2017 AHA/ACC Clinical Performance and Quality Measures for Adults With ST-Elevation and Non–ST-Elevation Myocardial Infarction

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Disclosures

• Speakers Board
  – AstraZeneca
  – Jansen
  – Edwards Life Science
Scope of the Problem

- Incidence 1 MI /42 second in USA
- AMI, and the estimated annual incidences of new and recurrent MI events are 550,000 and 200,000 respectively
- The rates of hospitalization and 30-day mortality for AMI have been on the decline
- Overall mortality rate in 2008 after an AMI was still 7.8% at 30 days
- CVD/MI /stroke in patients on DAPT( PLATO trial- Clopidogrel arm ) at 12 mo was 11.7% ( 6.9% recurrent MI)

Definition of AMI

- Third Universal Definition of Myocardial Infarction consensus document published in 2012
- AMI is defined by a rise and/or fall of cardiac biomarkers (preferably cardiac troponin levels) with at least 1 value above the 99th percentile upper reference limit and with at least one of the following:
  - (a) symptoms of ischemia
  - (b) new or presumed new significant ST-segment–T wave changes or new LBBB
  - (c) development of pathological Qwave on ECG
  - (d) imaging evidence of new loss of viable myocardium or new regional wall motion abnormality
  - (e) identification of an intracoronary thrombus by angiography or autopsy.
- Type I or spontaneous MI, event related to atherosclerotic plaque disruption
American College of Cardiology (ACC)/American Heart Association (AHA) performance measures serve as vehicles to accelerate translation of scientific evidence into clinical practice.

Goal:
- provide practitioners and institutions with tools to measure the quality of care
- capture important aspects of care quality, while minimizing, when possible, the reporting burden

Quality Vs Performance measures
- The ACC/AHA Task Force on Performance Measures distinguishes quality measures from performance measures.
- Quality measures are those metrics that may be useful for local quality improvement but are not yet appropriate for public reporting or pay for performance programs (uses of performance measures).
- Quality measures are metrics that are being tested. If deemed useful upgraded to Performance measures.
• Task Force recognizes 17 Performance Measures (PM) and 7 Quality measures (QM)
• Updated from 2008 → 2017
  – Retired and added measures

Performance Measures for Use in Patients With Inpatient STEMI and NSTEMI
Clinical Case presentation

- 58 yo male presenting with acute inferior STEMI
- Outside hospital
- Non PCI capable facility
- ASA + No Heparin
- Called receiving Hospital → accepted patient
- **Door in Door out** receiving hospital within 35 min
- Arrived at receiving facility **PCI within 100 min**
• Short hospital stay 48 hrs
• **LVEF** by echo 45%
• DC patient
• DAPT, asa, betablockers, simvastatin 40 mg
• no ACE inh / No ARB
• **No lipid Profile** obtained
• **No smoking cessation** instructed or documented
• **No cardiac rehab referral provided**

**PM-1 and PM-2**

**ASA**

• ASA 162-325 mg on admission prior to PCI/Lytics for STEMI and NSTEMI
• ASA (81-325 mg) preferred 81 mg upon discharge and indefinitely
PM-3  B-blockers at discharge

- Oral beta blockers should therefore be administered to **all patients with MI** without contraindications.
- The effects of beta blockers appear also to be greatest among patients with MI complicated by heart failure, systolic cardiomyopathy, or ventricular arrhythmias.
- Patients with AMI who are prescribed a beta blocker at hospital discharge.
- Appropriate beta blockers to be used in patients with AMI and LVSD are: bisoprolol, carvedilol, extended-release metoprolol.

PM-4  High intensity Statin

- Statins have been shown in multiple secondary prevention trials to reduce cardiovascular events, including coronary heart disease death, recurrent MI, cerebrovascular events, coronary revascularization, and all-cause mortality.
- They have also been shown to delay coronary atherosclerosis progression and possibly induce plaque regression, on serial angiographic and intravascular ultrasonographic studies.
- **Paradigm of treating patients to LDL-C targets is largely abandoned**
PM-5 evaluation of LVEF

- LVEF is important from a therapeutic and prognostic standpoint
- Patients with reduced LVEF may benefit from specific medical therapies, (ACEinh, B-b, ARB, Aldost.inh, ARNI)
- LVSD may help inform and guide the invasive strategy and revascularization modality
- LVEF is one of the strongest predictors of long-term survival following AMI.
- post-MI LVEF. This will help guide the need for device therapy

PM-6 ACEin-ARB for LVSD

- Patients with AMI with LVSD (defined as chart documentation of a LVEF <40% or a narrative description of LVSF consistent with moderate or severe systolic dysfunction)
PM-7 Door to needle time

- Acute STEMI: Time to Fibrinolytic Therapy
- Survival benefit of lytics is the best with 2 hrs of symptom onset
- ACCF/AHA guideline set a benchmark time goal from hospital arrival to drug administration, or DTN time, to be 30 min
- Fibrinolytic therapy should not be administered to patients with ST depression *except when a true posterior (inferobasal) MI is suspected or when associated with ST elevation in lead aVR*
- Documentation of a *medical reason* for delayed fibrinolytic therapy (e.g., cardiopulmonary arrest, initial suspicion of bleeding/ stroke or other contraindications to use fibrinolytic therapy, respiratory failure requiring intubation, intra-aortic balloon pump insertion, late presentation >12 h after symptom onset)
- Documentation of a *patient reason* (e.g., initial patient concern with bleeding hazards)

30 Day Mortality with Reperfusion Therapy in AMI

**Meta-Analysis Comparison**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Death, %</th>
<th>FTT:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placebo</td>
<td>11.5%</td>
<td>9 placebo controlled lytic trials (n=58,800)</td>
</tr>
<tr>
<td>Lytic</td>
<td>9.6%</td>
<td>11 PTCA-lytic trials (n=2,606) - PCAT</td>
</tr>
<tr>
<td>Lytic</td>
<td>6.5%</td>
<td></td>
</tr>
<tr>
<td>PTCA</td>
<td>4.4%</td>
<td></td>
</tr>
</tbody>
</table>

**FTT:**

- Placebo lytic trials (n=58,800)
- PTCA-lytic trials (n=2,606) - PCAT
PM-8 First Medical Contact-Device Time

• STEMI (or equivalent on ECG) FMC-DT benchmark 90 min
• Documentation for delay (similar to the Lytic therapy)

PM-9 Reperfusion Therapy

• Patients with acute STEMI (or its equivalent) should receive reperfusion
• PCI preferred
• < 12 hour onset of symptoms (unless Shock of severe CHF-No time parameter)
• FMC-Device < 90 min, FMC-DT < 120 min (if transferred), DTN < 30 min (if lytics)
PM-10 Door-in-Door-Out Time

• Acute STEMI: Time From ED Arrival at STEMI Referral Facility to ED Discharge From STEMI Referral Facility in Patients Transferred for Primary PCI
• Unless: Documentation of a medical reason for the delay (e.g., cardiopulmonary arrest, balloon pump insertion, respiratory failure requiring intubation). Patient preference
• Referring facility is responsible
PM-11 Time to Primary PCI Among Transferred Patients

- **FMC-Device time < 120 min**
- D-in D–out < 30 min
- Measure reportable at the facility level Both STEMI referral facility (non–PCI-capable) and STEMI receiving facility (PCI-capable) are accountable for this measure.
- Documentation of a medical reason for the delay (e.g., cardiopulmonary arrest, balloon pump insertion, respiratory failure requiring intubation)

PM-12 Cardiac Rehabilitation Referral

- AMI patients who are referred to outpatient CR/secondary prevention program prior to hospital discharge
- **Exceptions**
  - Provider-oriented criteria (patient deemed to have a high-risk condition or a contraindication to exercise, for example)
  - Healthcare system barriers (e.g., financial barriers or lack of CR programs near a patient’s home)
- Pt eligible (MI, chronic stable angina, CABG, PCI, cardiac valve surgery, or cardiac transplantation,CHF)-Class I
PM-13: AMI: P2Y12 Receptor Inhibitor Prescribed at Discharge

- Clopidogrel, prasugrel, or ticagrelor in PCI-treated patients (BMS or DES)
- Clopidogrel or ticagrelor in medically treated patients
- Clopidogrel in STEMI patients receiving fibrinolytic therapy
- Preferred therapy duration at least for 12 mo

PM-14: STEMI: Immediate Angiography for Resuscitated Out-of-Hospital Cardiac Arrest in STEMI Patients

- Many patients with cardiac arrest and ST elevation on the ECG often have high-risk coronary anatomy, which may benefit from timely coronary angiography to identify severe coronary artery disease and possibly guide/dictate revascularization (usually with PCI)
- All patients with STEMI who are resuscitated from out-of-hospital cardiac arrest should undergo immediate angiography.
- Immediate = 120 min within resuscitation
- Inability
  - Futile effort/terminal illness/Patient, Family wishes.
  - Too unstable to Tx to PCI facility
PM-15: AMI: Non-Invasive Stress Testing Before Discharge in Conservatively Treated Patients

• All patients with AMI who are initially treated with a conservative management strategy (medical therapies alone without invasive coronary angiography as a planned initial therapy)-Usually are low risk patients

• Contraindication
  – intolerance to dobutamine or vasodilator test
  – Ongoing ischemia
  – terminal illness/futile not candidate for PCI

PM-16: Acute NSTEMI: Early Cardiac Troponin Measurement (Within 6 Hours of Arrival)

• NSTE-ACS can present with nonspecific changes on the ECG

• troponin levels expedite early diagnosis and risk stratification → earlier triage and institution of appropriate medical and interventional treatments
PM-17: AMI: Participation in a Regional or National Registries That Include Patients With Acute Myocardial Infarction

• Examples of such registries include the NCDR ACTION Registry-Get With The Guidelines, Mission Lifeline, and the D2B Alliance

• STEMI (Class I)

• NSTEMI (Class IIa)

• includes assessment and continuous quality improvement of emergency medical services and hospital-based activities

Quality Improvement Measures for Inpatient STEMI and NSTEMI Patients
QM-1: NSTEMI: Risk Stratification of NSTEMI Patients With a Risk Score

• Patients with NSTEMI who have a risk score documented during hospitalization
  – TIMI risk score
  – GRACE risk score

• Early invasive strategy (12-24Hrs) Vs Delayed invasive strategy (24-72Hrs)
QM-2: Acute NSTEMI: Early Invasive Strategy (Within <24 Hours) for High-Risk NSTEMI Patients

- Patients with acute NSTEMI who are high risk and receive early invasive strategy (diagnostic angiography with intent to perform revascularization if appropriate based on coronary anatomy) within 24 h of admission
- A high-risk NSTEMI patient is best defined by an objective risk score (e.g., GRACE risk score >140 or TIMI risk score >4).
QM-3: STEMI: Therapeutic Hypothermia for Comatose STEMI Patients With Out-of-Hospital Cardiac Arrest
- Therapeutic hypothermia should be started as soon as possible in comatose patients with STEMI and out-of-hospital cardiac arrest caused by ventricular fibrillation (VF) or pulseless ventricular tachycardia (VT), including patients who undergo primary PCI (Class I, Level of Evidence: B)

QM-4: AMI: Aldosterone Antagonist Prescribed at Discharge
- Post MI /LVEF < 0.4 and either HF or DM
- On ACEinh/ARB/Bb
- Contraindication:
  - Creat 2.0-2.5mg/dl,K>5.0
QM-5: AMI: Inappropriate In-Hospital Use of NSAIDs

• Class III

QM-6: AMI: Inappropriate Prescription of Prasugrel at Discharge in Patients With a History of Prior Stroke or TIA

• Class III
QM-7: AMI: Inappropriate Prescription of High-Dose Aspirin With Ticagrelor at Discharge

- Class III

<table>
<thead>
<tr>
<th>No.</th>
<th>Measure Title</th>
<th>Care Setting</th>
<th>Attribution</th>
<th>Measure Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM-1</td>
<td>Aspirin at Arrival</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Effective Clinical Care</td>
</tr>
<tr>
<td>PM-2</td>
<td>Aspirin Prescribed at Discharge</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Effective Clinical Care</td>
</tr>
<tr>
<td>PM-3</td>
<td>Beta Blocker Prescribed at Discharge</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Effective Clinical Care</td>
</tr>
<tr>
<td>PM-4</td>
<td>High-Intensity Statin Prescribed at Discharge</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Effective Clinical Care</td>
</tr>
<tr>
<td>PM-5</td>
<td>Evaluation of LVSD</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Effective Clinical Care</td>
</tr>
<tr>
<td>PM-6</td>
<td>ACEI or ARB Prescribed for LVSD</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Effective Clinical Care</td>
</tr>
<tr>
<td>PM-7</td>
<td>Time to Fibrinolytic Therapy*</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Communication and Care Coordination</td>
</tr>
<tr>
<td>PM-8</td>
<td>Time to Primary PCI*</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Communication and Care Coordination</td>
</tr>
<tr>
<td>PM-9</td>
<td>Reperfusion Therapy*</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Effective Clinical Care</td>
</tr>
<tr>
<td>PM-10</td>
<td>Time From ED Arrival at STEMI Referral Facility to ED Discharge</td>
<td>Inpatient</td>
<td>Facility Level</td>
<td>Communication and Care Coordination</td>
</tr>
<tr>
<td>PM-11</td>
<td>Time From FMC (All or Before ED Arrival at STEMI Referral Facility) to Primary PCI at STEMI Receiving Facility Among Transferred Patients*</td>
<td>Inpatient</td>
<td>Facility Level</td>
<td>Communication and Care Coordination</td>
</tr>
<tr>
<td>PM-12</td>
<td>Cardiac Rehabilitation Patient Referral From an Inpatient Setting</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Communication and Care Coordination</td>
</tr>
<tr>
<td>PM-13</td>
<td>PPI Receptor Inhibitor Prescribed at Discharge</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Effective Clinical Care</td>
</tr>
<tr>
<td>PM-14</td>
<td>Immediate Angiography for Recanalized Out-of-Hospital Cardiac Arrest in STEMI Patients*</td>
<td>Inpatient</td>
<td>Facility or Provider Level</td>
<td>Effective Clinical Care</td>
</tr>
</tbody>
</table>
### Table 1: 2017 AHA/ACC STEMI and NSTEMI Myocardial Infarction Clinical Performance and Quality Measures

| PM-15 | Noninvasive Stress Testing Before Discharge in Conservatively Treated Patients | Inpatient | Facility or Provider Level | Efficiency and Cost Reduction |
| PM-16 | Early Cardiac Troponin Measurement (Within 6 Hours of Arrival) | Inpatient | Facility or Provider Level | Efficiency and Cost Reduction |
| PM-17 | Participation in a Regional or National Registry That Include Patients With Acute Myocardial Infarction Registry | Inpatient | Facility Level | Community, Population, and Public Health |

#### Quality Measures

| QM-1 | Risk Stratification of NSTEMI Patients With a Risk Score | Inpatient | Facility or Provider Level | Effective Clinical Care |
| QM-2 | Early invasive strategy (within 24 hours) in High-risk NSTEMI patients | Inpatient | Facility or Provider Level | Effective Clinical Care |
| QM-3 | Therapeutic Hypothermia for Comatose STEMI Patients With Out-of-Hospital Cardiac Arrest | Inpatient | Facility or Provider Level | Effective Clinical Care |
| QM-4 | Alkaline Antagonist Prescribed at Discharge | Inpatient | Facility or Provider Level | Effective Clinical Care |
| QM-5 | Inappropriate in-Hospital Use of NSAIDs | Inpatient | Facility or Provider Level | Patient Safety |
| QM-6 | Inappropriate Prescription of Prazosin at Discharge in Patients With a History of Prior Stroke or TIA | Inpatient | Facility or Provider Level | Patient Safety |
| QM-7 | Inappropriate Prescription of High-Dose Aspirin With Ticagrelor at Discharge | Inpatient | Facility or Provider Level | Patient Safety |

### Table 4: Retired STEMI and NSTEMI Measures From the 2008 Set

<table>
<thead>
<tr>
<th>#</th>
<th>Care Setting</th>
<th>Measure Title</th>
<th>Rationale for Retiring the Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM-10</td>
<td>Inpatient</td>
<td>All-Staff Smoking Cessation Advice/Counseling</td>
<td>This measure is being retired because perfect scores are consistently achieved and the measure appears to have reached a ceiling effect. Therefore, given degrees of rise for further improvement, the writing committee opted to omit this measure from the inpatient performance measure set for AMI (realizing also that a separate outpatient CAD measure set will likely address smoking cessation advice/counseling). The writing committee also recognizes the importance of the American Medical Association Physician Consortium for Performance Improvement Tobacco Use: Screening and Cessation Intervention measure that already exists (37).</td>
</tr>
<tr>
<td>CM-1</td>
<td>Inpatient</td>
<td>LDL Cholesterol Assessment</td>
<td>This measure is being retired to be consistent with the new lipid guidelines that no longer recommend LDL measurements to target statin prescription and/or dosing.</td>
</tr>
<tr>
<td>CM-2</td>
<td>Inpatient</td>
<td>Excessive Initial Hepatic Dose</td>
<td>This measure is being retired because it covers only one aspect of medication use (e.g., overdosage) and misses other aspects such as underdosing and inappropriate use. In addition, this is not a direct stand-alone Class I or II recommendation in the guidelines and has shortcomings pertinent to measure feasibility and accountability.</td>
</tr>
<tr>
<td>CM-3</td>
<td>Inpatient</td>
<td>Excessive Initial Glicoprotein Dose</td>
<td>This measure is being retired because it covers only one aspect of medication use (e.g., overdosage) and misses other aspects such as underdosing and inappropriate use. In addition, this is not a direct stand-alone Class I or II recommendation in the guidelines and has shortcomings pertinent to measure feasibility and accountability.</td>
</tr>
</tbody>
</table>
### TABLE 4  Retired STEMI and NSTEMI Measures From the 2008 Set

<table>
<thead>
<tr>
<th>#</th>
<th>Inpatient</th>
<th>Measure Title Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QE3</td>
<td>Inpatient</td>
<td>Exclusive Initial Dobutamine Dose</td>
</tr>
<tr>
<td>QE4</td>
<td>Inpatient</td>
<td>Exclusive Initial Dobutamine Dose</td>
</tr>
<tr>
<td>QE5</td>
<td>Inpatient</td>
<td>Exclusive Initial Dobutamine Dose</td>
</tr>
<tr>
<td>QE6</td>
<td>Inpatient</td>
<td>Exclusive Initial Dobutamine Dose</td>
</tr>
<tr>
<td>QE7</td>
<td>Inpatient</td>
<td>Antiplatelet Dosing Protocol</td>
</tr>
<tr>
<td>QE8</td>
<td>Inpatient</td>
<td>Antiplatelet Emissary Tracking System</td>
</tr>
</tbody>
</table>

This measure is being retired because it covers only one aspect of medication use (e.g., overdosing) and misses other aspects such as underdosing and inappropriate use. In addition, this is not a direct stand-alone Class I or III recommendation in the guidelines and has shortcomings pertinent to measure feasibility and accountability.

### TABLE 5  Revised STEMI and NSTEMI Measures

<table>
<thead>
<tr>
<th>#</th>
<th>Care Setting</th>
<th>Measure Title</th>
<th>Retain for Revision of the Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM6</td>
<td>Inpatient</td>
<td>STEMI for AMI</td>
<td>This measure is being evolved to reflect the 2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults. The document that describes the measure includes the following guidance:</td>
</tr>
<tr>
<td>PM7</td>
<td>Inpatient</td>
<td>Evaluation of LVEF</td>
<td>The title of the measure is being revised from “Evaluation of Left Ventricular Systolic Function” to “Evaluation of Left Ventricular Ejection Fraction.” The treatment recommendations regarding the use of guideline-directed medical therapies are based on LVESD, not qualitative estimations of left ventricular systolic function. The 2009 ACC/AHA/SCAI guidelines explicitly recommend measuring LVESD. The 2014 AHA/ACC/AATS guidelines (14) likewise have medical recommendations based on knowledge of the ejection fraction.</td>
</tr>
<tr>
<td>PM8</td>
<td>Inpatient</td>
<td>Cardiac Rehabilitation Referral</td>
<td>This measure is being adapted from the MCV/UC/SHS 2010 Update Performance Measures on Cardiac Rehabilitation Referral to Cardinal Rehabilitation/Cardiovascular Prevention Services (15). The modification was made to include the number of patients who received a referral to cardiac rehabilitation as a measure of quality.</td>
</tr>
<tr>
<td>PM9</td>
<td>Inpatient</td>
<td>PICF Recruited Referral at Discharge</td>
<td>In the 2008 ACC/AHA/SCAI STEMI/NSTEMI measures set, 2 new measures entitling “Discharge at Discharge” were included. Since then, 2 newer FDA approved medications—eptifibatide and glycoprotein—have emerged and demonstrated safety, efficacy, and clinical effectiveness after AMI. As these medications are physician-directed choices, the measure is not appropriate to be included as part of a dual antiplatelet regimen to reduce recurrent ischemic events after AMI.</td>
</tr>
</tbody>
</table>

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Allegheny Health Network
TABLE 6  New STEMI/NSTEMI Measures

<table>
<thead>
<tr>
<th>No.</th>
<th>Care Setting</th>
<th>Measure Title</th>
<th>Rationale for Creating New Measure</th>
<th>Rationale for Designating as a Quality Measure as Opposed to a Performance Measure (If Applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM-16</td>
<td>Inpatient</td>
<td>Intracoronary Angiography for Suspected Out-of-Hospital Cardiac Arrest in STEMI Patients</td>
<td>This measure seeks to improve a Class IIb level of evidence A recommendation in the 2013 ACC/AHA/SCAI guidelines that intracoronary angiography with PCI when indicated should be performed in unascertained out-of-hospital cardiac arrest patients with a normal initial ECG suggestive of STEMI.</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

PM-18 | Inpatient | Noninvasive Imaging Testing, Before Discharge in Coronary CT-Related Patients | This measure seeks to implement a Class IIb level of evidence A recommendation in the 2013 ACC/AHA/SCAI guidelines that noninvasive imaging testing (NIT) should be used to assess risk in a subset of patients who have a non-ST-segment elevation myocardial infarction (NSTEMI) or STEMI. | Not Applicable |

PM-19 | Inpatient | Early Cardiac Troponin | This measure seeks to implement a Class IA level of evidence A recommendation in the 2013 ACC/AHA/SCAI guidelines that early troponin testing should be performed in all patients with NSTEMI or STEMI. | Not Applicable |

PM-20 | Inpatient | Participation in Regional or National Acute Myocardial Infarction Registry | This measure seeks to implement a Class IA level of evidence A recommendation in the 2013 ACC/AHA/SCAI guidelines that participation in a regional or national NSTEMI registry will help track and assess the outcomes, complications, and quality of care for patients with AMI, and is supported by evidence. | Not Applicable |

CM-1 | Inpatient | Risk Score Stratification for NSTEMI Patients | This measure seeks to implement a Class IA level of evidence A recommendation in the 2014 ACC/AHA/SCAI guidelines that risk score stratification should be used to assess prognosis in patients with NSTEMI. | Not Applicable |

CM-2 | Inpatient | Early Invasive Strategy (within 24 Hours) in High Risk NSTEMI Patients | This measure seeks to implement a Class IA level of evidence A recommendation in the 2014 ACC/AHA/SCAI guidelines that an early invasive strategy should be performed in high-risk NSTEMI patients with high-risk. | Not Applicable |

CM-3 | Inpatient | Therapeutic Hypothermia for Conscious STEMI Patients with Risk of Cardiac Arrest | This measure seeks to implement a Class IA level of evidence A recommendation in the 2013 ACC/AHA/SCAI guidelines that therapeutic hypothermia should be started in patients with STEMI and anterior hospital cardiac arrest caused by VF or VT. | Not Applicable |

CM-4 | Inpatient | Abnormal ECG Arrhythmia at Discharge | This measure seeks to implement a Class IA level of evidence A recommendation in the 2013 ACC/AHA/SCAI guidelines that patients with STEMI and NSTEMI should be evaluated for arrhythmias at discharge. | Not Applicable |
<table>
<thead>
<tr>
<th>No.</th>
<th>Care Setting</th>
<th>Measure Title</th>
<th>Rationale for Creating New Measure</th>
<th>Rationale for Designating as a Quality Measure as Opposed to a Performance Measure (If Applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inpatient</td>
<td>Inappropriate Use of NSAIDs</td>
<td>This measure seeks to implement Class III recommendations (Class IIa, Level of Evidence: B) in both the 2010 ACC/AHA STEMI (20) and 2011 AHA/ACC NSTEMI (18) guidelines, cautioning against the use of these drugs after AMI.</td>
<td>The writing committee felt it is best to keep this as a quality measure given the low impact associated with the use of NSAIDs during the brief hospitalization period (this is likely more relevant in the outpatient setting). The existence of an extensive and evolving list of NSAIDs may also create significant abstraction burden.</td>
</tr>
<tr>
<td>2</td>
<td>Inpatient</td>
<td>Inappropriate Prescription of Aspirin at Discharge in Patients With a History of Prior Stroke or TIA</td>
<td>This measure seeks to implement Class III recommendations (Class IIa, Level of Evidence: B) in both the 2011 AHA/ACC NSTEMI (18) and 2014 AHA/ACC NSTEMI guidelines, cautioning against the use of aspirin in patients with prior TIA/stroke, because of net clinical harm in these patients. The FDA also issued a black box warning on this.</td>
<td>The writing committee felt it is best to keep this as a quality measure only for the time being until more data became available pertinent to this measure and its impact in real-world patients.</td>
</tr>
<tr>
<td>3</td>
<td>Inpatient</td>
<td>Inappropriate Prescription of High-Dose Aspirin at Discharge</td>
<td>This measure seeks to implement Class III recommendations (Class IIa, Level of Evidence: B) in both the 2011 ACC/AHA STEMI (20) and 2014 AHA/ACC NSTEMI (18) guidelines, cautioning against the use of high-dose aspirin (200 mg) among patients receiving ticagrelor. The FDA also issued a black box warning on this.</td>
<td>The writing committee felt it is best to keep this as a quality measure only for the time being until more data became available pertinent to this measure and its impact in real-world patients.</td>
</tr>
</tbody>
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