NATIONAL QUALITY FORUM

TO: Cardiovascular Endorsement Maintenance Steering Committee

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SU: Evaluation of competing and related measures in the Cardiovascular Endorsement Maintenance 2010 project

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The next step in the evaluation process is evaluation of competing measures for "best in class" and harmonization of related measures. NQF staff has prepared side-by-side tables to compare the competing and related measures.

COMPETING MEASURES

NQF staff has identified the following competing measures:

Phase I

- 0068 IVD: use of aspirin or antithrombotics (NCQA)
- 0067 CAD: antiplatlet therapy (PCPI)

- 0075 IVD: complete lipid profile and LDL control <100 (NCQA)
- 0074 CAD: drug therapy (PCPI)

- 0070 CAD: beta blocker—prior MI (PCPI)
- 0071 AMI: persistence of beta blocker therapy (NCQA)
- 0160 Beta blocker prescribed at discharge [for AMI] (CMS)

Phase II

- 1525 Chronic anticoagulation therapy [for a-fib or a-flutter] (PCPI)
- 0624 Atrial fibrillation: warfarin therapy (Active Health)

- 0018 Controlling high blood pressure (NCQA)
- 0013 Hypertension: Blood pressure control (PCPI/ACC)

- 0081 Heart failure: ACEI/ARB therapy (PCPI)
- 0610 Heart failure: use of ACEI or ARB

- 0083 Heart failure: beta blocker therapy (PCPI)
- 0615 Heart failure: use of beta blocker therapy

At the April 7-8, 2011 meeting the Steering Committee will select the best in class for each of the pairs of competing measures above. NQF is currently developing a process to assist Steering Committees in evaluating competing measures to determine best in class.

Principles for Selection of Best in Class

The Consensus Standards Approval Committee (CSAC) has identified the following principles for selection of best in class:

1. The endorsement of multiple competing measures should be by exception with adequate justification.
2. NQF prefers endorsement of measures that include the broadest possible target patient population for whom the measure is appropriate.
3. NQF prefers endorsement of measures that assess performance scores at the broadest level of analysis (e.g., for as many possible individuals and entities) for which the measure is appropriate.
4. If a single measure cannot accommodate the inclusion of all relevant patient populations or entities for performance measurement, a second measure could be considered for endorsement. The two measures should be harmonized to the extent possible.
5. When best in class is not clear, it may be appropriate to endorse more than one competing measure. At the time of initial endorsement, NQF should identify analyses needed to conduct a rigorous evaluation of the use and usefulness of the measures. This information should be provided by the developers to support best-in-class determination at the time of three-year maintenance.

NQF Evaluation Criteria: Comparison of Related or Competing Measures:

If a measure meets the NQF evaluation criteria **and** there are endorsed or new related measures (either the same measure focus or the same target population), or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

> **Criterion 5a.** The measure specifications are harmonized with related measures; OR the differences in specifications are justified.
>
> **Criterion 5b.** The measure is superior to competing measures (e.g., is a more valid or efficient way to measure); OR multiple measures are justified.

Guidance for Evaluating Competing Measures

Competing measures are those that essentially address the same target process, condition, event or outcome (numerator) and the same target population (denominator). The goal is to endorse the best measure and minimize confusing or conflicting information.

Competing measures may already be endorsed or may be new submissions. Before competing measurers are compared, they must first be evaluated individually and judged to adequately meet all four evaluation criteria to be suitable for a Steering Committee to recommend endorsement. This procedure is intended to

give each measure a thorough evaluation and prevent expending time and effort on comparing measures if some competing measures are not evaluated favorably.

If a new measure competes with an NQF-endorsed® measure, the developer should be expected to address how the proposed measure is superior to competing measures, or the added value of endorsing multiple measures. Ideally, the developer will be able to present analyses demonstrating how the submitted measure is superior; however, in many situations that will not be feasible (e.g., no access to an alternative data source) and then the developer should be able to present a rationale for superiority. If the competing measure also is a new submission, the developers can be asked to address that question after the Committee determines that both meet the evaluation criteria.

Determination of the best measure should be based on the evaluation criteria of *Importance to Measure and Report, Scientific Acceptability of Measure Properties, Usability,* and *Feasibility*. In the absence of empirical data to compare the measures, the Steering Committee will need to compare not only their evaluation ratings, but also the information submitted in support of the criteria. The comparison will require expert judgment and may involve consideration of the pros and cons related to all the criteria. For example, slightly lower reliability, but much greater feasibility might indicate the more feasible measure should be selected.

If the measures are determined to be conceptually the same, then generally they would be expected to be evaluated equally on the subcriteria under *Importance to Measure and Report*, i.e., impact, opportunity for improvement, and evidence supporting the focus of measurement. However, they could differ on opportunity for improvement depending on whether they are new measures or have been in use. For new measures, opportunity for improvement generally will be the same because it is based on epidemiologic and research data. However, measures in use at the time of endorsement maintenance may differ in opportunity for improvement (e.g., one may be "topped out" in terms of performance). When measures are essentially the same on the criterion *Importance to Measure and Report*, the determination of the best measure to recommend for endorsement would be made based on the remaining criteria.

Table 1. Evaluating Competing Measures for Superiority or Justification for Multiple Measures

Determine if need to compare measures for superiority	Determine if need to evaluate competing measures (address the same concepts for measure focus—i.e., the target process, condition, event, or outcome for the same target patient population) for superiority
Assess competing measures for superiority on NQF evaluation criteria and subcriteria	The comparison will require expert judgment and may involve considerations of pros and cons related to all the criteria. Impact, Opportunity, and Evidence—Importance to Measure and Report: Competing measures generally will be the same in terms of impact and evidence for the focus of measurement. • Compare measures on opportunity for improvement. For new measures, this generally will be the same. However, measures in use at the time of endorsement maintenance may differ in opportunity for improvement (e.g., one may be "topped out" in terms of performance).

	Reliability and Validity—Scientific Acceptability of Measure Properties: • Compare evidence of reliability. • Compare evidence of validity. Untested measures cannot be considered superior to tested measures because there would be no empirical evidence on which to compare reliability and validity. (However, a new measure, when tested, could ultimately demonstrate superiority and the NQF endorsement maintenance cycles allow for regular submission of new measures.) Compare and identify differences in specifications. *All else being equal*: • Measureswith the broadest application (target patient population, settings, level of analysis) are preferred. Usability: • Compare evidence of use and usefulness for public reporting. • Compare evidence of use and usefulness for quality improvement. *All else being equal*: • Measures that are publicly reported are preferred. • Measures with the widest use (e.g., settings, numbers of entities reporting performance results) are preferred. • Measures that are in use are preferred over those without evidence of use. Feasibility: • Compare the ease of data collection. • Compare the potential for inaccuracies, errors, and unintended consequences. *All else being equal:* • Measures based on data from electronic sources are preferred. • Measures that are freely available are preferred.
If a competing measure does not have clear superiority, Assess justification for multiple measures	If a competing measure does not have clear superiority, is there a justification for endorsing multiple measures? Does the added value offset any burden or negative impact? Measures based on different data types *may provide added value if*: • the additional measure allows transition to an EHR-based measure OR • the additional measure is applicable to additional setting(s) or increases the number of

	individuals and entities for whom performance results are available and cannot be achieved by expanding the target patient population, setting, or level of analysis of one measure. A rationale for recommending endorsement of multiple competing measures must be provided. Identify analyses needed to conduct a rigorous evaluation of the use and usefulness of the measures at the time of endorsement maintenance.

If the Steering Committee is unable to identify the best (superior) measure, multiple endorsed measures may be acceptable and the Steering Committee needs to identify the additive value of endorsement of more than one measure. That is, does having multiple measures add enough value to offset any potential negative impact?

- Value
  - Is an additional measure necessary?
    - to change to an EHR-based measurement;
    - to have broader applicability (if one measure cannot accommodate all settings, e.g., hospital, home health, etc.); or
    - to increase availability of performance results (if one measure cannot be widely implemented, e.g., if measures based on different data types increase the number of entities for whom performance results are available).
  - Is an additional measure unnecessary?
    - unique developer preferences
- Burden
  - Do the different measures affect interpretability across measures?
  - Does having more than one endorsed measure increase the burden of data collection?

RELATED MEASURES

Related measures should be harmonized. Measure harmonization refers to the standardization of specifications for related measures with the same measure focus (e.g., ***influenza immunization*** of patients in hospitals or nursing homes), or related measures with the same target population (e.g., eye exam and HbA1c for ***patients with diabetes***), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are justified (e.g., dictated by the evidence). The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

NQF staff has been working with the measure developers for a long time on the issue of harmonization and they have encountered several challenges:

- Review and approval of all changes by the developer's technical panel and organizational leadership takes significant time (sometimes months).
- Developers have different approaches and philosophies about measurement.

- Particularly when there are several related measures, determining which version to harmonize to may be difficult.
- Trending data may be affected by changes in specifications.
- There may be disagreement as to what degree of alignment is needed to achieve harmonization.

Guidance for Steering Committees on evaluating and making recommendations related to measure harmonization was approved by the NQF Board in 2010. Ultimately, measures should not be recommended for endorsement unless measures are completely harmonized or the lack of harmonization has been justified (Table 2).

Table 2. Sample Considerations to Justify Lack of Measure Harmonization

Related Measures	Lack of Harmonization	Assess Justification for Conceptual Differences	Assess Justification for Technical Differences
Same measure focus (numerator); different target population (denominator)	Inconsistent measure focus (numerator)	The evidence for the measure focus is different for the different target population so that one measure cannot accommodate both target populations. Evidence should always guide measure specifications.	• Differences in the available data drive differences in the technical specifications for the measure focus. • Effort has been made to reconcile the differences across measures but important differences remain.
Same target population (denominator); different measure focus (numerator)	Inconsistent target population (denominator) and/or exclusions	The evidence for the different measure focus necessitates a change in the target population and/or exclusions. Evidence should always guide measure specifications.	• Differences in the available data drive differences in technical specifications for the target population. • Effort has been made to reconcile the differences across measures but important differences remain.
For any related measures	Inconsistent scoring/ computation	The difference does not affect interpretability or burden of data collection. If it does, it adds value that outweighs any concern regarding interpretability or burden of data collection.	The difference does not affect interpretability or burden of data collection. If it does, it adds value that outweighs any concern regarding interpretability or burden of data collection.

National Quality Forum Cardiovascular Competing Measures

SECONDARY PREVENTION - Anti-platelet agents

Competing Measures **Related measures**

	0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy	0076 Optimal Vascular Care	0142 Aspirin prescribed at discharge for AMI	1493 Aspirin at discharge for patients with Percutaneous Coronary Intervention (PCI)
Steward	American Medical Association	National Committee for Quality Assurance	Active Health Management	MN Community Measurement	Centers for Medicare & Medicaid Services	American College of Cardiology Foundation
Description	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 with ischemic vascular disease who currently report taking aspirin and the percentage of patients with ischemic vascular disease who were counseled about the risks and benefits of aspirin.	Percentage of patients with ischemic vascular disease (IVD) that are taking aspirin or an antiplatelet agent	Percentage of adult patients ages 18 to 75 who have ischemic vascular disease with optimally managed modifiable risk factors (LDL, blood pressure, tobacco-free status, daily aspirin use).	Percentage of acute myocardial infarction (AMI) patients who are prescribed aspirin at hospital discharge	Proportion of adult patients (age 18 or older) who undergo a percutaneous coronary intervention (PCI) and are prescribed aspirin at discharge.
Status	Maintenance review	Maintenance review	Endorsed- not for maintenance in 2010/2011	Maintenance review	Maintenance review	New
Steering Committee Evaluation	Importance: Y 21, N-0 SA: C= 16, P=5, M= 0,N=0 U: C=16, P=5, M=0, N=0 F: C=19, P=2, M=0, N=0 Meets crtieria for endorsement: Yes- 21, No=0	Importance: Y = 21, N =0 SA:C =2, P=14, M=4, N=1 U: C=12, P=7, M=0, N=0 F: C=13, P=7, M=1, N=0 Meets crtieria for endorsement: Yes = 20, No =1		Importance: Y-20, N=0 SA: C=1, P=13, M=5, N=2 U: C=14, P=7, M=0, N=0 F: C=18, P=3, M=0, N=0 Meets crtieria for endorsement if BP target changed to < 140/90: Yes =19, No=1	Importance: Y = 4 , N= 17 Very imortant process of care but measure has little room for improvement – "topped out"	Importance: Y=21, N=0 SA: C=19, P=2, M=0, N=0 U: C=17, P=4, M=0, N=0 F: C=17, P=4, M=0, N=0 Meets criteria for endorsement: Yes= 21, No =0
Differences	Numerator inclusions: aspirin or clopidogrel only Target population: Stable CAD only (needs harmonization of CAD codes as a subset of 0068 and 0076) Exclusions for medical reasons, patient reasons and system reasons Current use: CMS PQRI	Numerator inclusions: Aspirin, clopidogrel; • aspirin-dipyridamole • prasugrel; ticlopidine Target population: Ischemic vascular disease includes peripheral vascular disease and cerebral vascular disease as well as CAD; IVD codes need harmonization with 0076	Based on clinically enriched administrative data – admin data with clinical data from EHR/PHR; larghest list of anti-latelet agents; age ≥ 21 years Current use: In use by plans – not publicly reported	HARMONIZATION: Aspirin component: numerator includes • Aspirin (ASA) • Plavix (clopidogrel) • Ticlid (ticlopidine) • Pravigard (aspirin/pravastatin) • Aggrenox (aspirin/dypyridamole) • Low dose enteric-coated 81	HARMONIZATION: other anit-platelet agents except aspiorin not included; chart abstraction; Age ≥ 18 years Current use: Hospital Compare	HARMONIZATION: Aspirin only – additional measure (1495) for P2Y12 Inhibitors after PCI includes clopidogrel, ticlopidine, or prasugrel Age ≥ 18 years

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	2007, 2008, 2009, 2010 PINNACLE registry Age ≥18 years Retooled for EHRs	With additional harmonization, this measure is a component of composite measure 0076 Exclusions: none Age ≥ 18 years Current use: HEDIS Physician Measurement ; NCQA Heart/Stroke Recognition Program Retooled for EHRs		mg ASA (Ecotrin or Bayer); Needs harmonization of codes for IVD with 0068; Age = 18=75 years Current use:		
Type	Process	Process	Process	Composite	Process	Process
Data Source	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 www.pinnacleregistry.org Attachment PCPI_CAD-6_AntiplateletTherapy NQF 0067.pdf	Paper medical record/flow-sheet; Electronic administrative data/claims; Electronic clinical data; Electronic Health/Medical Record NA	Electronic administrative data/claims; Pharmacy data; Clinically enriched adminstrative data – Level 3	Paper medical record/flow-sheet; Electronic Health/Medical Record; Registry data. Paper abstraction forms are provided All data is uploaded in electronic format (.csv file) to a HIPAA secure, encrypted and password protected data portal. URL www.mncm.org/site/?p=resources URL www.mncm.org/site/?p=resources	Paper medical record/flow-sheet; Electronic Health/Medical Record Centers for Medicare & Medicaid Services (CMS) Abstraction & Reporting Tool (CART). Vendor tools also available. URL http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1135267770141 Section 1 - Data Dictionary | Alphabetical Data Dictionary.	Registry data National Cardiovascular Data Registry (NCDR®) CathPCI Registry® URL http://www.ncdr.com/WebNCDR/ELEMENTS.ASPX URL http://www.ncdr.com/WebNCDR/ELEMENTS.ASPX
Level	Clinicians: Individual; Clinicians: Group	Clinicians: Individual; Clinicians: Group	Can be measured at all levels	Clinicians: Group; Clinicians: Other Clinic site location	Facility/Agency; Population: national; Program: QIO	Facility/Agency
Setting	Home; Ambulatory Care: Office; Ambulatory Care:	Ambulatory Care: Clinic; All settings	Nursing home (NH) /Skilled Nursing Facility (SNF);	Ambulatory Care: Office; Ambulatory Care: Clinic;	Hospital	Hospital; Ambulatory Care: Hospital Outpatient

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	Clinic; Nursing home (NH) /Skilled Nursing Facility (SNF); Ambulatory Care: Hospital Outpatient; Assisted Living; Group homes		Ambulatory Care: Clinic; Other; Dialysis Facility	Ambulatory Care: Hospital Outpatient		
Numerator Statement	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	Use of aspirin or another antithrombotic. Electronic specification: Documentation of use of aspirin or another antithrombotic during the measurement year. Refer to table IVD-D to identify the code for prescribed oral anti-platelet therapy. Refer to Table IVD-E to identify medications for oral anti-platelet therapy. Medical Record Specification: Documentation of use of aspirin or another antithrombotic during the measurement year. At a minimum, documentation in the medical record must include a note indicating the date on which aspirin or another antithrombotic was prescribed or documentation of prescription from another	Patients that are taking aspirin or an antiplatelet agent Time Window: 6 months	Patients ages 18 to 75 with ischemic vascular disease (IVD) who meet all of the following targets from the most recent visit during the measurement period: LDL less than 100, Blood Pressure (two targets) less than 140/90 if patient has co-morbidity of diabetes OR less than 130/80 for all other IVD patients, Tobacco-Free Status, Daily Aspirin Use (unless contraindicated).	AMI patients who are prescribed aspirin at hospital discharge	Count of patients with a PCI procedure with aspirin prescribed at discharge.

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		treating physician.				
Numerator Details	Time Window: Once during the measurement period. See attached for EHR Specifications. For Claims/Administrative: Report CPT II Code 4011F: Oral antiplatelet therapy prescribed	Time Window: 12 months Use of aspirin or another antithrombotic. Electronic specification: Documentation of use of aspirin or another antithrombotic during the measurement year. Refer to table IVD-D to identify the code for prescribed oral anti-platelet therapy. Refer to Table IVD-E to identify medications for oral anti-platelet therapy. Medical Record Specification: Documentation of use of aspirin or another antithrombotic during the measurement year. At a minimum, documentation in the medical record must include a note indicating the date on which aspirin or another antithrombotic was prescribed or documentation of prescription from another treating physician.Table IVD-D: Codes to Identify Prescribed Oral Anti-Platelet	Time Window: Anti-platelet agents: spirin, ticlopidine, cilostazol, aggrastat, anagrelide, dip[yramadole, prsnatine, agrylin, ticlid, plavix, aggrenox, pletal, permole, inlegilen, reopro, dipradan, aspre	Time Window: Values are collected as the most recent during the measurement period (January 1 through December 31), with the exception of the LDL value which is collected over a 15 month time span to allow a greater window of time for patients that may not complete a cholesterol test within the 12 month time frame, but do complete a cholesterol test within 15 months (October 1 of the previous year through December 31 of the measurement year). Aspirin Use or Documented Contraindication for the use of aspirin. Aspirin (ASA) Date [Date (mm/dd/yyyy)] Enter the most recent date of documented ASA or anti-platelet prior to and including 12/31/YYYY (measurement period). FYI: any documented date in the measurement period of ASA or an anti-platelet is	Time Window: From hospital arrival to time of hospital discharge Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760129036: · Section 1 - Data Dictionary	Alphabetical Data Dictionary – pages 1-75 through 1-76. · Appendices	Appendix C - Medication Tables – pages Appendix C-3 through Appendix C-6. · Section 2 - Measurement Information	Section 2.1 - Acute Myocardial Infarction (AMI) – pages AMI-2-1 through AMI-2-5.	Time Window: 1 year Element Name: Discharge Medications Discharge Medications=aspirin (any) Coding Instructions: Indicate which of the following medications the patient was prescribed upon discharge. Note(s): Complete only for patients who had a PCI procedure attempted or performed during this episode of care. Discharge medications not required for patients who were discharged to "Other acute care hospital","Hospice", or Left against medical advice (AMA)." Element Name: Medication Administered Medication Administered=Yes Coding Instructions: Indicates if the medication was administered, not administered, contraindicated or blinded. Selections:

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		Therapy Description CPT Category II ICD-9-CM Diagnosis Oral anti-platelet therapy prescribed 4011F V58.63, V58.66 Table IVD-E: Oral Anti-Platelet Therapies Description Prescription Oral anti-platelet therapies • aspirin • clopidogrel • aspirin-dipyridamole • prasugrel • ticlopidine		acceptable; the date does not need to be the most recent. The following are accepted ASA or anti-platelet medications • Aspirin (ASA) • Plavix (clopidogrel) • Ticlid (ticlopidine) • Pravigard (aspirin/pravastatin) • Aggrenox (aspirin/dypyridamole) • Low dose enteric-coated 81 mg ASA (Ecotrin or Bayer) Other considerations: • Enter the date in which ASA (or other accepted anti-platelet was documented as a current medication (e.g., med reconciliation date). • If there is no documentation of daily ASA or anti-platelet, leave this date field blank. • Do not enter any dates of service after the measurement period. • If the patient is not taking ASA and has a contraindication to ASA, leave this date field blank and enter the contraindication date in the contraindication date field.		No- Medication was not administered or prescribed. Yes- Medication was administered or prescribed. Contraindicated- Medication was not administered because of a contraindication. (Contraindications must be documented explicitly by the physician, clearly evidenced within the medical record.) Blinded- Patient was in a research study or clinical trial and the administration of this specific medication or class of medications is unknown.

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				• Do not count an ASA/narcotic combo medication for the "daily aspirin use" component of the measure whether it is used for temporary or chronic pain. Aspirin (ASA) Contraindication Date [Date (mm/dd/yyyy)] If patient has a documented contraindication to ASA, enter the date of the contraindication. Any valid contraindication date will be given credit. Auditor must be able to validate this date. Accepted contraindications: • Anticoagulant use, Lovenox (Enoxaparin) or Coumadin (Warfarin) • Any history of gastrointestinal (GI)* or intracranial bleed (ICB) • Allergy to ASA *Gastroesophogeal reflux disease (GERD) is not automatically considered a contraindication but may be included if specifically documented as a contraindication by the physician. The following may be exclusions if specifically documented by the physician:		

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				• Use of non-steroidal anti-inflammatory agents • Documented risk for drug interaction • Other provider documented reason for not being on ASA therapy Contraindication date. • If the patient is on an anticoagulant, enter the most recent date.		
Denominator Statement	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 as of December 31 of the measurement year discharged alive for AMI, CABG or PCI on or between January 1 and November 1 of the year 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.	All patients, ages 21 and older, diagnosed with IVD as defined by coronary artery disease, peripheral vascular disease or cerebrovascular disease, who are asked about aspirin use Time Window: Anytime in the past	Patients ages 18 to 75 with ischemic vascular disease who have at least two visits for this condition over the last two years (established patient) with at least one visit in the last 12 months.	AMI patients (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.00, 410.01, 410.10, 410.11, 410.20, 410.21, 410.30, 410.31, 410.40, 410.41, 410.50, 410.51, 410.60, 410.61, 410.70, 410.71, 410.80, 410.81, 410.90, 410.91)	Count of patients with a PCI procedure
Denominator Categories	Female; Male Aged 18 years and older	Female; Male 18 years of age and older		Female; Male Ages 18 to 75 during the measurement period	Female; Male Greater than or equal to 18 years old	Female; Male All patients >= 18 years of age.
Denominator Details	Time Window: 12 consecutive months See attached for EHR	Time Window: From January 1st of the year prior to the measurement year through December 31st of	Time Window: See attachment	Time Window: Patients with ischemic vascular disease (IVD) with two or more visits with IVD codes in the last two	Time Window: From hospital arrival to time of hospital discharge	Time Window: 1 year Element name: PCI PCI=Yes

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	Competing Measures			Related measures		
	0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy	0076 Optimal Vascular Care	0142 Aspirin prescribed at discharge for AMI	1493 Aspirin at discharge for patients with Percutaneous Coronary Intervention (PCI)
	Specifications. For Claims/Administrative: See coding tables attached for coding (ICD-9-CM, ICD-10-CM, CPT)	the measurement year. Patients 18 years or older as of December 31 of the measurement year. Patient inclusion criteria: For physician assessment with generated from a health plan: continuous medical benefit enrollment for the measurement year, with no more than one gap in continuous enrollment of up to 45 days during the measurement year. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, there may not be more than a 1-month gap in coverage during each year of continuous enrollment. The patient must be enrolled as of December 31 of the measurement year. For physician assessment from data that comes from a non-health plan: Any enrollment, claim or encounter transaction any time during the		years and at least one visit in the last 12 months. Medical groups perform the visit count and exclusions prior to file creation (excluded patients are not submitted in the direct data submission file). MNCM requires an upfront denominator certification process to ensure that the medical group is identifying the population correctly. Data collection or extraction cannot occur prior to MNCM approval of the denominator. Birth date [Date (mm/dd/yyyy)] Ischemic vascular disease ICD-9 codes: 410 – 410.92 Acute Myocardial Infarction (AMI) 411 – 411.89 Post Myocardial Infarction Syndrome 412 Old AMI 413 – 413.9 Angina Pectoris 414.0 – 414.07 Coronary Arthrosclerosis 414.2 Chronic Total Occlusion of Coronary Artery 414.8 Other Chronic Ischemic Heart Disease (IHD) 414.3 Atherosclerosis due to	ICD-9-CM Principal Diagnosis codes: 410.00: Anterolateral wall, acute myocardial infarction-episode of care unspecified 410.01: Anterolateral wall, acute myocardial infarction-initial episode 410.10: Other anterior wall, acute myocardial infarction-episode of care unspecified 410.11: Other anterior wall, acute myocardial infarction-initial episode 410.20: Inferolateral wall, acute myocardial infarction-episode of care unspecified 410.21: Inferolateral wall, acute myocardial infarction-initial episode 410.30: Inferoposterior wall, acute myocardial infarction-episode of care unspecified 410.31: Inferoposterior wall, acute myocardial infarction-initial episode 410.40: Other inferior wall, acute myocardial infarction-episode of care unspecified 410.41: Other inferior wall, acute myocardial infarction-initial episode	Coding Instructions: Indicate if the patient had a percutaneous coronary intervention (PCI). Selections: No/Yes Supporting Definitions: PCI:A percutaneous coronary intervention (PCI) is the placement of an angioplasty guide wire, balloon, or other device (e.g. stent, atherectomy, brachytherapy, or thrombectomy catheter) into a native coronary artery or coronary artery bypass graft for the purpose of mechanical coronary revascularization.Source: NCDR

National Quality Forum Cardiovascular Competing Measures

SECONDARY PREVENTION - Anti-platelet agents

Competing Measures **Related measures**

	0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy	0076 Optimal Vascular Care	0142 Aspirin prescribed at discharge for AMI	1493 Aspirin at discharge for patients with Percutaneous Coronary Intervention (PCI)
		measurement year. Event/diagnosis Event. Discharged alive for AMI, CABG or PCI on or between January 1 and November 1 of the year prior to the measurement year. Use the codes listed in Table IVD-A 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). Diagnosis. 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 (Table IVD-C) with an IVD diagnosis (Table IVD-B), or •At least one acute inpatient visit (Table IVD-C) with an IVD diagnosis (Table IVD-B) Medical record data:		lipid rich plaque 414.9 Chronic IHD 429.2 Cardiovascular (CV) disease, unspecified 433 – 433.91 Occlusion and stenosis of pre-cerebral arteries 434 – 434.91 Occlusion of cerebral arteries 440.1 Atherosclerosis of renal artery 440.2 – 440.29 Atherosclerosis of native arteries of the extremities, unspecified 440.4 Chronic Total Occlusion of Artery of the Extremities 444 – 444.9 Arterial embolism and thrombosis 445 - 445.8 Atheroembolism	410.50: Other lateral wall, acute myocardial infarction-episode of care unspecified 410.51: Other lateral wall, acute myocardial infarction-initial episode 410.60: True posterior wall, acute myocardial infarction-episode of care unspecified 410.61: True posterior wall, acute myocardial infarction-initial episode 410.70: Subendocardial, acute myocardial infarction-episode of care unspecified 410.71: Subendocardial, acute myocardial infarction-initial episode 410.80: Other specified sites, acute myocardial infarction-episode of care unspecified 410.81: Other specified sites, acute myocardial infarction-initial episode 410.90: Unspecified site, acute myocardial infarction-episode of care unspecified 410.91: Unspecified site, acute myocardial infarction-initial episode	

National Quality Forum Cardiovascular Competing Measures

SECONDARY PREVENTION - Anti-platelet agents

	Competing Measures			Related measures		
	0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy	0076 Optimal Vascular Care	0142 Aspirin prescribed at discharge for AMI	1493 Aspirin at discharge for patients with Percutaneous Coronary Intervention (PCI)
		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 EMRs to identify the denominator, then use the medical record to confirm patient eligibility. Table IVD-A: Codes to Identify AMI, PCI and CABG Description CPT HCPCS ICD-9-CM Diagnosis ICD-9-CM Procedure AMI (inpatient only) 410.x1				

National Quality Forum Cardiovascular Competing Measures

SECONDARY PREVENTION - Anti-platelet agents

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	0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy	0076 Optimal Vascular Care	0142 Aspirin prescribed at discharge for AMI	1493 Aspirin at discharge for patients with Percutaneous Coronary Intervention (PCI)
		CABG (inpatient only) 33510-33514, 33516-33519, 33521-33523, 33533-33536 S2205-S2209 36.1, 36.2 PCI 92980, 92982, 92995 G0290 00.66, 36.06, 36.07 Table IVD-B: Codes to Identify IVD Description ICD-9-CM Diagnosis IVD 411, 413, 414.0, 414.2, 414.8, 414.9, 429.2, 433, 434, 440.1, 440.2, 440.4, 444, 445 Table IVD-C: Codes to Identify Visit Type Description CPT UB Revenue Outpatient 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456 051x, 0520-0523, 0526-0529, 057x-059x, 0982, 0983 Acute inpatient 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291 010x, 0110-0114, 0119,				

National Quality Forum Cardiovascular Competing Measures

SECONDARY PREVENTION - Anti-platelet agents

	Competing Measures			Related measures		
	0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy	0076 Optimal Vascular Care	0142 Aspirin prescribed at discharge for AMI	1493 Aspirin at discharge for patients with Percutaneous Coronary Intervention (PCI)
		0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-021x, 072x, 0987Medical record text Coronary artery disease Stable angina Lower extremity arterial disease/peripheral artery disease Ischemia Stroke Artheroembolism Renal artery atherosclerosis				
Exclusions	Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (eg, allergy, intolerant, receiving other thienopyridine therapy, bleeding coagulation disorders, receiving warfarin therapy, other medical reasons) Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (eg, patient declined, other patient reasons) Documentation of system reason(s) for not prescribing aspirin or clopidogrel (eg,	None	Patients with contraindications to antithrombotic agents such as thrombocytopenia, coagulopathy, recent procedures, or current warfarin therapy General exclusions: • Evidence of metastatic disease or active treatment of malignancy (chemotherapy or radiation therapy) in the last 6 months; • Patients who have been in a skilled nursing facility in the last 3 months	Valid exclusions include patients who only had one coded visit to the clinic during the last two years, patients who had died during the measurement period, patients who were in hospice during the measurement period, patients who were permanent nursing home residents during the measurement period, or patients who were coded with IVD in error.	Exclusions: •<18 years of age •Patients who have a length of stay greater than 120 days •Patients enrolled in clinical trials •Discharged to another hospital •Expired •Left against medical advice •Discharged to home for hospice care •Discharged to a health care facility for hospice care •Patients with comfort measures only documented • Patients with a documented	-Aspirin coded as contraindicated or blinded -Discharge status of deceased -Discharge location of “other acute care hospital”, “hospice” or “against medical advice”.

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SECONDARY PREVENTION - Anti-platelet agents

Competing Measures **Related measures**

	0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy	0076 Optimal Vascular Care	0142 Aspirin prescribed at discharge for AMI	1493 Aspirin at discharge for patients with Percutaneous Coronary Intervention (PCI)
	lack of drug availability, other reasons attributable to the health care system)		• Patient or provider feedback indicating allergy or intolerance to the drug in the past • Patient or provider feedback indicating that there is a contraindication to adding the drug		reason for no aspirin at discharge	
Exclusion Details	See attached for EHR Specifications. For Claims/Administrative: Documentation of medical reason(s) for not prescribing aspirin or clopidogrel • Append modifier to CPT II code 4011F-1P (in development) Documentation of patient reason(s) for not prescribing aspirin or clopidogrel • Append modifier to CPT II code 4011F-2P (in development) Documentation of system reason(s) for not prescribing aspirin or clopidogrel • Append modifier to CPT II code 4011F-3P (in development)	None	See attachment	Patient was a permanent nursing home resident home during the measurement period Patient was in hospice at any time during the measurement period Patient died prior to the end of the measurement period Documentation that diagnosis was coded in error	Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760129036: · Section 1 - Data Dictionary | Alphabetical Data Dictionary – pages 1-20 through 1-21, 1-69 through 1-71, 1-90, 1-98 through 1-104, 1-117, 1-118 through 1-120, 1-204, and 1-321 through 1-323. · Appendices | Appendix C - Medication Tables PDF – pages Appendix C-3 through Appendix C-6 plus Appendix C-9, and Appendix H - Miscellaneous Tables – page Appendix H-5. · Section 2 - Measurement Information | Section 2.1 - Acute Myocardial Infarction (AMI) – pages AMI-5 plus	Element name: Discharge Status Discharge status=deceased Coding Instructions: Indicate whether the patient was alive or deceased at discharge. Selections: Alive/Deceased Element name: Discharge Location Discharge location="other acute hospital","hospice", or "left against medical advice" Coding Instructions: Indicate the location to which the patient was discharged. Selections: -Home -Extended care/TCU/rehabilitation -Other acute care hospital -Nursing home -Hospice

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SECONDARY PREVENTION - Anti-platelet agents

	Competing Measures				Related measures	
	0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy	0076 Optimal Vascular Care	0142 Aspirin prescribed at discharge for AMI	1493 Aspirin at discharge for patients with Percutaneous Coronary Intervention (PCI)
					AMI-2-1 through AMI-2-5.	-Other Left against medical advice (The patient was discharged or eloped against medical advice.) Medication Administered=contraindicated or blinded Name: Medication Administered Coding Instructions: Indicates if the medication was administered, not administered, contraindicated or blinded. Selections: No- Medication was not administered or prescribed. Yes- Medication was administered or prescribed. Contraindicated- Medication was not administered because of a contraindication. (Contraindications must be documented explicitly by the physician, or clearly evidenced within the medical record.) Blinded- Patient was in a research study or clinical trial and the administration of this specific medication or class of

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SECONDARY PREVENTION - Anti-platelet agents

	Competing Measures			Related measures		
	0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy	0076 Optimal Vascular Care	0142 Aspirin prescribed at discharge for AMI	1493 Aspirin at discharge for patients with Percutaneous Coronary Intervention (PCI)
						medications is unknown.
Risk Adjustment	no risk adjustment necessary	no risk adjustment necessary NA		case-mix adjustment Risk adjustment for this measure is based on case mix (health plan product). Health plan product was selected because it can serve as a proxy for socioeconomic status, if more specific variables are not available. Socioeconomic status can be a variable in a patient's ability to comply with a treatment plan for achieving the intermediate outcomes that can postpone or prevent the long term complications of cardiovascular disease. The overall average state-wide distribution of patients across three major insurance types (Commercial, Medicare and MN Healthcare Programs plus Self-pay/Uninsured) is calculated and then each reporting site's patient distribution is adjusted to match the average mix. Rates are re-weighted based on the new distribution of patients and then rates are re-calculated. Background and Evolution of	no risk adjustment necessary N/A	no risk adjustment necessary N/A

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SECONDARY PREVENTION - Anti-platelet agents

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				Risk Adjustment: MN Community Measurement has been publicly reporting unadjusted ambulatory outcome rates at the clinic site level for several years dating back to 2004. Currently, the lowest level of reporting is at the clinic site and we do not publicly report any practitioner level information. As our state begins moving towards utilizing cost and quality measures to demonstrate value and utilizing these measures for incentive based payment and tiering by health plans, we began to explore risk adjustment of measures used for these purposes. Our subcommittee of the Board of Directors, the Measurement and Reporting Committee (MARC) has reviewed several methods for risk adjusting these measures. Part of their discussion included the potential use of the risk adjusted measures for public reporting to consumers on our MN HealthScores website. The group agreed that risk		

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SECONDARY PREVENTION - Anti-platelet agents

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				adjustment would be more beneficial for tiering and incentive based programs and that there was value in reporting the unadjusted clinic site level rate for consumers for the following reasons: rates reflect actual performance, confusion for consumers in terms of explaining risk adjustment or displaying two rates (adjusted and unadjusted), or creating a mindset that it is acceptable for patients in public programs to have different treatment standards than those with commercial insurance. There are no current plans to report risk adjusted data on our consumer facing website; however we will provide both adjusted and unadjusted clinic site level rates on our corporate website (pdf format). Attachment MNCM Case Mix Risk Adjustment June 2010-634242034150216836.docx		
Stratification		None		The ischemic vascular disease population is not currently stratified when publicly reported on MNCM's consumer	N/A	N/A

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				website, MN HealthScores. MNCM does collect the following fields that will allow for future stratification: Insurance coverage code (used to determine public and private purchasers): from list of MNCM-designated codes [number] Patient's health plan member ID (used to determine public and private purchasers): unique patient health plan member ID [text] Date of birth: [MM/DD/YYYY] Race/ethnicity: from list of MNCM-designated codes [number] Primary language: from list of MNCM-designated codes [number] Country of origin: from list of MNCM-designated codes [number] Zip code: 5-digit zip code of patient [text] Gender: M (male), F (female), U (unknown) [text] Co-morbidity of diabetes: 1 (yes), 2 (no) [number] Co-morbidity of depression: 1 (yes), 2 (no) [number]		

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	Competing Measures			Related measures		
	0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy	0076 Optimal Vascular Care	0142 Aspirin prescribed at discharge for AMI	1493 Aspirin at discharge for patients with Percutaneous Coronary Intervention (PCI)
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score		Weighted score/composite/scale better quality = higher score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	See attached for calculation algorithm.	NA		If any component of the numerator is noncompliant for any one of the four components, then the patient is numerator noncompliant for the composite. Is Aspirin Date in the measurement period? OR, Is Aspirin Contraindication Date a valid date? If yes, numerator is compliant for this component. If no, numerator is noncompliant for this component. Assess next variable. If all of the above numerator components are compliant, then the patient is calculated as a numerator case for the optimal vascular care measure.	Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760129036: Section 2 - Measurement Information | Section 2.1 - Acute Myocardial Infarction (AMI) – pages AMI-5 plus AMI-2-1 through AMI-2-5.	Denominator calculation: 1. Count of patients with arrival/discharge dates from data submissions that pass NCDR data inclusion thresholds 2. Exclude patients with arrival/discharge dates without PCI during episode 3. Exclude patients with discharge status=deceased 4. Exclude patients with Discharge Location: Other acute care hospital 5. Exclude patients with Discharge Location: Left against medical advice 6. Exclude patients with Discharge Location: Hospice 7. Exclude patients with Aspirin at discharge: contraindicated or blinded Numerator calculation: 8. From denominator population, count of patients with Discharge medication of aspirin=yes Calculation of score: 9. Numerator

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SECONDARY PREVENTION - Anti-platelet agents

	Competing Measures			Related measures		
	0067 Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	0068 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic	0631 Secondary Prevention of Cardiovascular Events - Use of Aspirin or Antiplatelet Therapy	0076 Optimal Vascular Care	0142 Aspirin prescribed at discharge for AMI	1493 Aspirin at discharge for patients with Percutaneous Coronary Intervention (PCI)
						count/Denominator count

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SECONDARY PREVENTION: lipid control

	0074 Chronic Stable Coronary Artery Disease: Lipid Control	0075 IVD: Complete Lipid Profile and LDL Control <100	0076 Optimal Vascular Care	0611 Hyperlipidemia (Primary Prevention) - Lifestyle Changes and/or Lipid Lowering Therapy	0636 Atherosclerotic Disease and LDL Greater than 100 - Use of Lipid Lowering Agent
Steward	American Medical Association	National Committee for Quality Assurance	MN Community Measurement	Active Health Management	Active Health Mangement
Description	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	The percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) from January 1–November 1 of the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to measurement year, who had each of the following during the measurement year. • Complete Lipid Profile • LDL-C control <100 mg/dL	Percentage of adult patients ages 18 to 75 who have ischemic vascular disease with optimally managed modifiable risk factors (LDL, blood pressure, tobacco-free status, daily aspirin use).	Percentage of patients with coronary artery disease risk factors who have an elevated LDL and who have initiated therapeutic lifestyle changes or are taking a lipid lowering agent	Percentage of adult patients with atherosclerotic disease and an LDL greater than 100 that are taking a lipid lowering agent
Status	Maintenance review	Maintenance review	Maintenance review	Endorsed – not under review	Endorsed – not under review
Steering Committee Evaluation	Importance: Yes=11, No=5 SA: C=16 U: C=15, P=1 F: C=16 Meets criteria for endorsement: Yes=16, No=0	Importance: Yes=7, No=6 SA: C=6, P=6, M=4 U: C=5, P=9, M=1 F: C=12, P=4 Meets criteria for endorsement: Yes = 15, No =1	Importance: Y-20, N=0 SA: C=1, P=13, M=5, N=2 U: C=14, P=7, M=0, N=0 F: C=18, P=3, M=0, N=0 Meets crtieria for endorsement if BP target changed to < 140/90: Yes =19, No=1		
Differences	Mixed process and outcome measure; limited to patients with CAD; age ≥ 18 years; target values aligned; retooled for EHRs	Outcome measure; target values aligned; includes all IVD including PAD and CVD as well as CAD; age > 18 years; retolled for EHRs; no exclusions; with additiohnal harmonization this is a compnent of 0076	Composite measure with mix of process and outcomes measures; includes all IVD including PAD and CVD as well as CAD; lipid target aligned; Age 18-75 years –others are ≥18 years	Clinically enriched adminstrative data ; Can be measured at all levels, including plans and systems as well as clinicians; lipid targets aligned; age aligned	Clinically enriched adminstrative data ; Can be measured at all levels, including plans and systems as well as clinicians; lipid targets aligned

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SECONDARY PREVENTION: lipid control

	0074 Chronic Stable Coronary Artery Disease: Lipid Control	0075 IVD: Complete Lipid Profile and LDL Control <100	0076 Optimal Vascular Care	0611 Hyperlipidemia (Primary Prevention) - Lifestyle Changes and/or Lipid Lowering Therapy	0636 Atherosclerotic Disease and LDL Greater than 100 - Use of Lipid Lowering Agent
Type	Process and intermediate outcome	Intermediate outcome	Composite	Intermediate outcome with embedded process response	Intermediate outcome with embedded process response
Data Source	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 www.pinnacleregistry.org Attachment PCPI_CAD-2_LipidControl NQF 0074.pdf	Paper medical record/flow-sheet; Electronic administrative data/claims; Electronic clinical data; Electronic Health/Medical Record; Lab data NA	Paper medical record/flow-sheet; Electronic Health/Medical Record; Registry data Paper abstraction forms are provided All data is uploaded in electronic format (.csv file) to a HIPAA secure, encrypted and password protected data portal. URL www.mncm.org/site/?p=resources URL www.mncm.org/site/?p=resources	Electronic administrative data/claims; Pharmacy data; Lab data; Clinicially enriched admin data – Level 3	Electronic administrative data/claims; Pharmacy data; Lab data Clinically enriched admin data – Level 3
Level	Clinicians: Individual; Clinicians: Group	Clinicians: Individual; Clinicians: Group	Clinicians: Group; Clinicians: Other Clinic site location	Can be measured at all levels	Can be measured at all levels
Setting	Home; Ambulatory Care: Office; Ambulatory Care: Clinic; Nursing home (NH) /Skilled Nursing Facility (SNF); Ambulatory Care: Hospital Outpatient; Assisted Living; Group homes	Ambulatory Care: Clinic; All settings	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient	Nursing home (NH) /Skilled Nursing Facility (SNF); Ambulatory Care: Clinic; Other	Nursing home (NH) /Skilled Nursing Facility (SNF); Ambulatory Care: Clinic; Other
Numerator Statement	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:	A complete lipid profile performed during the measurement year. A LDL-C control result of <100mg/dL using the most recent LDL-C screening test during the measurement year.	Patients ages 18 to 75 with ischemic vascular disease (IVD) who meet all of the following targets from the most recent visit during the measurement period: LDL less than 100, Blood Pressure (two targets) less than 140/90 if patient has co-morbidity of diabetes OR less than 130/80 for all other IVD patients, Tobacco-Free Status, Daily	Patients who have initiated therapeutic lifestyle changes or that are taking a lipid lowering agent Time Window: A drug day-supply that extends within 30 days of the measurement date	Patients with a current refill for a lipid lowering agent Time Window: A drug day-supply that extends within 30 days of the measurement date

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SECONDARY PREVENTION: lipid control

	0074 Chronic Stable Coronary Artery Disease: Lipid Control	0075 IVD: Complete Lipid Profile and LDL Control <100	0076 Optimal Vascular Care	0611 Hyperlipidemia (Primary Prevention) - Lifestyle Changes and/or Lipid Lowering Therapy	0636 Atherosclerotic Disease and LDL Greater than 100 - Use of Lipid Lowering Agent
	*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.		Aspirin Use (unless contraindicated). Please note: On 7/27/2010, the blood pressure component of this measure was changed for patients with a co-morbidity of diabetes (target less than 140/90). MNCM's technical advisory group recommended this changed based on ACCORD results, ICSI's most recent guideline changes (July 2010), and the national meaningful use measures for diabetes blood pressure control. A target of less than 140/90 allows for individualization of patient goals.		
Numerator Details	Time Window: 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	Time Window: 12 months Electronic Specification: Complete Lipid Profile: A complete lipid profile performed during the measurement year (table IVD-F) as identified by claim/encounter or electronic laboratory data. LDL-C Control: <100mg/dL Use electronic laboratory data during the measurement year. Calculate a numerator by using the most recent LDL-C screening test. Use the CPT Category II codes in Table CMC-E to determine compliance. The patient is non	Time Window: Values are collected as the most recent during the measurement period (January 1 through December 31), with the exception of the LDL value which is collected over a 15 month time span to allow a greater window of time for patients that may not complete a cholesterol test within the 12 month time frame, but do complete a cholesterol test within 15 months (October 1 of the previous year through December 31 of the measurement year).	Time Window: See attachment	Time Window: See attachment

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SECONDARY PREVENTION: lipid control

	0074 Chronic Stable Coronary Artery Disease: Lipid Control	0075 IVD: Complete Lipid Profile and LDL Control <100	0076 Optimal Vascular Care	0611 Hyperlipidemia (Primary Prevention) - Lifestyle Changes and/or Lipid Lowering Therapy	0636 Atherosclerotic Disease and LDL Greater than 100 - Use of Lipid Lowering Agent
	• 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	compliant if: the electronic results for the most recent LDL-C test exceeds the desired threshold, the electronic result for the most recent LDL-C test is missing or an LDL-C test was not done during the measurement year. Medical Record Specification: Complete Lipid Profile: A full lipid profile completed during the measurement year, with the date and result of each component of the profile documented. Identify the most recent visit ot the doctor´s office or clinic where a full lipid profile was documented and which occurred during the measurement year (but after the diagnosis of IVD was made). Each component of the lipid profile must be noted with the date of the test and results. LDL Control <100: The number of patients in the denominator whose LDL-C is adequately controlled during the measurement year. Use the most recent LDL-C level performed during the measurement year. At a minimum documentation in the record must include a note indicating the date when the test was performed and the result.Table IVD-F: Codes to Identify a Complete Lipid Profile Description CPT CPT Category II Lipid panel 80061 3011F	LDL Date [Date (mm/dd/yyyy)] AND LDL Value [Numeric] Numerator calculation: numerator compliant is LDL during the last 15 months AND LDL value is less than 100. Enter the date of the most recent LDL test prior to and including 12/31/YYYY (measurement period). Enter the value of the most recent LDL test prior to and including 12/31/ YYYY (measurement period). Other considerations: • If an LDL was never performed, leave the date field blank. • Do not enter any test dates after the measurement period. • Test from an outside referring provider or specialist is acceptable (not required) but only if documented in the primary clinic's record and is more recent than the primary clinic's test. • Elevated Triglyceride: If LDL is "too high to calculate," enter the LDL date field and leave the LDL		

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		OR Description CPT LOINC Total cholesterol 82465 2093-3, 14647-2 WITH High density lipoprotein (HDL) 83701 2085-9, 14646-4, 18263-4 AND Triglycerides 84478 2571-8, 12951-0, 14927-8, 47210-0 Table CMC-E: CPT category II codes to identify LDL-C levels LDL-C<100: 3048F LDL-C 100-129: 3049F LDL-C>=130: 3050F			
Denominator Statement	All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period	Patients 18 years of age an older as of December 31st of the measurement year who were discharged alive for AMI, CABG or PCI on or between January 1 and November 1 of the year prior to the measurement year or who had a diagnosis of IVD during both the measurement year and the year prior to the measurement year.	Patients ages 18 to 75 with ischemic vascular disease who have at least two visits for this condition over the last two years (established patient) with at least one visit in the last 12 months.	All patients, ages 18 and older, with coronary artery disease risk factors who have an elevated LDL Time Window: 12 months	All patients diagnosed with atherosclerotic disease and an LDL level above 100 mg/dL Time Window: All available historical data for the presence of atherosclerotic disease and 3 months for LDL
Denominator Categories	Female; Male Aged 18 years and older	Female; Male 18 years and older	Female; Male Ages 18 to 75 during the measurement period	All patients, ages 18 and older	
Denominator Details	Time Window: 12 consecutive months See attached for EHR Specifications. For Claims/Administrative: See coding tables attached for coding (ICD-9-CM, ICD-10-	Time Window: Between January 1 of the year prior to the measurement year and December 31st of the measurement year. Patients 18 years or older as of December 31 of the measurement year who met the following patient	Time Window: Patients with ischemic vascular disease (IVD) with two or more visits with IVD codes in the last two years and at least one visit in the last 12 months. Medical groups perform the visit count and exclusions prior to file creation (excluded	Time Window: Coronary artery disease risk factors who have an elevated LDL See attachment	Time Window: Atherosclerotic disease and an LDL level above 100 mg/dL See attachment

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	CM, CPT)	inclusion criteria: For data on physician performance generated from a health plan: Continuous medical benefit enrollment for the measurement year, with no more than one gap in continuous enrollment of up to 45 days during the measurement year. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, there may not be more than a 1-month gap in coverage during each year of continuous enrollment. The patient must be enrolled as of December 31 of the measurement year. For data on physician performance generated from non-health plan data: Any enrollment, claim or encounter transaction any time during the measurement year. Event/ diagnosis: Event. Discharged alive for AMI, CABG or PCI on or between January 1 and November 1 of the year prior to the measurement year. Use the codes listed in Table IVD-A 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). Diagnosis. Identify patients as having IVD who met at least one of the two criteria below, during both the measurement year and the year	patients are not submitted in the direct data submission file). MNCM requires an upfront denominator certification process to ensure that the medical group is identifying the population correctly. Data collection or extraction cannot occur prior to MNCM approval of the denominator. Birth date [Date (mm/dd/yyyy)] Ischemic vascular disease ICD-9 codes: 410 – 410.92 Acute Myocardial Infarction (AMI) 411 – 411.89 Post Myocardial Infarction Syndrome 412 Old AMI 413 – 413.9 Angina Pectoris 414.0 – 414.07 Coronary Arthrosclerosis 414.2 Chronic Total Occlusion of Coronary Artery 414.8 Other Chronic Ischemic Heart Disease (IHD) 414.3 Atherosclerosis due to lipid rich plaque 414.9 Chronic IHD 429.2 Cardiovascular (CV) disease, unspecified 433 – 433.91 Occlusion and stenosis of pre-cerebral arteries 434 – 434.91 Occlusion of cerebral arteries 440.1 Atherosclerosis of renal		

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		prior to the measurement year. Criteria need not be the same across both years. • At least one outpatient visit (Table IVD-C) with an IVD diagnosis (Table IVD-B), or • At least one acute inpatient visit (Table IVD-C) with an IVD diagnosis (Table IVD-B) Medical record data 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 EMRs to identify the denominator, then use the medical record to confirm patient eligibility. Exclusions None. Table IVD-A: Codes to Identify AMI, PCI and CABG	artery 440.2 – 440.29 Atherosclerosis of native arteries of the extremities, unspecified 440.4 Chronic Total Occlusion of Artery of the Extremities 444 – 444.9 Arterial embolism and thrombosis 445 - 445.8 Atheroembolism		

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		Description CPT HCPCS ICD-9-CM Diagnosis ICD-9-CM Procedure AMI (inpatient only) 410.x1 CABG (inpatient only) 33510-33514, 33516-33519, 33521-33523, 33533-33536 S2205-S2209 36.1, 36.2 PCI 92980, 92982, 92995 G0290 00.66, 36.06, 36.07 Table IVD-B: Codes to Identify IVD Description ICD-9-CM Diagnosis IVD 411, 413, 414.0, 414.2, 414.8, 414.9, 429.2, 433, 434, 440.1, 440.2, 440.4, 444, 445 Source: Table CMC-B in Cholesterol Management for Patients With Cardiovascular Conditions. Table IVD-C: Codes to Identify Visit Type Description CPT UB Revenue Outpatient 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456 051x, 0520-0523, 0526-0529, 057x-059x, 0982, 0983 Acute inpatient 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291 010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-021x, 072x, 0987			

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Exclusions	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)	None	Valid exclusions include patients who only had one coded visit to the clinic during the last two years, patients who had died during the measurement period, patients who were in hospice during the measurement period, patients who were permanent nursing home residents during the measurement period, or patients who were coded with IVD in error.	1. Specific exclusions: • Presence of TSH Labs Result Value > 10 In the past 6 Months • Presence of NEPHROTIC SYNDROME in past 12 months • CAD Validation is confirmed • Diabetes Validation is confirmed • PAD Validation is confirmed • AAA in the past • Carotid endarterectomy in the past General exclusions: • Evidence of metastatic disease or active treatment of malignancy (chemotherapy or radiation therapy) in the last 6 months; • Patients who have been in a skilled nursing facility in the last 3 months For add a drug CCs only • Patient or provider feedback indicating allergy or intolerance to the drug in the past • Patient or provider feedback indicating that there is a contraindication to adding the drug	1. Specific exclusions: Presence of Patient Data Confirming provider made a change to their lipid treatment plan in the past 6 month General exclusions: • Evidence of metastatic disease or active treatment of malignancy (chemotherapy or radiation therapy) in the last 6 months; • Patients who have been in a skilled nursing facility in the last 3 months • Patient or provider feedback indicating allergy or intolerance to the drug in the past • Patient or provider feedback indicating that there is a contraindication to adding the drug
Exclusion Details	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)	None	Patient was a permanent nursing home resident home during the measurement period Patient was in hospice at any time during the measurement period Patient died prior to the end of the measurement period	See attachment	See attachment

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	• 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)		Documentation that diagnosis was coded in error		
Risk Adjustment	no risk adjustment necessary	no risk adjustment necessary NA	case-mix adjustment Risk adjustment for this measure is based on case mix (health plan product). Health plan product was selected because it can serve as a proxy for socioeconomic status, if more specific variables are not available. Socioeconomic status can be a variable in a patient's ability to comply with a treatment plan for achieving the intermediate outcomes that can postpone or prevent the long term complications of cardiovascular disease. Attachment MNCM Case Mix Risk Adjustment June 2010-634242034150216836.docx		

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Stratification		NA	The ischemic vascular disease population is not currently stratified when publicly reported on MNCM's consumer website, MN HealthScores. MNCM does collect the following fields that will allow for future stratification: Insurance coverage code (used to determine public and private purchasers): from list of MNCM-designated codes [number] Patient's health plan member ID (used to determine public and private purchasers): unique patient health plan member ID [text] Date of birth: [MM/DD/YYYY] Race/ethnicity: from list of MNCM-designated codes [number] Primary language: from list of MNCM-designated codes [number] Country of origin: from list of MNCM-designated codes [number] Zip code: 5-digit zip code of patient [text] Gender: M (male), F (female), U (unknown) [text] Co-morbidity of diabetes: 1 (yes), 2 (no) [number] Co-morbidity of depression: 1 (yes), 2 (no) [number]		
Type Score	Rate/proportion better quality	Rate/proportion better quality =	Weighted score/composite/scale		

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	= higher score	higher score	better quality = higher score		
Algorithm	See attached for calculation algorithm.	NA	This measure is calculated by submitting a file of individual patient values (e.g. blood pressure, LDL value, 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. If any component of the numerator is noncompliant for any one of the four components, then the patient is numerator noncompliant for the composite all or none optimal vascular care measure.		

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	0070 Chronic Stable Coronary Artery Disease: Beta-Blocker Therapy--Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071 Acute Myocardial Infarction (AMI): Persistence of Beta-Blocker Treatment After a Heart Attack	0160 Beta-blocker prescribed at discharge for AMI	0613 MI - Use of Beta Blocker Therapy
Steward	American Medical Association	National Committee for Quality Assurance	Centers for Medicare & Medicaid Services	Active Health Management
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 prior MI or a current or prior LVEF & <40% who were prescribed beta-blocker therapy	The percentage of patients age 18 years and older during the measurement year who were hospitalized and discharged alive July 1 of the year prior to the measurement year through 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 acute myocardial infarction (AMI) patients who are prescribed a beta-blocker at hospital discharge	Percentage of patients who had a myocardial infarction (MI) and are taking a beta blocker
Status	Maintenance review	Maintenance review	Maintenance review	Endorsed – not under review
Steering Committee Evaluation	Importance: Yes=17, No=0 SA: C=4, P=9, M=2 U: C=9, P=10, M=2 F: C=9, P=8, M=2 Meets criterria for endorsement: Yes= 17, No=4	Importance: Yes =21, No =0 SA: C=8, P=11, M=2 U: C=17, P=0, M=2, N=1 F: C=4, P=11, M=5, N=1 Meets criteria for endorsement: Yes = 13 No=8	Importance: Yes =10, No =11 Current performance 98.2% No opportunity for improvement	
Differences	Includes patients with LVEF < 40% as well as AMI at any time in the past;	Measures adherence to beta blocker in 6 months post-MI;		Claims based measure based on past diagnosis of AMI and pharmacy data reflecting current prescription for beta blocker
Type	Process	Process	Process	Process
Data Source	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 www.pinnacleregistry.org Attachment PCPI_CAD-7_Betablocker MI or LVEF NQF 0070.pdf	Paper medical record/flow-sheet; Electronic administrative data/claims; Pharmacy data; Electronic clinical data; Electronic Health/Medical Record NA	Paper medical record/flow-sheet; Electronic Health/Medical Record Centers for Medicare & Medicaid Services (CMS) Abstraction & Reporting Tool (CART). Vendor tools also available. URL http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1135267770141 URL Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760129036: Section 1 - Data Dictionary |	Electronic administrative data/claims; Pharmacy data

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	0070 Chronic Stable Coronary Artery Disease: Beta-Blocker Therapy--Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071 Acute Myocardial Infarction (AMI): Persistence of Beta-Blocker Treatment After a Heart Attack	0160 Beta-blocker prescribed at discharge for AMI	0613 MI - Use of Beta Blocker Therapy
			Alphabetical Data Dictionary.	
Level	Clinicians: Individual; Clinicians: Group	Clinicians: Individual; Clinicians: Group; Health Plan	Facility/Agency; Population: national; Program: QIO	Can be measured at all levels
Setting	Home; Ambulatory Care: Office; Ambulatory Care: Clinic; Nursing home (NH) /Skilled Nursing Facility (SNF); Ambulatory Care: Hospital Outpatient; Assisted Living; Group homes	Ambulatory Care: Clinic; All settings	Hospital	Nursing home (NH) /Skilled Nursing Facility (SNF); Ambulatory Care: Clinic; Other
Numerator Statement	Patients who were prescribed* beta-blocker therapy** *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, no recommendations or evidence cited in current chronic stable angina guidelines for preferential use of specific agents •For patients with prior LVEF <40%, beta-blocker therapy should include bisoprolol, carvedilol, or sustained release metoprolol succinate	A 180-day course of treatment with beta-blockers post discharge.	AMI patients who are prescribed a beta-blocker at hospital discharge	Patients who were prescribed a beta blocker Time Window: A drug day-supply that extends within 30 days of the measurement date
Numerator Details	Time Window: Once during the measurement period See attached for EHR Specifications. For Claims/Administrative: Report CPT II Code 4006F: Beta-blocker therapy prescribed	Time Window: Six months after discharge from a hospital with AMI (with the discharge anywhere from July 1 of the year prior to the measurement year through June 30 of the measurement year). Identify all patients in the denominator population whose dispensed days supply is >=135 days in the 180 days following discharge. Persistence of treatment for this measure is defined as at least 75 percent of the days supply filled. To determine continuity of treatment during the 180-day period, sum the number of allowed gap days to the number of treatment days for a	Time Window: From hospital arrival to time of hospital discharge. Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760129036: · Section 1 - Data Dictionary | Alphabetical Data Dictionary – pages 1-88 through 1-89. · Appendices | Appendix C - Medication Tables – pages Appendix C-7 through	Time Window: See attachment

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	0070 Chronic Stable Coronary Artery Disease: Beta-Blocker Therapy--Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071 Acute Myocardial Infarction (AMI): Persistence of Beta-Blocker Treatment After a Heart Attack	0160 Beta-blocker prescribed at discharge for AMI	0613 MI - Use of Beta Blocker Therapy
		maximum of 180 days (i.e., 135 treatment days + 45 gap days = 180 days); identify all prescriptions filled within 180 days of the Discharge Date. To account for members who are on beta-blockers prior to admission, the organization should factor those prescriptions into adherence rates if the actual treatment days fall within the 180 days following discharge. Table PBH-B Beta Blocker Medications: Noncardioselective beta-blockers (carteolol, carvedilol, labetalol, nadolol, penbutolol, pindolol, propranolol, timolol, sotalol), cardioselective beta-blockers (acebutolol, atenolol, betaxolol, bisoprolol, metoprolol, nebivolol), Antihypertensive combinations (atenolol-chlorthalidone, bendroflumethiazide-nadolol, bisoprolol-hydrochlorothiazide, hydrochlorothiazide-propranolol, hydrochlorothiazide-metoprolol, hydrochlorothiazide-timolol)	Appendix C-9. · Section 2 - Measurement Information | Section 2.1 - Acute Myocardial Infarction (AMI) – pages AMI-5-1 through AMI-5-5.	
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 prior MI or a current or prior LVEF <40%	Patients 18 years and older as of December 31 of the measurement year discharged alive from an acute inpatient setting with an AMI from July 1 of the year prior to the measurement year through June 30 of the measurement year.	AMI patients (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.00, 410.01, 410.10, 410.11, 410.20, 410.21, 410.30, 410.31, 410.40, 410.41, 410.50, 410.51, 410.60, 410.61, 410.70, 410.71, 410.80, 410.81, 410.90, 410.91)	All patients, ages 18 and older, diagnosed with MI Time Window: Anytime in the past
Denominator Categories	Female; Male Aged 18 years and older	Female; Male 18 years and older	Female; Male Greater than or equal to 18 years old	
Denominator Details	Time Window: 12 consecutive months See attached for EHR Specifications. For Claims/Administrative: See coding tables attached for coding (ICD-9-CM, ICD-10-CM, CPT) AND CPT category II code 3021F -	Time Window: July 1 of the year prior to the measurement year through June 30 of the measurement year. Patients 18 years and older as of December 31 of the measurement year discharged alive from an	Time Window: From hospital arrival to time of hospital discharge. ICD-9-CM Principal Diagnosis codes: 410.00: Anterolateral wall, acute myocardial infarction-episode of care	Time Window: See attachment

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	0070 Chronic Stable Coronary Artery Disease: Beta-Blocker Therapy--Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071 Acute Myocardial Infarction (AMI): Persistence of Beta-Blocker Treatment After a Heart Attack	0160 Beta-blocker prescribed at discharge for AMI	0613 MI - Use of Beta Blocker Therapy
	Left ventricular ejection fraction (LVEF) <40% or documentation of moderately or severely depressed left ventricular systolic function	acute inpatient setting with an AMI from July 1 of the year prior to the measurement year through June 30 of the measurement year. If using health plan data, patient should have continuous medical and pharmacy benefit enrollment on the discharge date through 180 days after discharge, with no more than one gap in enrollment of up to 45 days within 180 days of the event. If the patient is a Medicaid beneficiary, the patient may not have more than 1 month gap in coverage and must be enrolled on the discharge date. If using non-health plan data, the patien must have a pharmacy claim or prescription written July 1 of the year prior to the measurement year through 180 days post-discharge to be included. 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 the first discharge should be included. 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 inital discharge. The discharge date from the facility to which the patient was transferred must occur on or before June 30 of the measurement year. 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. Description ICD-9-CM Diagnosis AMI 410.x1	unspecified 410.01: Anterolateral wall, acute myocardial infarction-initial episode 410.10: Other anterior wall, acute myocardial infarction-episode of care unspecified 410.11: Other anterior wall, acute myocardial infarction-initial episode 410.20: Inferolateral wall, acute myocardial infarction-episode of care unspecified 410.21: Inferolateral wall, acute myocardial infarction-initial episode 410.30: Inferoposterior wall, acute myocardial infarction-episode of care unspecified 410.31: Inferoposterior wall, acute myocardial infarction-initial episode 410.40: Other inferior wall, acute myocardial infarction-episode of care unspecified 410.41: Other inferior wall, acute myocardial infarction-initial episode 410.50: Other lateral wall, acute myocardial infarction-episode of care unspecified 410.51: Other lateral wall, acute myocardial infarction-initial episode 410.60: True posterior wall, acute myocardial infarction-episode of care unspecified 410.61: True posterior wall, acute myocardial infarction-initial episode 410.70: Subendocardial, acute myocardial infarction-episode of care unspecified 410.71: Subendocardial, acute myocardial infarction-initial episode	

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	0070 Chronic Stable Coronary Artery Disease: Beta-Blocker Therapy--Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071 Acute Myocardial Infarction (AMI): Persistence of Beta-Blocker Treatment After a Heart Attack	0160 Beta-blocker prescribed at discharge for AMI	0613 MI - Use of Beta Blocker Therapy
			410.80: Other specified sites, acute myocardial infarction-episode of care unspecified 410.81: Other specified sites, acute myocardial infarction-initial episode 410.90: Unspecified site, acute myocardial infarction-episode of care unspecified 410.91: Unspecified site, acute myocardial infarction-initial episode	
Exclusions	Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, allergy, intolerant, bradycardia, AV block without permanent pacemaker, arrhythmia, hypotension, asthma, 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	Exclude patients who are identified as having a contraindication to beta-blocker therapy or previous adverse reaction to beta-blocker therapy. Also exclude from the denominator hospitalizations in which the patient was transferred directly to a nonacute care facility for any diagnosis.	Exclusions •<18 years of age •Patients who have a length of stay greater than 120 days •Patients enrolled in clinical trials •Discharged to another hospital •Expired •Left against medical advice •Discharged to home for hospice care •Discharged to a health care facility for hospice care •Patients with comfort measures only documented •Patients with a documented reason for no beta-blocker at discharge	Contraindications to a beta blocker, including: • Asthma • COPD • Bradycardia • Hypotension • Aortic stenosis • Peripheral artery disease medications • Heart block • Heart transplant General exclusions: • Evidence of metastatic disease or active treatment of malignancy (chemotherapy or radiation therapy) in the last 6 months; • Patients who have been in a skilled nursing facility in the last 3 months For add a drug CCs only • Patient or provider feedback indicating allergy or intolerance to the drug in the past • Patient or provider feedback indicating that there is a contraindication to adding the drug
Exclusion Details	See attached for EHR Specifications. For Claims/Administrative: Documentation of medical reason(s) for not prescribing beta-blocker therapy Append	Exclude patients who are identified as having a contraindication to beta-blocker therapy or previous adverse reaction to beta-blocker therapy. Look as far back as possible in the	Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760	See attachment

National Quality Forum Cardiovascular Competing Measures

	0070 Chronic Stable Coronary Artery Disease: Beta-Blocker Therapy--Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	0071 Acute Myocardial Infarction (AMI): Persistence of Beta-Blocker Treatment After a Heart Attack	0160 Beta-blocker prescribed at discharge for AMI	0613 MI - Use of Beta Blocker Therapy
	modifier to CPT II code 4006F-1P Documentation of patient reason(s) for not prescribing beta-blocker therapy Append modifier to CPT II code 4006F-2P Documentation of system reason(s) for not prescribing beta-blocker therapy Append modifier to CPT II code 4006F-3P	patients history through either administrative data or medical record review for evidence of contraindication or a previous adverse reaction to beta-blocker therapy. Also exclude from the denominator hospitalizations in which the patient was transferred directly to a nonacute care facility for any diagnosis. Table PBH-C: ICD-9 codes to identify exclusions: history of asthma: 493; hypotension: 458; heart block >1 degree: 426.0, 426.12, 426.13, 426.2-426.4, 426.51-426.54, 426.7; sinus bradycardia: 427.81; COPD: 491.2, 496, 506.4 Table PBH-D Medications to Identify Exclusions (hx of asthma): Bronchodilator combinations (budesonide-formoterol, fluticasone-salmeterol), inhaled corticosteroids (beclomethasone, budesonide, flunisolide, fluticasone, mometasone, triamcinolone, fluticasone CFC free)	129036: · Section 1 - Data Dictionary | Alphabetical Data Dictionary – pages 1-20 through 1-21, 1-90, 1-98 through 1-104, 1-117, 1-118 through 1-120, 1-204, and 1-327 through 1-330. · Appendices | Appendix C - Medication Tables PDF – pages Appendix C-7 through Appendix C-9, and Appendix H - Miscellaneous Tables – page Appendix H-5. · Section 2 - Measurement Information | Section 2.1 - Acute Myocardial Infarction (AMI) – pages AMI-5 plus AMI-5-1 through AMI-5-5.	
Risk Adjustment	no risk adjustment necessary	no risk adjustment necessary NA	no risk adjustment necessary N/A	
Stratification		None	N/A	
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score	
Algorithm	See Attached for calculation algorithm.	NA	Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760129036: Section 2 - Measurement Information | Section 2.1 - Acute Myocardial Infarction (AMI) – pages AMI-5 plus AMI-5-1 through AMI-5-5.	

Secondary Prevention – ACEI/ARBs

	0066 Chronic Stable Coronary Artery Disease: ACE Inhibitor or ARB Therapy--Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%)	0551 Ace Inhibitor / Angiotensin Receptor Blocker Use and Persistence Among Members with Coronary Artery Disease at High Risk for Coronary Events	0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients	0594 Post MI: ACE inhibitor or ARB therapy
Steward	American Medical Association	Health Benchmarks	Centers for Medicare & Medicaid	Resolution Health, Inc.
Description	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who also have diabetes or a current or prior LVEF <40% who were prescribed ACE inhibitor or ARB therapy	To assess the use of and persistence to ACE inhibitors or Angiotensin receptor blockers (ARB) among members with CAD or other atherosclerotic vascular disease (i.e., peripheral arterial disease, atherosclerotic aortic disease and carotid artery disease) who are at high risk for coronary events during a one year period. High-risk comorbidities are defined as heart failure, hypertension, diabetes, or chronic kidney disease (excluding stage V and patients on dialysis).	Percentage of acute myocardial infarction (AMI) patients with left ventricular systolic dysfunction (LVSD) who are prescribed an ACEI or ARB at hospital discharge. For purposes of this measure, LVSD is defined as chart documentation of a left ventricular ejection fraction (LVEF) less than 40% or a narrative description of left ventricular systolic (LVS) function consistent with moderate or severe systolic dysfunction.	This measure identifies patients with ST elevation MI (STEMI), or non-ST elevation MI (NSTEMI) plus a history of hypertension, heart failure and/or diabetes prior to the measurement year who are taking an ACEI or an ARB during the measurement year.
Status	Maintenance review	Endorsed – not under review	Maintenance review	Not under review
Steering Committee Evaluation	Importance Yes = 18, No=0 SA: C=12 P=8 M=1 N=0 U: C=12 P=9 M=0 N=0 F: C=13 P=8 M=0 N=0 Meets criteria for endorsement: Yes=21 No=0		Importance Yes = 21, No=0 SA: C=18 P=3 M=0 N=0 U: C=19 P=2 M=0 N=0 F: C=21 P=0 M=0 N=0 Meets criteria for endorsement: Yes=21 No=0	
Differences	CAD + LVSD or diabetes Retooled for EHRs Clinician level Age ≥ 18 years “prescribed” in med record	CAD/PAD/carotid + heart failure/HTN/daibetes/CKD Claims data All levels Age 18-75 years “dispensed” Medication Possession Ratio	AMI + LVSD Chart abstraction Hospital Age ≥ 18 years “prescribed” in hsopital record	AMI + HTN/heart failure/diabetes Claims data All levels Age ≥ 18 years “dispensed” At least one Rx claim
Type	Process	Process	Process	Process
Data Source	Electronic administrative data/claims; Electronic clinical data; Electronic	Electronic administrative data/claims; Pharmacy data	Paper medical record/flow-sheet; Electronic Health/Medical Record Centers for	Electronic administrative data/claims; Pharmacy data

	0066 Chronic Stable Coronary Artery Disease: ACE Inhibitor or ARB Therapy--Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%)	0551 Ace Inhibitor / Angiotensin Receptor Blocker Use and Persistence Among Members with Coronary Artery Disease at High Risk for Coronary Events	0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients	0594 Post MI: ACE inhibitor or ARB therapy
	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 www.pinnacleregistry.org Attachment PCPI_CAD-8_ACE-ARB Diabetes LVSD NQF 0066.pdf		Medicare & Medicaid Services (CMS) Abstraction & Reporting Tool (CART). Vendor tools also available. URL http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1135267770141 URL Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760129036: Section 1 - Data Dictionary | Alphabetical Data Dictionary.	
Level	Clinicians: Individual; Clinicians: Group	Clinicians: Individual; Health Plan; Clinicians: Group; Facility/Agency; Integrated delivery system	Facility/Agency; Population: national; Program: QIO	Clinicians: Individual; Population: counties or cities; Health Plan; Clinicians: Group; Integrated delivery system
Setting	Home; Ambulatory Care: Office; Ambulatory Care: Clinic; Nursing home (NH) /Skilled Nursing Facility (SNF); Ambulatory Care: Hospital Outpatient; Assisted Living; Group homes	Ambulatory Care: Clinic; Other	Hospital	Ambulatory Care: Clinic; Other
Numerator Statement	Patients who were prescribed ACE inhibitor or ARB therapy* *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	The member's persistence or medication possession ratio (MPR) for ACE inhibitor or ARB prescriptions during the measurement year. Individuals with 0% MPR will be defined as those who did not fill any prescriptions for ACE or ARB. Note: Members may switch between ACEI and ARB drugs. Time Window: 6 month period prior to measurement year to the measurement year. Of note, the 6 month period prior to the measurement year is needed to	AMI patients who are prescribed an ACEI or ARB at hospital discharge	Patients in the denominator with at least 1 Rx claim for an ACEI or an ARB medication during the measurement year Time Window: See below

	0066 Chronic Stable Coronary Artery Disease: ACE Inhibitor or ARB Therapy--Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%)	0551 Ace Inhibitor / Angiotensin Receptor Blocker Use and Persistence Among Members with Coronary Artery Disease at High Risk for Coronary Events	0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients	0594 Post MI: ACE inhibitor or ARB therapy
		identify new ACE/ARB users and the measurement year is used to calculate MPR.		
Numerator Details	Time Window: Once during measurement period See attached for EHR Specifications. For Claims/Administrative: Report CPT II Code 4009F: Angiotensin converting enzyme (ACE) inhibitor or Angiotensin Receptor Blocker (ARB) therapy prescribed	Time Window:	Time Window: From hospital arrival to time of hospital discharge Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760129036: · Section 1 - Data Dictionary | Alphabetical Data Dictionary – pages 1-18 through 1-19 plus pages 1-67 through 1-68. · Appendices | Appendix C - Medication Tables – pages Appendix C-6 through Appendix C-7 plus pages Appendix C-11 through Appendix C-12. · Section 2 - Measurement Information | Section 2.1 - Acute Myocardial Infarction (AMI) – pages AMI-3-1 through AMI-3-6.	Time Window: >=1 Rx claim for an 'ACE Group' or 'ARB Group' medication' (the complete list of drugs used in this measure is given) during the measurement year ACE Group (Medispan Drug)
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 a current or prior LVEF <40%	Continuously enrolled members 18-75 years of age with established coronary and other atherosclerotic vascular disease at high risk for coronary events. The high risk subgroup is defined as members with concurrent comorbidity of heart failure, hypertension, diabetes, or chronic kidney disease (excluding stage V and patients on dialysis). Time Window: Year prior to the measurement year	AMI patients (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.00, 410.01, 410.10, 410.11, 410.20, 410.21, 410.30, 410.31, 410.40, 410.41, 410.50, 410.51, 410.60, 410.61, 410.70, 410.71, 410.80, 410.81, 410.90, 410.91); with chart documentation of a left ventricular ejection fraction (LVEF) < 40% or a narrative description of left ventricular systolic (LVS) function consistent with moderate or severe systolic dysfunction	Patients with STEMI, or NSTEMI with hypertension, HF and/or diabetes, prior to the measurement year Tine Window: See below
Denom Categories	Female; Male Aged 18 years and older		Female; Male Greater than or equal to 18 years old	

	0066 Chronic Stable Coronary Artery Disease: ACE Inhibitor or ARB Therapy--Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%)	0551 Ace Inhibitor / Angiotensin Receptor Blocker Use and Persistence Among Members with Coronary Artery Disease at High Risk for Coronary Events	0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients	0594 Post MI: ACE inhibitor or ARB therapy
Denominator Details	Time Window: 12 consecutive months See attached for EHR Specifications. For Claims/Administrative: See coding tables attached for coding (ICD-9-CM, ICD-10-CM, CPT)	Time Window: Extensive code lists	Time Window: From hospital arrival to time of hospital discharge ICD-9-CM Principal Diagnosis codes: 410.00: Anterolateral wall, acute myocardial infarction-episode of care unspecified 410.01: Anterolateral wall, acute myocardial infarction-initial episode 410.10: Other anterior wall, acute myocardial infarction-episode of care unspecified 410.11: Other anterior wall, acute myocardial infarction-initial episode 410.20: Inferolateral wall, acute myocardial infarction-episode of care unspecified 410.21: Inferolateral wall, acute myocardial infarction-initial episode 410.30: Inferoposterior wall, acute myocardial infarction-episode of care unspecified 410.31: Inferoposterior wall, acute myocardial infarction-initial episode 410.40: Other inferior wall, acute myocardial infarction-episode of care unspecified 410.41: Other inferior wall, acute myocardial infarction-initial episode 410.50: Other lateral wall, acute myocardial infarction-episode of care unspecified 410.51: Other lateral wall, acute myocardial infarction-initial episode 410.60: True posterior wall, acute myocardial infarction-episode of care unspecified 410.61: True posterior wall, acute	Time Window: - Age >=18 years as of the end of the measurement year - AND either - >=1 claim from an inpatient setting and/ or >=2 claims from an outpatient setting with a diagnosis of 'STEMI' prior to the measurement year OR {- >=1 claim from an inpatient setting and/ or >=2 claims from an outpatient setting with a diagnosis of 'NSTEMI' prior to the measurement year AND {>=1 claim from an inpatient setting and/or >=2 claims from an outpatient setting with a diagnosis of 'heart failure' or 'diabetes' OR >=2 Rx for 'insulin' or 'oral antidiabetic group' AND No claims for 'gestational diabetes' or 'polycystic ovaries' (this is clause is an alternative definition of diabetes using claims data) OR >=2 claims from an outpatient setting for 'hypertension' }}

	0066 Chronic Stable Coronary Artery Disease: ACE Inhibitor or ARB Therapy--Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%)	0551 Ace Inhibitor / Angiotensin Receptor Blocker Use and Persistence Among Members with Coronary Artery Disease at High Risk for Coronary Events	0137 ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients	0594 Post MI: ACE inhibitor or ARB therapy
			myocardial infarction-initial episode 410.70: Subendocardial, acute myocardial infarction-episode of care unspecified 410.71: Subendocardial, acute myocardial infarction-initial episode 410.80: Other specified sites, acute myocardial infarction-episode of care unspecified 410.81: Other specified sites, acute myocardial infarction-initial episode 410.90: Unspecified site, acute myocardial infarction-episode of care unspecified 410.91: Unspecified site, acute myocardial infarction-initial episode LVSD - Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760129036: · Section 1 - Data Dictionary | Alphabetical Data Dictionary – pages 1-257 through 1-260.	- AND eligible for Rx benefits during the measurement year
Exclusions	Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, allergy, intolerant, 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	Members with a diagnosis of angiodema, hyperkalemia, hypotension, arterial stenosis, or renal failure (stage V or dialysis) at any time prior to the end of the measurement year, members who were pregnant during the measurement year, or members who were in hospice during the measurement year. Also, members who were discharged as expired from the denominator qualifying AMI, CABG or PTCA (i.e. denominator criterion [A], [B], or [C]).	Exclusions: •<18 years of age •Patients who have a length of stay greater than 120 days •Discharged to another hospital •Expired •Left against medical advice •Discharged to home for hospice care •Discharged to a health care facility for hospice care •Patients with comfort measures only documented •Patients enrolled in clinical trials •Patients with a documented reason for no	Excludes members who meet the following criteria for the ACE/ARB contraindication - >=1 claim with a diagnosis code for 'hyperkalemia', 'renal artery stenosis', 'ESRD', 'severe chronic kidney disease', 'pregnancy', or 'angioneurotic edema' (see below for the complete list of ICD9 codes)'

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	system)		ACEI and no ARB at discharge	
Exclusion Details	See attached for EHR Specifications. For Claims/Administrative: Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy • Append modifier to CPT II code 4009F-1P Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB therapy • Append modifier to CPT II code 4009F-2P Documentation of system reason(s) for not prescribing ACE inhibitor or ARB therapy • Append modifier to CPT II code 4009F-3P	Denominator Exclusion Logic: A or B or C or D [A] Members with angioedema, anuric renal failure, hypotension, hyperkalemia, on dialysis, or arterial stenosis anytime in the member's history prior to the end of the measurement year. [B] Members with pregnancy events prior to and after delivery or delivery/abortion during the measurement year. [C] Members on hospice during the measurement year. [D] Patients who were discharged as expired from the denominator qualifying AMI, CABG or PTCA (i.e. denominator criterion [A], [B], or [C]).	Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760129036: · Section 1 - Data Dictionary | Alphabetical Data Dictionary – pages 1-20 through 1-21, 1-90, 1-98 through 1-104, 1-117 through 1-120, 1-204, 1-257 through 1-260, and 1-315 through 1-320. · Appendices | Appendix C - Medication Tables PDF – pages Appendix C-6 through Appendix C-7 plus pages Appendix C-11 through Appendix C-12, and Appendix H - Miscellaneous Tables – page Appendix H-5. · Section 2 - Measurement Information | Section 2.1 - Acute Myocardial Infarction (AMI) – pages AMI-5 plus AMI-3-1 through AMI-3-6	See Measure Submission Form
Risk Adjustment	no risk adjustment necessary		no risk adjustment necessary N/A	
Stratification			N/A	
Type Score	Rate/proportion better quality = higher score		Rate/proportion better quality = higher score	
Algorithm	See attached for calculation algorithm.		Refer to http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228760129036: Section 2 - Measurement Information | Section 2.1 - Acute Myocardial Infarction (AMI) – pages AMI-5 plus AMI-3-1 through AMI-3-6.	