to receive any of the three medication classes:

1) Eligibile for aspirin (ASA): Patients undergoing PCI who do not have a contraindication to aspirin documented

AND

2) Eligible for P2Y12 agent (clopidogrel, prasugrel, or ticlopidine): Patients undergoing PCI with stenting who do not have a contraindication to P2Y12 agent documented

AND

3) Eligible for statin therapy: Patients undergoing PCI who do not have a contraindication to statin therapy.

0118: Anti-Lipid Treatment Discharge

All patients undergoing isolated CABG

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

All patients aged 18 years and older undergoing lower extremity bypass as defined above who are discharged alive, excluding those patients who are intolerant to statins.

0696: STS CABG Composite Score

Please see Appendix

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

All patients aged 18 years and older for whom PCI is performed who are eligible for any of the following medications (ie, patient has no contraindication, allergy, intolerance):

- Aspirin
- P2Y12 inhibitor (only for PCIs with stenting)
- Statin

0439: STK-06: Discharged on Statin Medication

See details in multiple formats

Denominator Details

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

See 'Registry Supplemental Resources' attached in appendix field A.1 for data dictionary and form.

0074: Chronic Stable Coronary Artery Disease: Lipid Control

See attached for EHR Specifications.

For Claims/Administrative: See coding tables attached for coding (ICD-9-CM, ICD-10-CM, CPT)

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

0118: Anti-Lipid Treatment Discharge

Number of isolated CABG procedures excluding cases with an in-hospital mortality or cases for which discharge anti-lipid treatment use was contraindicated. The SQL code used to create the function used to identify cardiac procedures is provided in the Appendix.

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

ANY registry that includes anatomic details or CPT procedure codes is required to identify patients for denominator inclusion. The Society for Vascular Surgery Vascular Quality Initiative and the Vascular Study Group of New England are examples of registries that capture detailed anatomic information, but the measure is not limited to these registries. Infrainguinal lower extremity bypass is defined as a bypass beginning at or below the external iliac artery and extending into the ipsilateral leg. It includes procedures with CPT codes 35656, 35556, 35583, 35666, 35566, 35585, 35671, 35571, 35587. Only patients who are discharged alive are included in the denominator, and patients who are intolerant to statins are excluded, as described below.

0696: STS CABG Composite Score

Please see Appendix

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

The denominator population is identified as patients who have a PCI performed (procedure codes included below) and who are eligible for at least one discharge medication. Eligibility for medications and electronic specifications for registry reporting are included in the Appendix, attached to Section A.1 in the 'Additional' tab.

CPT Codes:

92920 Percutaneous transluminal coronary angioplasty; single major coronary artery or branch

92924 Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; single major coronary artery or branch

92928 Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; single major coronary artery or branch

92933 Percutaneous transluminal coronary atherectomy, with intracoronary stent, with coronary angioplasty when performed; single major coronary artery or branch

92937 Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; single vessel

92941 Percutaneous transluminal revascularization of acute total/subtotal occlusion during acute myocardial infarction, coronary artery or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty, including aspiration thrombectomy when performed, single vessel

92943 Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; single vessel

SNOMED-CT Codes:

11101003 Percutaneous transluminal coronary angioplasty

15256002 Transmyocardial revascularization by laser technique

175066001 Percutaneous transluminal balloon angioplasty of bypass graft of coronary artery

232727003 Percutaneous directional coronary atherectomy

232728008 Percutaneous low speed rotational coronary atherectomy

232729000 Percutaneous high speed rotational coronary atherectomy

397193006 Percutaneous transluminal coronary angioplasty by rotoablation

397431004 Percutaneous transluminal coronary angioplasty with rotoablation, single vessel

414089002 Emergency percutaneous coronary intervention

415070008 Percutaneous coronary intervention

428488008 Placement of stent in anterior descending branch of left coronary artery

429499003 Placement of stent in circumflex branch of left coronary artery

429639007 Percutaneous transluminal balloon angioplasty with insertion of stent into coronary artery

431759005 Percutaneous transluminal atherectomy using fluoroscopic guidance

75761004 Infusion of intra-arterial thrombolytic agent with percutaneous transluminal coronary angioplasty

80762004 Infusion of intra-arterial thrombolytic agent with percutaneous transluminal coronary angioplasty, multiple vessels

85053006 Percutaneous transluminal coronary angioplasty, multiple vessels

91338001 Infusion of intra-arterial thrombolytic agent with percutaneous transluminal coronary angioplasty, single vessel

0439: STK-06: Discharged on Statin Medication

"Nine data elements are used to calculate the denominator:

1. Admission Date – The month, day and year of admission to acute inpatient care.

2. Birthdate - The month, day and year the patient was born.

3. Clinical Trial - Documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with stroke were being studied. Allowable values: Yes or No/UTD.

4. Comfort Measures Only – The earliest day the physician/APN/PA documented comfort measures only after hospital arrival.

Allowable values: 1 (Day 0 or 1); 2 (Day 2 or after); 3 (Timing Unclear); 4 (Not Documented/UTD).

5. Discharge Date – The month day and year the patient was discharged from acute care, left against medical advice or expired during the stay.

6. Discharge Disposition – The place or setting to which the patient was discharged on the day of hospital discharge.

7. Elective Carotid Intervention – Documentation demonstrates that the current admission is solely for the performance of an elective carotid intervention (e.g., elective carotid endarterectomy, angioplasty, carotid stenting).

Allowable values: Yes or No/UTD.

8. ICD-10-CM Principal Diagnosis Code - The International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) code associated with the diagnosis established after study to be chiefly responsible for occasioning the admission of the patient for this hospitalization.

9. Reason For Not Prescribing Statin Medication at Discharge – Documentation of a reason for not prescribing a statin medication at discharge.

Allowable values: Yes or No/UTD.

Population: Discharges with ICD-10-CM Principal Diagnosis Code for ischemic stroke as defined in Appendix A, Table 8.1."

Exclusions

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

Exceptions: Documentation of medical reason(s) for not prescribing a statin (e.g., allergy, intolerance to statin[s], other medical reasons).

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Documentation of medical reason(s) for not prescribing a statin (eg, allergy, intolerance to statin medication(s), other medical reasons)

Documentation of patient reason(s) for not prescribing a statin (eg, patient declined, other patient reasons)

Documentation of system reason(s) for not prescribing a statin (eg, financial reasons, other system reasons)

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

Discharge status of expired; patients who left against medical advice, patients discharged to hospice or for whom comfort care measures only is documented; patients discharged to other acute hospital

0118: Anti-Lipid Treatment Discharge

Cases are removed from the denominator if there was an in-hospital mortality or if discharge anti-lipid treatment was contraindicated.

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

Chart documentation that patient was not an eligible candidate for statin therapy due to known drug intolerance, or patient died before discharge.

0696: STS CABG Composite Score

Please see Appendix

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

Patients who expired

Patients who left against medical advice

Patient discharged to hospice or for whom comfort care measures only is documented

Patient discharged to other acute care hospital

0439: STK-06: Discharged on Statin Medication

See details in multiple formats

Exclusion Details

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

The ACC and AHA distinguish between measure exceptions and measure exclusions. Exclusions arise when the intervention required by the numerator is not appropriate for a group of patients who are otherwise included in the initial patient or eligible population of a measure (i.e. the denominator). Exclusions are absolute and are to be removed from the denominator of a measure and therefore clinical judgment does not enter the decision.

Measure Exceptions:

Denominator Exceptions are used to remove a patient from the denominator of the [performance measure when the patient does no receive a therapy or service AND that therapy or service would not be appropriate due to the patient specific reasons, the patient would otherwise meet the denominator. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics or patients. For this measure exception may include medical reasons for not prescribing a statin (e.g., allergy,

intolerance to statin[s],other medical reasons). There are no patient or system reasons that would remove a patient from the denominator.

0074: Chronic Stable Coronary Artery Disease: Lipid Control

See attached for EHR Specifications.

For Claims/Administrative:

Documentation of medical reason(s) for not prescribing a statin (eg, allergy, intolerance to statin medication(s), other medical reasons)

• Append modifier to CPT II code 4XXXF-1P (in development)

Documentation of patient reason(s) for not prescribing a statin (eg, patient declined, other patient reasons)

• Append modifier to CPT II code 4XXXF-2P (in development)

Documentation of system reason(s) for not a statin (eg, financial reasons, other system reasons)

• Append modifier to CPT II code 4XXXF-3P (in development)

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

NCDR has a clear distinction between absolute “Exclusions” (e.g., death, transfer) and relative “Exceptions”, (e.g., contraindications). While patients with exclusions are always automatically removed from the denominator and numerator, exceptions allow clinicians the opportunity to identify an intervention/process/medication as not clinically indicated based on the unique patient scenario.

Each of the three medications incorporated into this composite may be coded as Yes (medication prescribed), No (medication not prescribed), Blinded (pt. involved in a clinical trial, medication type unavailable for data entry), and Contraindicated (used to capture many of the medical exceptions used in measure #2452).

0118: Anti-Lipid Treatment Discharge

Mortality Discharge Status (MtDCStat), Mortality Date (MtDate), and Discharge Date (DischDt) indicate an in-hospital mortality; DCLipid is marked as "Contraindicated"

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

Chart documentation that patient was not an eligible candidate for statin therapy due to known drug intolerance, or patient died before discharge. These data are captured in the SVS VQI and VSGNE registries.

0696: STS CABG Composite Score

Please see Appendix

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

According to the ACCF/AHA/PCPI methodology, exclusions arise when the intervention required by the numerator is not appropriate for a group of patients who are otherwise included in the initial patient or eligible population of a measure (ie, the denominator). Exclusions are absolute and are to be removed from the denominator of a measure and therefore clinical judgment does not enter the decision. For this measure, exclusions include patients who died, etc. etc. Exclusions, including applicable value sets, are included in the measure specifications.

Additional details by data source are as follows:

The electronic specifications for registry reporting necessary to capture the excluded population are included in the Appendix, attached to Section A.1 in the 'Additional' tab.

0439: STK-06: Discharged on Statin Medication

"• The patient age in years is equal to the Discharge Date minus the Birthdate. Patients less than 18 years are excluded.

• The Length of Stay (LOS) in days is equal to the Discharge Date minus the Admission Date. If the LOS is greater than 120 days, the patient is excluded.

• Patients with Comfort Measures Only allowable value of 1 (Day 0 or 1), 2 (Day 2 or after), and 3 (Timing unclear) are excluded.

• Patients are excluded if ""Yes"" is selected for Clinical Trial.

• Patients with ICD-10-PCS procedure codes for carotid intervention procedures as identified in Appendix A, Table 8.3,, if medical record documentation states that the patient was admitted for the elective performance of this procedure are excluded.

• Patients with Discharge Disposition allowable value of 2 (Hospice-Home), 3 (Hospice-Health Care Facility), 4 (Acute Care Facility), 6 (Expired), or 7 (Left Against Medical Advice/AMA) are excluded.

• Patients are excluded if ""Yes"" is selected for Reason For Not Prescribing Statin Medication at Discharge."

Risk Adjustment

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

No risk adjustment or risk stratification

Not Applicable

0074: Chronic Stable Coronary Artery Disease: Lipid Control

No risk adjustment or risk stratification

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

No risk adjustment or risk stratification

0118: Anti-Lipid Treatment Discharge

No risk adjustment or risk stratification

N/A

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

No risk adjustment or risk stratification

NA

0696: STS CABG Composite Score

Statistical risk model

The details of risk adjustment model development were published in 2009. The list of candidate risk predictors were selected by a surgeon panel based on prior research and clinical expertise. Initial models were selected using a backwards approach with a significance criterion of 0.001 for removal. Several variables were preselected and forced

into the models. These included all of the continuous variables (age, BSA, date of surgery [in 6-month intervals], creatinine, ejection fraction), plus sex and dialysis.

Shahian DM, O'Brien SM, Filardo G, Ferraris VA, et al. The Society of Thoracic Surgeons 2008 cardiac surgery risk models: part 1--coronary artery bypass grafting surgery. Ann Thorac Surg. 2009 Jul;88(1 Suppl):S2-22.

The definitions of all the variables in the final 2008 CABG model are provided below. (Note: not all were included in the final model for this measure.)

Variable Definition

_____

Intercept = 1 for all patients

Atrial fibrillation = 1 if patient has history of preoperative atrial fibrillation, = 0 otherwise

Age = Patient age in years

Age function 1 = max (age–50, 0)

Age function 2 = max (age–60, 0)

Age by reop function = Age function 1 if surgery is a reoperation, = 0 otherwise

Age by status function = Age function 1 if status is emergent or salvage, = 0 otherwise

BSA function 1 = max (1.4, min [2.6, BSA]) – 1.8

BSA function 2 = (BSA function 1)2

CHF but not NYHA IV = 1 if patient has CHF and is not NYHA class IV, = 0 otherwise

CHF and NYHA IV = 1 if patient has CHF and is NYHA class IV, = 0 otherwise

CLD mild = 1 if patient has mild chronic lung disease, = 0 otherwise

CLD moderate = 1 if patient has moderate chronic lung disease, = 0 otherwise

CLD severe = 1 if patient has severe chronic lung disease, = 0 otherwise

Creatinine function 1 = max (0.5, min [creatinine, 5.0]) if patient is not on dialysis, = 0 otherwise

Creatinine function 2 = max ([creatinine function 1] – 1.0, 0)

Creatinine function 3 = max ([creatinine function 1] – 1.5, 0)

CVD without prior CVA = 1 if patient has history of CVD and no prior CVA, = 0 otherwise

CVD and prior CVA= 1 if patient has history of CVD and a prior CVA, = 0 otherwise

Diabetes, noninsulin = 1 if patient has diabetes not treated with insulin, = 0 otherwise

Diabetes, insulin = 1 if patient has diabetes treated with insulin, = 0 otherwise

Ejection fraction function = max (50 – ejection fraction, 0)

Female = 1 if patient is female, = 0 otherwise

Female by BSA function 1 = BSA function 1 if female, = 0 otherwise

Female by BSA function 2 = BSA function 2 if female, = 0 otherwise

Hypertension = 1 if patient has hypertension, = 0 otherwise

IABP or inotropes = 1 if patient requires IABP or inotropes preoperatively, = 0 otherwise

Immunosuppressive treatment = 1 if patient given immunosuppressive therapy within 30 days, = 0 otherwise

Insufficiency, aortic = 1 if patient has at least moderate aortic insufficiency, = 0 otherwise

Insufficiency, mitral = 1 if patient has at least moderate mitral insufficiency, = 0 otherwise

Insufficiency, tricuspid = 1 if patient has at least moderate tricuspid insufficiency, = 0 otherwise

Left main disease = 1 if patient has left main disease, = 0 otherwise

MI 1 to 21 days = 1 if history of MI 1 to 21 days prior to surgery, = 0 otherwise

MI > 6 and < 24 hours = 1 if history of MI >6 and <24 hours prior to surgery, = 0 otherwise

MI 6 hours

= 1 if history of MI 6 hours prior to surgery, = 0 otherwise

No. diseased vessel function = 2 if triple-vessel disease, = 1 if double-vessel disease, = 0 otherwise

PCI 6 hours

= 1 if patient had PCI 6 hours prior to surgery, = 0 otherwise

Peripheral vascular disease = 1 if patient has peripheral vascular disease, = 0 otherwise

Race black = 1 if patient is black, = 0 otherwise

Race Hispanic = 1 if patient is nonblack Hispanic, = 0 otherwise

Race Asian = 1 if patient is nonblack, non-Hispanic, and is Asian, = 0 otherwise

Reop, 1 previous operation = 1 if patient has had exactly 1 previous CV surgery, = 0 otherwise

Reop, 2 previous operations

= 1 if patient has had 2 or more previous CV surgeries, = 0 otherwise

Shock = 1 if patient was in shock at time of procedure, = 0 otherwise

Status urgent = 1 if status is urgent, = 0 otherwise

Status emergent = 1 if status is emergent (but not resuscitation), = 0 otherwise

Status salvage = 1 if status is salvage (or emergent plus resuscitation), = 0 otherwise

Stenosis aortic = 1 if patient has aortic stenosis, = 0 otherwise

Unstable angina = 1 if patient has unstable angina, no MI within 7 days of surgery, = 0 otherwise

Available in attached Excel or csv file at S.2b

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

No risk adjustment or risk stratification

Not applicable.

0439: STK-06: Discharged on Statin Medication

No risk adjustment or risk stratification

Not applicable.

Stratification

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

We encourage that the results of this measure be stratified by race, ethnicity, administrative sex, and payer, consistent with the data elements collected in the Pinnacle Registry.

0074: Chronic Stable Coronary Artery Disease: Lipid Control

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

N/A

0118: Anti-Lipid Treatment Discharge

N/A

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

Not required

0696: STS CABG Composite Score

N/A

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

We encourage the results of this measure be stratified by race, ethnicity, administrative sex, and payer.

0439: STK-06: Discharged on Statin Medication

Not applicable, the measure is not stratified.

Type Score

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

Rate/proportion better quality = higher score

0074: Chronic Stable Coronary Artery Disease: Lipid Control

Rate/proportion better quality = higher score

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

Rate/proportion better quality = higher score

0118: Anti-Lipid Treatment Discharge

Rate/proportion better quality = higher score

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

Rate/proportion better quality = higher score

0696: STS CABG Composite Score

Rate/proportion better quality = higher score

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

Rate/proportion better quality = higher score

0439: STK-06: Discharged on Statin Medication

Rate/proportion

better quality = higher score

Algorithm

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

To calculate performance rates:

1) Find the patients who meet the initial patient 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 patient 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 patient population and denominator are identical.

3) Find the patients who quality for exclusions and subtract from the denominator.

4) From the patients within the denominator (after exclusions have been subtracted from the denominator), find the patients who qualify for the Numerator (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.

5) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for exception when exceptions have been specified [for this measure: medical reason(s) (e.g., allergy, intolerance to statin[s], other medical reasons)]. 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 of patients 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.

For calculation algorithm, see 'Registry Supplemental Resources' attached in appendix field A.1. Available in attached appendix at A.1

0074: Chronic Stable Coronary Artery Disease: Lipid Control

See attached for calculation algorithm.

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

1) Remove patients whose discharge status is expired

2) Check if given patient is eligible for 1 of the 3 medication therapies.

3) If eligible for at least 1 medication, then keep this patient.

4) If not eligible for any of the 3 medications, then patient is removed from eligibility.

5)

If eligible for Aspirin and given, then code "Yes"

If eligible for Aspirin and not given, then code "No, not given"

If eligible for Aspirin but contraindicated, then code “contraindicated/blinded”

If eligible for P2Y12 and given, then code then “Yes”

If eligible for P2Y12 and not given, then code “No, not given”

If eligible for P2Y12 but contraindicated, then code “contraindicated/blinded”

If eligible for statin and given, then code “Yes”

If eligible for statin and not given, then code “No, not given”

If eligible for statin but contraindicated, then code “contraindicated/blinded”

6) If any “No, not given” present, then performance not met. Else, performance met.

0118: Anti-Lipid Treatment Discharge

Please refer to numerator and denominator sections for detailed information. No diagram provided

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

All patients age 18 and older undergoing infrainguinal LEB who were prescribed statin at discharge divided by (all patients over 18 undergoing infrainguinal LEB minus those intolerant to statins minus those who died before discharge).

0696: STS CABG Composite Score

Please see discussion under section S.4 and attached articles. No diagram provided

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

To calculate performance rates:

1) Find the patients who meet the initial patient population (ie, the general group of patients that a set of performance measures is designed to address).

2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator. (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical.

3) Find the patients who quality for exclusions and subtract from the denominator.

4) From the patients within the denominator, find the patients who qualify for the Numerator (ie, 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

If the patient does not meet the numerator, this case represents a quality failure. Available in attached appendix at A.1

0439: STK-06: Discharged on Statin Medication

"1. Start processing. Run cases that are included in the Stroke (STK) Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.

2. Check ICD-10-CM Principal Diagnosis Code

a. If the ICD-10-CM Principal Diagnosis Code is not on Table 8.1, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

b. If the ICD-10-CM Principal Diagnosis Code is on Table 8.1, continue processing and proceed to Discharge Disposition.

3. Check Discharge Disposition

a. If Discharge Disposition equals 2, 3, 4, 6, 7 the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

b. If Discharge Disposition equals 1, 5, 8, continue processing and proceed to Comfort Measures Only.

4. Check Comfort Measures Only

a. If Comfort Measures Only is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If Comfort Measures Only equals 1, 2, or 3, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

c. If Comfort Measures Only equals 4, continue processing and proceed to Clinical Trial.

5. Check Clinical Trial

a. If Clinical Trial is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If Clinical Trial equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.

c. If Clinical Trial equals No, continue processing and proceed to Elective Carotid Intervention.

6. Check admitted for Elective Carotid Intervention

a. If Elective Carotid Intervention is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If Elective Carotid Intervention equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

c. If Elective Carotid Intervention equals No, continue processing and proceed to Pre-Arrival Lipid-Lowering Agent.

7. Check Statin Medication Prescribed at Discharge

a. If Statin Medication Prescribed at Discharge is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If Statin Medication Prescribed at Discharge equals Yes, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.

c. If Statin Medication Prescribed at Discharge equals No, continue processing and check Reason for Not Prescribing Statin Medication at Discharge.

8. Check Reason for Not Prescribing Statin Medication at Discharge

a. If Reason for Not Prescribing Statin Medication at Discharge is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If Reason for Not Prescribing Statin Medication at Discharge equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

c. If Reason for Not Prescribing Statin Medication at Discharge equals No, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing."

Available at measure-specific web page URL identified in S.1

Submission items

2939: Statin Therapy in Patients with Clinical Atherosclerotic Disease

5.1 Identified measures: 1519 : Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

0439 : STK-06: Discharged on Statin Medication

0118 : Anti-Lipid Treatment Discharge

0074 : Chronic Stable Coronary Artery Disease: Lipid Control

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: See discussion under 5b.1

5b.1 If competing, why superior or rationale for additive value: This new measure on statin therapy for patients with ASCVD is based on the 2013 ACC/AHA guidelines, which focus on optimal treatment of statins. Most measures on statin therapy that are NQF-endorsed address subsets of the patients included in this broad measure and do not yet reflect the updated recommendations and/or are intended to be used in a different setting, level of analysis or different data source. Specific comments for each measure are below:

- 964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients (ACC)
- 2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy (ACC)

Measures 118 and 696 are STS registry-based measures and Measure 1519 is a SVS registry-based measure; thus, the data source and level of analysis are the same across all of the four measures. These measures are intended to be used at the time of hospital discharge, which differs from this new measure. In addition, based on the information provided on QPS, these measures do not reflect the updated recommendations for statin therapy.

Measure 439 is similar to the three measures discussed above with the exception of data source (electronic clinical data, paper medical records) and level of analysis (hospital/acute care facility). Similar concerns with the lack of alignment with the new ACC/AHA guidelines exist.

ACC/AHA believe that this new measure should be considered superior as it is aligned with the current recommendations and underlying evidence and is broadly applicable.

0074: Chronic Stable Coronary Artery Disease: Lipid 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: Related Measures: Maintenance submission of NQF #0074: Drug Therapy for Lowering LDL-Cholesterol

0964: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients

5.1 Identified measures: 0639 : Statin Prescribed at Discharge

0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

0074 : Chronic Stable Coronary Artery Disease: Lipid Control

0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease

0569 : ADHERENCE TO STATINS

0631 : Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy

0142 : Aspirin prescribed at discharge for AMI

0118 : Anti-Lipid Treatment Discharge

0068 : Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: see below for discussion of harmonization and competition.

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

0543: Adherence to Statin Therapy for Individuals with Coronary Artery Disease is not specific to patients undergoing a PCI. This measure uses claims data and it is not evaluated at the point of discharge. This is a measure using claims data and determines whether patients are filing their prescription. The measure we propose evaluates if the prescription has been provided to the patients.

0569: Adherence to Statin is similar to measure 0543 listed above and is not specific to patients undergoing PCI. This is a measure using claims data and determines whether patients are filing their prescription. The measure we propose evaluates if the prescription has been provided to the patients.

0118: Anti-Lipid Treatment Discharge includes patients undergoing CABG, not PCI. It also includes non statins as well as statins.

0074: Chronic Stable Coronary Artery Disease: Lipid Control includes all patients with CAD and is not specific to those patients who have had a PCI.

0639: Statin Prescribed at Discharge evaluates patients who have had a myocardial infarction. There may be patient overlap with this measure and the one proposed. The composite measure proposed in this application however contains two other guideline recommended medication. Our measure includes all PCI patients not only those who have had a MI, thus ours is monitoring secondary prevention as well as the tertiary prevention that is measured by CMS.

P2Y12/Aspirin component

0142: Aspirin prescribed at discharge for AMI evaluates patients who have had a myocardial infarction. There may be patient overlap with this measure and the one proposed. The composite measure proposed in this application however contains two other guideline recommended medication. Our measure includes all PCI patients not only those who have had a MI, thus ours is monitoring secondary prevention as well as the tertiary prevention that is measured by CMS.

0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy includes all patients with CAD and is not specific to those patients who have had a PCI.

0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic includes a larger patient population of patients who were discharged for acute myocardial infarction, coronary artery bypass graft or percutaneous coronary interventions. The measure 0068 measures patients who had documentation of use of aspirin or another antithrombotic during the measurement year. The critical difference is the use of the term "or" that allows patients to be included into the numerator of this measure. Evidence indicates that Dual Antiplatelet Therapy is the ideal medical therapy of choice for this patient population. The composite measure proposed in this application follows the current medical guidelines for treating patients undergoing PCI with both Aspirin and a specifically anti platelets medications within the P2Y12 inhibitor drug class.

0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy

The critical difference is the use of the term "or" that allows patients to be included into the numerator of this measure. Evidence indicates that Dual Antiplatelet Therapy is the ideal medical therapy of choice for this patient population. The composite measure proposed in this application follows the current medical guidelines for treating patients undergoing PCI with both Aspirin and a specifically anti platelets medications within the P2Y12 inhibitor drug class.

0118: Anti-Lipid Treatment Discharge

5.1 Identified measures:

5a.1 Are specs completely harmonized? Yes

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

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

1519: Statin Therapy at Discharge after Lower Extremity Bypass (LEB)

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: Related Measures: 0118 Antilipid therapy at discharge 0439 Discharged on statin medication

0696: STS CABG Composite Score

5.1 Identified measures:

5a.1 Are specs completely harmonized? Yes

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

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

2452: Percutaneous Coronary Intervention (PCI): Post-procedural Optimal Medical Therapy

5.1 Identified measures: 0639 : Statin Prescribed at Discharge

0067 : Chronic Stable Coronary Artery Disease: Antiplatelet Therapy

0074 : Chronic Stable Coronary Artery Disease: Lipid Control

0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease

0569 : ADHERENCE TO STATINS

0631 : Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy

0142 : Aspirin prescribed at discharge for AMI

0118 : Anti-Lipid Treatment Discharge

0068 : Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: Statin measures 0543: Adherence to Statin Therapy for Individuals with Coronary Artery Disease is not specific to patients undergoing a PCI. This measure uses claims data and it is not evaluated at the point of discharge. This is a measure using claims data and determines whether patients are filing their prescription. The measure we propose evaluates if the prescription has been provided to the patients. 0569: Adherence to Statin is similar to measure 0543 listed above and is not specific to patients undergoing PCI. This is a measure using claims data and determines whether patients are filing their prescription. The measure we propose evaluates if the prescription has been provided to the patients. 0118: Anti-Lipid Treatment Discharge includes patients undergoing CABG, not PCI. It also includes non statins as well as statins. 0074: Chronic Stable Coronary Artery Disease: Lipid Control includes all patients with CAD and is not specific to those patients who have had a PCI. 0639: Statin Prescribed at Discharge evaluates patients who have had a myocardial infarction. There may be patient overlap with this measure and the one proposed. The composite measure proposed in this application however contains two other guideline recommended medication. Our measure includes all PCI patients not only those who have had a MI, thus ours is monitoring secondary prevention as well as the tertiary prevention that is measured by CMS. P2Y12/Aspirin component 0142: Aspirin prescribed at discharge for AMI evaluates patients who have had a myocardial infarction. There may be patient overlap with this measure and the one proposed. The composite measure proposed in this application however contains two other guideline recommended medication. Our measure includes all PCI patients not only those who have had a MI, thus ours is monitoring secondary prevention as well as the tertiary prevention that is measured by CMS. 0067: Chronic Stable Coronary Artery Disease: Antiplatelet Therapy includes all patients with CAD and is not specific to those patients who have had a PCI. 0068: Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic includes a larger patient population of patients who were discharged for acute myocardial infarction, coronary artery bypass graft or percutaneous coronary interventions. The measure 0068 measures patients who had documentation of use of aspirin or another antithrombotic during the measurement year. The critical difference is the use of the term “or” that allows patients to be included into the numerator of this measure. Evidence indicates that Dual Antiplatelet Therapy is the ideal medical therapy of choice for this patient population. The composite measure proposed in this application follows the current medical guidelines for treating patients undergoing PCI with both Aspirin and a specifically anti platelets medications within the P2Y12 inhibitor drug class. 0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet TherapyThe critical difference is the use of the term “or” that allows patients to be included into the numerator of this measure. Evidence indicates that Dual Antiplatelet Therapy is the ideal medical therapy of

choice for this patient population. The composite measure proposed in this application follows the current medical guidelines for treating patients undergoing PCI with both Aspirin and a specifically anti platelets medications within the P2Y12 inhibitor drug class. ACCF/AHA: Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients The specifications for the measure are harmonized. Though this measure targets the same topic area, encouraging the use of aspirin, P2Y12 inhibitor, and statin at discharge following PCI, the ACCF/AHA measure is measured on the facility level, whereas the measure we are submitting for endorsement here is a physician level measure.

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

0439: STK-06: Discharged on Statin Medication

5.1 Identified measures: "0639 : Statin Prescribed at Discharge

0074 : Chronic Stable Coronary Artery Disease: Lipid Control

0547 : Diabetes and Medication Possession Ratio for Statin Therapy

0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease

0545 : Adherence to Statins for Individuals with Diabetes Mellitus

0118 : Anti-Lipid Treatment Discharge

1519 : Statin Therapy at Discharge after Lower Extremity Bypass (LEB)"

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: Three statin therapy measures were identified from the NQF database. All three measures address target diagnoses other than ischemic stroke or specific surgical procedures for patients 18 years or older: 0074 Coronary Artery Disease; 0118 isolated Coronary Artery Bypass Graft (CABG); and, 1519 Lower Extremity Bypass (LEB). Measure 1519 addresses inpatient organizational performance.. The other two measures, 0074 and 0118 are provider-level measures in the ambulatory care setting.

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

National Quality Forum
1030 15th St NW, Suite 800
Washington, DC 20005
http://www.qualityforum.org

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