# Table of Contents

| #0065: | Coronary Artery Disease (CAD): Symptom and Activity Assessment | 2 |
| #0066: | CAD: ACE inhibitor/angiotensin receptor blocker (ARB) Therapy | 3 |
| #0067: | Antiplatelet Therapy | 5 |
| #0068: | Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic | 6 |
| #0070: | CAD: Beta-Blocker Therapy-Prior myocardial infarction (MI) | 7 |
| #0071: | Acute Myocardial Infarction (AMI): Persistence of Beta-Blocker Treatment After a Heart Attack | 8 |
| #0072: | CAD: Beta-Blocker Treatment after a Heart Attack | 9 |
| #0073: | IVD: Blood Pressure Management | 11 |
| #0074: | CAD: Drug Therapy for Lowering LDL-Cholesterol | 12 |
| #0075: | IVD: Complete Lipid Profile and LDL Control <100 | 13 |
| #0076: | CAD: optimally managed modifiable risk | 14 |
| #0132: | Aspirin at arrival for acute myocardial infarction (AMI) | 15 |
| #0133: | PCI mortality (risk-adjusted)© | 16 |
| #0137: | ACEI or ARB for left ventricular systolic dysfunction- Acute Myocardial Infarction (AMI) Patients | 18 |
| #0142: | Aspirin prescribed at discharge for AMI | 19 |
| #0160: | Beta blocker prescribed at discharge for AMI | 20 |
| #0161: | AMI inpatient mortality (risk-adjusted) | 21 |
| #0163: | Primary PCI within 90 minutes of Hospital Arrival | 22 |
| #0164: | Percutaneous coronary intervention (PCI) volume | 23 |
| #0165: | Fibrinolytic Therapy received within 30 minutes of hospital arrival | 24 |
| #0230: | Acute Myocardial Infarction 30-day Mortality | 24 |
| #0282: | Angina without procedure (PQI 13) | 25 |
| #0286: | Aspirin at Arrival | 26 |
| #0287: | Median to Fibrinolysis | 27 |
| #0288: | Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival | 28 |
| #0289: | Median to ECG | 29 |
| #0290: | Median Time to Transfer to Another Facility for Acute Coronary Intervention | 30 |
| #0355: | Bilateral Cardiac Catheterization Rate (IQI 25) | 31 |
| #0065: Coronary Artery Disease (CAD): Symptom and Activity Assessment  
American Medical Association-Physician Consortium for Performance Improvement |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Description:</strong> Percentage of patients with CAD who were evaluated for both level of activity and anginal symptoms during one or more office visits.</td>
</tr>
</tbody>
</table>
| **Setting:** Ambulatory Care: Clinic  
**Level of Analysis:** Clinicians: Individual |
| **Data Source:** Electronic administrative data/claims |
| **Target Outcome (unadjusted numerator):** Patients evaluated for both level of activity and anginal symptoms during one or more office visits  
Medical record must include documentation of the patient’s level of activity and anginal symptoms  
And/Or  
Grading of Angina by the Canadian Cardiovascular Society Classification System  
And/Or  
the patient completed a symptom and/or activity questionnaire (e.g., Seattle Angina Questionnaire)  
Or  
CPT-II code 1002F: Anginal symptoms and level of activity assessed |
| **Target Population (denominator):** All patients with CAD > 18 years of age  
Patient Selection:  
ICD-9-CM codes for CAD: 414.00-414.07, 414.8, 414.9, 410.00-410.92, 412, 411.0-411.89, 413.0-413.9, V45.81, V45.82;  
Or  
CPT Diagnosis codes: 92980-92982, 92984, 92995, 92996, 33140, 33510-33514, 33516-33519, 33521-33523, 33533-33536  
And  
CPT codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404  
And  
Patient’s age is > 18 years |
| **Target Population (denominator) Exclusions:** |
| **Methods/ Risk Adjustment:** |
| **Target Outcome (unadjusted numerator) Details:** |
| **Target Population (denominator) Details:** |
| **Target Population (denominator) Exclusion Details:** |
#0066: CAD: ACE inhibitor/angiotensin receptor blocker (ARB) Therapy

American Medical Association-Physician Consortium for Performance Improvement

**Description:** Percentage of patients with CAD who also have diabetes and/or LSVD who were prescribed ACE inhibitor or ARB therapy.

**Setting:** Ambulatory Care: Clinic  **Level of Analysis:** Clinicians: Individual

**Data Source:** Electronic administrative data/claims

**Target Outcome (unadjusted numerator):** Patients who were prescribed ACE inhibitor or ARB therapy (drug list available at www.ama-assn.org/ama/pub/category/4837.html) Or CPT-II code: 4009F ACE inhibitor or ARB therapy prescribed

**Target Population (denominator):** All patients with CAD > 18 years of age who also have diabetes and/or LVSD

**Patient Selection:**
- ICD-9-CM codes for CAD: 414.00-414.07, 414.8, 414.9, 410.00-410.92, 412, 411.0-411.89, 413.0-413.9, V45.81, V45.82;
- Or CPT codes: 92980-92982, 92984, 92995, 92996, 33140, 33510-33514, 33516-33519, 33521-33523, 33533-33536
- And ICD-9-CM codes for diabetes: 250.00-250.93, 357.2, 362.01-362.07, 366.41, 648.00-648.04
- Or CPT procedure codes for testing LVSD: 78414, 78468, 78472, 78473, 78480, 78481, 78483, 78494, 93303, 93304, 93307, 93308, 93312, 93314, 93315, 93317, 93350, 93543
- And Additional individual medical record review must be completed to identify patients who had documentation of an ejection fraction <40% (use most recent value)]
- Or With an active anti diabetic medication* prescribed (drug list available)
- Or [CPT-II codes: 3021F Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function;3022F Left ventricular ejection fraction (LVEF) = 40% or documentation as normal or mildly depressed left ventricular systolic function]
- And Patient’s age is > 18 years

**Target Population (denominator) Exclusions:** Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy:
- Allergy or intolerance to ACE inhibitor or ARB;
- ACE inhibitor contraindications including angioedema, anuric renal failure, moderate or severe aortic stenosis or pregnancy ICD-9-CM exclusion codes: 440.1, V56.0, V56.8, 39.95, 54.98, 788.5, 586, 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93, 584.5-584.9, , 585.5, 585.6, 395.0, 395.2, 396.0, 396.2, 396.8, 425.1, 747.22, V22.0-V23.9, 277.6;
- Or Other medical reason documented by the practitioner for not prescribing ACE inhibitor or ARB therapy;
- Or CPT-II code w/ modifier: 4009F 1P
- Other Patient reason (e.g., economic, social, religious)
- Or CPT-II code w/ modifier 4009F 2P

OR
<table>
<thead>
<tr>
<th>Other system reason for not prescribing ACE inhibitor or ARB therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CPT II Code w/ modifier 4009F 3P</td>
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</tbody>
</table>

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<tr>
<th>Methods/ Risk Adjustment:</th>
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<tr>
<th>Target Outcome (unadjusted numerator) Details:</th>
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<th>Target Population (denominator) Details:</th>
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<tr>
<th>Target Population (denominator) Exclusion Details:</th>
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</table>
### #0067: CAD: Antiplatelet Therapy
American Medical Association-Physician Consortium for Performance Improvement

<table>
<thead>
<tr>
<th>Description:</th>
<th>Percentage of patients with CAD who were prescribed antiplatelet therapy.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting:</td>
<td>Ambulatory Care: Clinic  Level of Analysis: Clinicians: Individual</td>
</tr>
<tr>
<td>Data Source:</td>
<td>Electronic administrative data/claims</td>
</tr>
<tr>
<td>Target Outcome (unadjusted numerator):</td>
<td>Patients who were prescribed antiplatelet therapy (aspirin, clopidogrel or combination of aspirin and dipyridamole) (drug list available at <a href="http://www.ama-assn.org/ama/pub/category/4837.html">www.ama-assn.org/ama/pub/category/4837.html</a>) Or CPT-II code: 4011F Oral antiplatelet therapy prescribed</td>
</tr>
<tr>
<td>Target Population (denominator):</td>
<td>All patients with CAD &gt; 18 years of age</td>
</tr>
<tr>
<td>Patient Selection:</td>
<td>ICD-9-CM codes for CAD: 414.00-414.07, 414.8, 414.9, 410.00-410.92, 412, 411.0-411.89, 413.0-413.9, V45.81, V45.82; Or CPT Diagnosis codes: 92980-92982, 92984, 92995, 92996, 33140, 33510-33514, 33516-33519, 33521-33523, 33533-33536 And CPT codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404 And Patient’s age is &gt; 18 years</td>
</tr>
<tr>
<td>Target Population (denominator) Exclusions:</td>
<td>Documentation of medical reason(s) for not prescribing antiplatelet therapy: • Active bleeding in the previous six months, which required hospitalization(s) or transfusion(s); Or • Aspirin/clopidogrel allergy/intolerance ICD-9-CM exclusion codes: 995.0 and E935.3, 995.1 and E935.3, 995.2 and E935.3, 995.0, and E934.8, 995.1 and E934.8, 995.2 and E934.8; Or • Other medical reason(s) documented by the practitioner for not prescribing antiplatelet therapy Or • CPT-II code w/modifier: 4011F 1P Documentation of patient reason(s) (e.g., economic, social, religious) Or • CPT-II code w/modifier: 4011F 2P Documentation of system reason(s) documented by the practitioner for not prescribing antiplatelet therapy • CPT II code w/modifier 4011F 3P</td>
</tr>
<tr>
<td>Methods/ Risk Adjustment:</td>
<td></td>
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<tr>
<td>Target Outcome (unadjusted numerator) Details:</td>
<td></td>
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<tr>
<td>Target Population (denominator) Details:</td>
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<tr>
<td>Target Population (denominator) Exclusion Details:</td>
<td></td>
</tr>
</tbody>
</table>
#0068: Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic
National Committee for Quality Assurance

**Description:** Percentage of patients who have documentation of use of aspirin or another antithrombotic during the 12-month measurement period.

**Setting:** Ambulatory Care: Clinic
**Level of Analysis:** Clinicians: Individual

**Data Source:** Electronic administrative data/claims

**Target Outcome (unadjusted numerator):** The number of patients who have documentation of use of aspirin or another antithrombotic during the 12-month measurement period. Documentation in the medical record must include, at a minimum, a note indicating the date on which aspirin or another antithrombotic was prescribed or documentation of prescription from another treating physician.

**Target Population (denominator):** A systematic sample of patients, age 18 years and older with a diagnosis of ischemic vascular disease (IVD) for at least 12 months, who have been under the care of the physician or physician group for IVD for at least 12 months (this is defined by documentation of a face-to-face visit for IVD care between the physician and the patient that predates the most recent IVD visit by at least 12 months.)

**Codes to Identify a Patient with a Diagnosis of Ischemic Vascular Disease:-**
- **ICD-9:** 411, 413, 414.0, 414.8, 414.9, 429.2, 433-434, 440.1, 440.2, 444, 445
- **DRG:** 140, 559

If using health plan administrative claims to identify the eligible population and then attributing to physicians, use the following denominator specifications:
- Discharged alive for AMI, CABC or PTCA on or between 1/1-11/1 of the year prior to the measurement year or at one outpatient or acute inpatient during the measurement year and year prior to the measurement year.
- **AMl:** ICD-9: 410.x1, DRG: 121, 122, 516
- **PTCA:** CPT: 33140, 92980-92982, 92984, 92995, 92996, ICD-9: 00.66, 36.01, 36.02, 36.05, 36.06, 36.07, 36.09, DRG: 516, 517, 526, 527, 555-558

**Codes to Identify a Patient with a Diagnosis of Ischemic Vascular Disease:-**
- **ICD-9:** 411, 413, 414.0, 414.8, 414.9, 429.2, 433-434, 440.1, 440.2, 444, 445
- **DRG:** 140, 559

**Outpatient Codes:** CPT: 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499, UB-92: 051x, 0520-0523, 0526-0529, 057x-059x, 077x, 0982, 0983

**Acute inpatient:** CPT: 99221-99223, 99231-99233, 99238, 99239, 99251, 99255, 99261-99263, 99291, UB-92: 010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 0987

**Presentation of Codes:**
Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three digit code is listed, it is valid as a three-, four- or five-digit code. When necessary, a code may be specified with an “x” which represents a required digit. For example ICD-9 CM diagnosis code 640.0x means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.

**Target Population (denominator) Exclusions:** Exclude patient self-report.

**Methods/ Risk Adjustment:**

**Target Outcome (unadjusted numerator) Details:**
### #0070: CAD: Beta-Blocker Therapy-Prior myocardial infarction (MI)

**American Medical Association-Physician Consortium for Performance Improvement**

**Description:** Percentage of patients with prior MI at any time who were prescribed beta-blocker therapy.

**Setting:** Ambulatory Care: Clinic  
**Level of Analysis:** Clinicians: Individual

**Data Source:** Electronic administrative data/claims

**Target Outcome (unadjusted numerator):** Patients who were prescribed beta blocker therapy (drug list available at www.ama-assn.org/ama/pub/category/4837.html) OR CPT-II code: 4006F Beta-blocker therapy prescribed

**Target Population (denominator):** All patients with CAD who also have prior MI at any time > 18 years of age  
Patient Selection:  
ICD-9-CM codes for CAD: 414.00-414.07, 414.8, 410.00-410.92, 412, 411.0-411.89, 413.0-413.9, V45.81, V45.82;  
Or CPT codes: 92980-92982, 92984, 92995, 92996, 33140, 33510-33514, 33516-33519, 33521-33523, 33533-33536;  
And ICD-9-CM codes for MI: 410.00-410.92, 412;  
And Patient’s age is > 18 years

**Target Population (denominator) Exclusions:**  
Documentation of medical reason(s) for not prescribing beta-blocker therapy:  
• Documentation of bradycardia < 50 bpm (without beta-blocker therapy) on two consecutive readings, history of Class IV (congestive) heart failure, history of second- or third-degree atrioventricular (AV) block without permanent pacemaker. ICD-9-CM exclusion codes: 493.00-493-92, 458.0, 458.1, 458.21, 458.29, 458.8, 458.9, 426.0 without V45.01, 426.12 without V45.01, 426.13 without V45.01, 427.81, 427.89;  
Or  
• Other medical reason(s) documented by the practitioner for not prescribing beta blocker therapy;  
Or  
• CPT-II code with modifier: 4006F 1P  
Documentation of patient reason(s) (e.g., economic, social, religious)  
Or CPT-II code with modifier: 4006F 2P  
Documentation of system reason(s) for not prescribing beta-blocker therapy;  
OR  
CPT II w/modifier 4006F 3P

**Methods/ Risk Adjustment:**
| **#0071: Acute Myocardial Infarction (AMI): Persistence of Beta-Blocker Treatment After a Heart Attack**  
*National Committee for Quality Assurance* |
<table>
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<tbody>
<tr>
<td><strong>Description:</strong> Percentage of patients whose days’ supply of beta blockers dispensed is ( \geq 135 ) days in the 180 days following discharge.</td>
</tr>
</tbody>
</table>
| **Setting:** Ambulatory Care: Clinic  
**Level of Analysis:** Clinicians: Individual |
| **Data Source:** Electronic administrative data/claims |
| **Target Outcome (unadjusted numerator):** The number of patients in the denominator population whose days’ supply of beta blockers prescribed 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 account for patients who are on beta-blockers prior to admission, factor those prescriptions into adherence rates if the actual treatment days fall within the 180 days following discharge.  
Documentation in medical record must include, at a minimum, a note indicating that the patient received a prescription for beta-blockers within the time frame specified. |
| **Target Population (denominator):** All patients aged 35 and older as of December 31 of the measurement year, discharged alive from an acute inpatient setting with an AMI between July 1 of the year prior to the measurement year through June 30 of the measurement year.  
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, include only the first discharge.  
Transfers to acute facilities. Include hospitalizations in which the patient was transferred directly to another acute care facility for any diagnosis. Count the discharge from the subsequent, not the initial, acute inpatient facility. The discharge date from the facility to which the patient was transferred must occur on or before June 30 of the measurement year.  
Transfers to nonacute facilities. Exclude from the denominator hospitalizations in which the patient was transferred directly to a nonacute care facility for any diagnosis.  
Readmissions. If the patient is 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.  
The denominator (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims or other codified encounter data should be used to identify patients who have had an acute myocardial infarction in the prior (12) months from which a purposeful sample (random, consecutive retrospective or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator. |
| **Target Population (denominator) Exclusions:** 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 patients history through either administrative data or medical record review for evidence of contraindication or a previous adverse reaction to beta-blocker therapy.  
Codes to identify contraindications to beta-blockers:  
History of asthma: prescription: inhaled corticosteroids, ICD-9: 493;  
Hypotension: 458;  
Heart block > 1 degree: 426.0, 426.12, 426.13, 426.2-426.4, 426.51, 426.52-426.54, 426.7;  
Sinus bradycardia: 427.81;  
COPD: 491.2, 496, 506.4 |
| **Methods/ Risk Adjustment:** |
| **Target Outcome (unadjusted numerator) Details:** |
| **Target Population (denominator) Details:** |
### Target Population (denominator) Exclusion Details:

#### #0072: CAD: Beta-Blocker Treatment after a Heart Attack

| Description: | Percentage of patients who have a claim indicating beta blocker therapy or who received an ambulatory prescription for beta-blockers rendered within 7 days after discharge. |
| Setting: | Ambulatory Care: Clinic  
Level of Analysis: Clinicians: Individual |
| Data Source: | Electronic administrative data/claims |

### Target Outcome (unadjusted numerator):

Patients who received an ambulatory prescription for beta-blockers rendered within seven days after discharge. Prescriptions filled on an ambulatory basis anytime while the patient is hospitalized for AMI through the seventh day after discharge count toward this measure. If unable to determine if the prescription was rendered on an inpatient or ambulatory basis, count those prescriptions rendered after discharge.

To account for patients who are on beta-blockers prior to admission, count prescriptions for beta-blockers that are active at the time of admission.

Documentation in medical record must include, at a minimum, a note indicating that the patient received a prescription for beta-blockers within the time frame specified.

### Target Population (denominator):

A systematic sample of patients age 35 years and older as of December 31 of the measurement year who are discharged alive from an inpatient setting with an AMI from January 1–December 24 of the measurement year. If a patient has more than one episode of AMI from January 1–December 24 of the measurement year, only include the first eligible discharge.

Transfers to acute facilities: Include hospitalizations in which the patient was transferred directly to another acute care facility for any diagnosis. The discharge date from the facility to which the patient was transferred must occur on or before December 24 of the measurement year.

Transfers to nonacute facilities: Exclude from the denominator hospitalizations in which the patient was transferred directly to a nonacute care facility for any diagnosis.

Readmissions: Exclude from the denominator hospitalizations in which the patient was readmitted to an acute or nonacute care facility for any diagnosis within seven days after discharge, because tracking the patient between admissions is not deemed feasible.

The denominator (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.

### Target Population (denominator) Exclusions:

Exclude from the denominator patients who are identified as having a contraindication to beta-blocker therapy or previous adverse reaction (i.e., intolerance) to beta-blocker therapy. Look back as far as possible in the patient’s history through either administrative data or medical record review for evidence of a contraindication or previous adverse reaction to beta-blocker therapy. Any of the following codes may be used:

- History of asthma (prescription: Inhaled corticosteroids): ICD-9: 493
- Hypotension: ICD-9: 458
- Heart block >1 degree: ICD-9: 426.0, 426.12, 426.13, 426.2-426.4, 426.51-426.54, 426.7
- Sinus bradycardia: ICD-9: 427.81
- COPD: ICD-9: 491.2, 496, 506.4

### Methods/ Risk Adjustment:

<p>| Target Outcome (unadjusted numerator) Details: |  |</p>
<table>
<thead>
<tr>
<th>Target Population (denominator) Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Population (denominator) Exclusion Details:</td>
</tr>
</tbody>
</table>
### Cardiovascular Consensus Standards Endorsement Maintenance

**NQF-endorsed® Cardiovascular Maintenance Standards- Phase I**

<table>
<thead>
<tr>
<th>#0073: IVD: Blood Pressure Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Committee for Quality Assurance</strong></td>
</tr>
</tbody>
</table>

**Description:** Percentage of patients who, at their most recent blood pressure reading during the 12-month measurement period, had a blood pressure result of <140/90 mm HG.

**Setting:** Ambulatory Care: Clinic  
**Level of Analysis:** Clinicians: Individual

**Data Source:** Paper medical record/flow-sheet; Electronic administrative data/claims; Pharmacy data

**Target Outcome (unadjusted numerator):** Number of patients who, at their most recent blood pressure reading during the 12-month measurement period, had a blood pressure result of <140/90 mm HG.

**Target Population (denominator):** A systematic sample of patients, age 18 years and older with a diagnosis of ischemic vascular disease (IVD) for at least 12 months, who have been under the care of the physician or physician group for IVD for at least 12 months (this is defined by documentation of a face-to-face visit for IVD care between the physician and the patient that predates the most recent IVD visit by at least 12 months.)

Codes to Identify a Patient with a Diagnosis of Ischemic Vascular Disease:—

- DRG: 140, 559

If using health plan administrative claims to identify the eligible population and then attributing to physicians, use the following denominator specifications:

- Discharged alive for AMI, CAbG or PTCA on or between 1/1-11/1 of the year prior to the measurement year or at one outpatient or acute inpatient during the measurement year and year prior to the measurement year.

  - AMI: ICD-9: 410.x1, DRG: 121, 122, 516
  - PTCA: CPT: 33140, 92980-92982, 92984, 92995, 92996, ICD-9:00.66, 36.01, 36.02, 36.05, 36.06, 36.07, 36.09, DRG: 516, 517, 526, 527, 555-558

Codes to Identify a Patient with a Diagnosis of Ischemic Vascular Disease:—

- DRG: 140, 559

Outpatient Codes: CPT: 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499, UB-92: 051x, 0520-0523, 0526-0529, 057x-059x, 077x, 0982, 0983

Acute inpatient CPT: 99221-99223, 99231-99233, 99238, 99239, 99251, 99255, 99261-99263, 99291, UB-92: 010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 0987

**Presentation of Codes:**

Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three digit code is listed, it is valid as a three-, four- or five-digit code. When necessary, a code may be specified with an "x" which represents a required digit. For example ICD-9 CM diagnosis code 640.0x means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.

**Target Population (denominator) Exclusions:** The denominator (patients for inclusion): A sample should be determined using the most accurate data available. The measure developer recommends that in most settings office visit claims (see list of codes) or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective or prospective from a specific date) can then be chosen for the denominator.

BPs that are self-reported by the patient (e.g., home and health-fair BPs reported by the patient) are not
#0074: CAD: Drug Therapy for Lowering LDL-Cholesterol
American Medical Association-Physician Consortium for Performance Improvement

**Description:** Percentage of patients with CAD who were prescribed a lipid-lowering therapy (based on current ACC/AHA guidelines)

**Setting:** Ambulatory Care: Clinic  
Level of Analysis: Clinicians: Individual

**Data Source:** Electronic administrative data/claims

**Target Outcome (unadjusted numerator):** Patients who were prescribed lipid-lowering therapy (based on current ACC/AHA guidelines). Drug list is available.

Or

CPT-II code: 4002F Statin therapy prescribed

**Target Population (denominator):** All patients with CAD > 18 years of age

Patient Selection: ICD-9-CM codes for CAD: 414.00-414.07, 414.9, 410.00-410.92, 412, 411.0-411.89, 413.0-413.9, V45.81, V45.82;

Or

CPT Diagnosis codes: 92980-92982, 92984, 92995, 92996, 33140, 33510-33514, 33516-33519, 33521-33523, 33533-33536

And

CPT codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404

And

Patient’s age is > 18 years

**Target Population (denominator) Exclusions:** Exclusions:

- Lipid-lowering drug therapy allergy/intolerance ICD-9-CM exclusion codes: 995.0 and E942.2, 995.1 and E942.2

Or

- LDL <130

Or

- Other medical reason(s) documented by the practitioner for not prescribing lipid-lowering therapy

Or

- CPT-II code w/modifier: 4002F 1P

Documentation of patient reason(s) (e.g., economic, social, religious)

Or

CPT-II code w/modifier: 4002F 2P

**Methods/ Risk Adjustment:**

**Target Outcome (unadjusted numerator) Details:**

**Target Population (denominator) Details:**

**Target Population (denominator) Exclusion Details:**
**#0075: IVD: Complete Lipid Profile and LDL Control <100**  
*National Committee for Quality Assurance*

**Description:** Percentage of patients with a full lipid profile completed during the 12-month measurement period with date of each component of the profile documented; LDL-C<100.

**Setting:** Ambulatory Care: Clinic    
**Level of Analysis:** Clinicians: Individual

**Data Source:** Electronic administrative data/claims

**Target Outcome (unadjusted numerator):** Numerator 1: Number of patients with a full lipid profile completed during the 12-month measurement period with date of each component of the profile documented.
- Identify the most recent visit to the doctor’s office or clinic that occurred during the measurement year (but after the diagnosis of IVD was made) in which a full lipid profile was documented.
- Each component of the lipid profile must be noted with the date of the laboratory test and results.

Numerator 2: Number of patients with a LDL completed during the 12-month abstraction period with date and LDL less than 100 mg/dl documented.

CPT II codes for compliance: 3048F  
CPT II codes for non-compliance: 3049F, 3050F

**Target Population (denominator):** A systematic sample of patients, age 18 years and older with a diagnosis of ischemic vascular disease (IVD) for at least 12 months, who have been under the care of the physician or physician group for IVD for at least 12 months (this is defined by documentation of a face-to-face visit for IVD care between the physician and the patient that predates the most recent IVD visit by at least 12 months.)

Codes to Identify a Patient with a Diagnosis of Ischemic Vascular Disease:-  
DRG: 140, 559

If using health plan administrative claims to identify the eligible population and then attributing to physicians, use the following denominator specifications:  
Discharged alive for AMI, CAGB or PTCA on or between 1/1-11/1 of the year prior to the measurement year or at one outpatient or acute inpatient during the measurement year and year prior to the measurement year.  
AMI: ICD-9: 410.x, DRG: 121, 122, 516  
PTCA: CPT: 33140, 92980-92982, 92984, 92995, 92996, ICD-9:00.66, 36.01, 36.02, 36.05, 36.06, 36.07, 36.09,  
DRG: 516, 517, 526, 527, 555-558  
CABG: CPT: 33510-33514, 33516-33519, 33521-33523, 33533-33536, 35600, 33572, HCPCS: S2205-S2209,  
ICD-9:36.1, 36.2, DRG: 106, 107, 109, 547-550

Codes to Identify a Patient with a Diagnosis of Ischemic Vascular Disease:-  
DRG: 140, 559

Outpatient Codes: CPT: 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350,  
99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499, UB-92: 051x, 0520-  
0523, 0526-0529, 057x-059x, 077x, 0982, 0983  
Acute inpatient: CPT: 99221-99223, 99231-99233, 99238, 99239, 99251, 99255, 99261-99263, 99291, UB-92:  
010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x,  
072x, 0987

Presentation of Codes:  
Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three digit code is listed, it is valid as a three-, four- or five-digit code. When necessary, a code may be specified with an “x” which represents a required digit. For example ICD-9 CM diagnosis code 640.0x means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.

**Target Population (denominator) Exclusions:** Exclude patient self-report or self-monitoring, LDL to HDL ratio
and findings reported on progress notes or other non-laboratory documentation.

<table>
<thead>
<tr>
<th>Methods/ Risk Adjustment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Outcome (unadjusted numerator) Details:</td>
</tr>
<tr>
<td>Target Population (denominator) Details:</td>
</tr>
<tr>
<td>Target Population (denominator) Exclusion Details:</td>
</tr>
</tbody>
</table>

### #0076: CAD: optimally managed modifiable risk

**Minnesota Community Measurement**

**Description:** Percentage of members who have optimally managed modifiable risk factors (LDL, tobacco non-use, blood pressure control, aspirin usage).

**Setting:** Ambulatory Care: Clinic  **Level of Analysis:** Clinicians: Individual

**Data Source:** Paper medical record/flow-sheet

**Target Outcome (unadjusted numerator):** All members from the denominator who reach treatment targets* for all numerator components:
- Low-Density Lipoprotein (LDL) Screening—Coronary artery disease (CAD) population who had an LDL during the measurement year or the year prior to the measurement year with a level less than 100 for the most recent screening
- Tobacco Non-User—CAD population with documented non-smoking status
- Blood Pressure Control—CAD population whose blood pressure is in control less than 140/90 during the measurement year
- Aspirin Usage—CAD population eligible for aspirin use who were on aspirin therapy.
*Numerator component target measure may be modified to reflect changing recommendations of treatment targets.

**Target Population (denominator):** Members between 18 and 75 years of age as of December 31st of the reporting year, who were continually enrolled with not more than 1 month break in coverage and have a diagnosis of coronary artery disease (CAD)*
*CAD diagnosis:
- Acute Myocardial Infarction (AMI) 410.XX
- Post Myocardial Infarction Syndrome 411.XX
- Old AMI 412.0X
- Angina Pectoris 413.XX
- Coronary Atherosclerosis 414.0X
- Aneurysm of Heart Wall 414.10
- Other Chronic Ischemic Heart Disease (IHD) 414.8
- Chronic IHD 414.9

**Target Population (denominator) Exclusions:** Numerator Exclusion: Members contraindicated to aspirin therapy are excluded from the "Aspirin Usage" component of the measure. Denominator Exclusions: Members can be validly excluded from the sample for the following reasons during the measurement year: member died, resident in nursing home, or hospice. Sampling error member does not have CAD.

**Methods/ Risk Adjustment:** None.

None.

**Target Outcome (unadjusted numerator) Details:**

**Target Population (denominator) Details:**

**Target Population (denominator) Exclusion Details:**
| **#0132: Aspirin at arrival for acute myocardial infarction (AMI)** |
| Centers for Medicare & Medicaid Services |
| **Description:** Percentage of acute myocardial infarction (AMI) patients without aspirin contraindications who received aspirin within 24 hours before or after hospital arrival |
| **Setting:** Hospital  | **Level of Analysis:** Facility/Agency |
| **Data Source:** Paper medical record/flow-sheet; Electronic administrative data/claims |
| **Target Outcome (unadjusted numerator):** AMI patients who received aspirin within 24 hours before or after hospital arrival |
| **Target Population (denominator):** AMI patients without aspirin contraindications (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91) |
| **Target Population (denominator) Exclusions:** Exclusions:  
• <18 years of age  
• Transferred to another acute care hospital or federal hospital on day of or day after arrival  
•Received in transfer from another hospital, including another emergency department  
• Discharged on day of arrival  
• Expired on day of or day after arrival  
• Left against medical advice on day of or day after arrival  
• Patients with comfort measures only documented by a physician, nurse practitioner, or physician assistant  
One or more of the following aspirin contraindications/reasons for not prescribing aspirin documented in the medical record:  
• Active bleeding on arrival or within 24 hours after arrival;  
• Aspirin allergy;  
• Warfarin/Coumadin as pre-arrival medication; or  
• Other reasons documented by physician, nurse practitioner, or physician assistant for not giving aspirin within 24 hours before or after hospital arrival |
| **Methods/ Risk Adjustment:** |
| **Target Outcome (unadjusted numerator) Details:** |
| **Target Population (denominator) Details:** |
| **Target Population (denominator) Exclusion Details:** |
| #0133: PCI mortality (risk-adjusted) ©  
| American College of Cardiology |
| **Description:** Percentage of PCI admissions who expired |
| **Setting:** Hospital  
| **Level of Analysis:** Facility/Agency |
| **Data Source:** Registry data |
| **Target Outcome (unadjusted numerator):** Patients with a PCI procedure performed during admission who expired  
| Time Window = during the hospital admission |
| **Target Population (denominator):** Patients with a PCI procedure performed during admission  
| Time window=quarterly to include previous four quarters of data |
| **Target Population (denominator) Exclusions:** 1. NCDR Registry patients who did not have a PCI (Patient admissions with a diagnostic cath only during that admission);  
2. Data submissions that do not pass the data quality and completeness reports;  
3. Procedure variables for subsequent PCIs during the same admission (if the patient had more than one PCI procedure during that admission).  
4. Patient admissions with PCI who transferred to another facility on discharge;  
5. Patient admissions with PCI who have more than two variables in the risk model that are missing. |
| **Methods/ Risk Adjustment:** risk adjustment methodology is a logistic regression analysis.  
weights were assigned to risk factors or variables reflecting the strength of their association to PCI inhospital mortality. each patient in a facilities submission is given a risk score to predict risk of inpatient mortality and accurately report risk adjusted mortality rates during hospitalization.  
the most noteworthy risk factors or variables in the model include:  
1. st-segment elevation mi defined as a patient who had a stemi on admission, with an onset within 24 hours, or the procedure indication was primary, rescue or facilitated pci.  
2. discharge status (alive or expired). the interaction between this variable with other variables were key in the analysis.  
3. the glomerular filtration rate (gfr) variable is calculated using abbreviated mdrd formula [gfr = 186 ×(last creatinine)-1.154 × (age)-0.203 × (gender factor) × (race factor) where (gender factor) = 1 for male and 0.742 for female, (race factor) = 1.21 for black and 1 for others].  
4. the body mass index (bmi) (kg/m2) is calculated from height (cm) and weight (kg): bmi = weight × 10000 / (height) 2. |
| risk adjustment variables  
stemi patients  
age (for age<=70, for age>70)  
cardiogenic shock at admission  
previous history - chf  
peripheral vascular disease  
chronic lung disease  
gfr (for stemi, for non-stemi)  
nyha class iv (for stemi, for non-stemi )  
pci status (for stemi, for non stemi)  
- urgent  
- emergency  
- salvage |
previous vascular disease
cerebrovascular disease
previous pci
preop iabp
ejection fraction percentage
coronary lesion >= 50%: subacute
thrombosis? yes vs. no
highest risk pre-procedure timi flow = none vs. yes
1.19 1.02 1.38 4.84
diabetes/control (non-insulin diabetes vs. no diabetes; insulin diabetes vs. no diabetes)
highest risk lesion: scai lesion class (ii or iii vs. i; iv vs. i)
bmi [kg/m²] (for stemi, for non-stemi)
highest risk lesion - segment category (for stemi, for non stemi)
-plad
-left main

<table>
<thead>
<tr>
<th>Target Outcome (unadjusted numerator) Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Population (denominator) Details:</td>
</tr>
<tr>
<td>Target Population (denominator) Exclusion Details: Note: If one or two variables are missing, the value is imputed for certain characteristics (see appendix 2 of the NCDR CathPCI Registry PCI Risk Adjusted Morality Model 2008 for more information). If the value is missing for more than two variables, the patient record is excluded. However, in our data quality program, all variables in the risk model have a high &quot;inclusion&quot; criteria. This means that, when a hospital submits data to us, they need to have a high level of completeness (around 99%) for those variables. If they are not able to meet the criteria in our data quality program, they do not receive risk adjusted mortality for the records they submitted for that quarter.</td>
</tr>
</tbody>
</table>
#0137: ACEI or ARB for left ventricular systolic dysfunction - Acute Myocardial Infarction (AMI) Patients
Centers for Medicare & Medicaid Services

**Description:** Percentage of acute myocardial infarction (AMI) patients with left ventricular systolic dysfunction (LVSD) and without both angiotensin converting enzyme inhibitor (ACEI) and angiotensin receptor blocker (ARB) contraindications 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.

**Setting:** Hospital  
**Level of Analysis:** Facility/Agency

**Data Source:** Paper medical record/flow-sheet; Electronic administrative data/claims

**Target Outcome (unadjusted numerator):** AMI patients who are prescribed an ACEI or ARB at hospital discharge

**Target Population (denominator):** AMI patients (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91); with LVSD and without both ACEI and ARB contraindications and with chart documentation of a left ventricular ejection fraction (LVEF) < 40% or a narrative description of LVS function consistent with moderate or severe systolic dysfunction

**Target Population (denominator) Exclusions:**
- <18 years of age
- Transferred to another acute care hospital or federal hospital
- Expired
- Left against medical advice
- Discharged to hospice
- Patients with comfort measures only documented by a physician, nurse practitioner, or physician assistant
- Chart documentation of participation in a clinical trial testing alternatives to ACEIs as first-line HF therapy
- One or more of the following ACEI contraindications/reasons for not prescribing ACEI documented in the medical record: Patients with BOTH a potential contraindication/reason for not prescribing an ACEI at discharge AND a potential contraindication/reason for not prescribing an ARB at discharge, as evidenced by one or more of the following:
  - ACEI allergy AND ARB allergy;
  - Moderate or severe aortic stenosis; or
  - Physician, nurse practitioner, or physician assistant documentation of BOTH a reason for not prescribing an ACEI at discharge AND a reason for not prescribing an ARB at discharge
  - Reason documented by physician, nurse practitioner, or physician assistant for not prescribing an ARB at discharge AND an ACEI allergy
  - Reason documented by a physician, nurse practitioner, or physician assistant for not prescribing an ACEI at discharge AND an ARB allergy

**Methods/Risk Adjustment:**

**Target Outcome (unadjusted numerator) Details:**

**Target Population (denominator) Details:**

**Target Population (denominator) Exclusion Details:**
<table>
<thead>
<tr>
<th>#0142: Aspirin prescribed at discharge for AMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centers for Medicare &amp; Medicaid Services</td>
</tr>
</tbody>
</table>

**Description:** Percentage of acute myocardial infarction (AMI) patients without aspirin contraindications who are prescribed aspirin at hospital discharge

**Setting:** Hospital  
**Level of Analysis:** Facility/Agency

**Data Source:** Paper medical record/flow-sheet; Electronic administrative data/claims

**Target Outcome (unadjusted numerator):** AMI patients who are prescribed aspirin at hospital discharge

**Target Population (denominator):** AMI patients without aspirin contraindications (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91)

**Target Population (denominator) Exclusions:** Exclusions:
- <18 years of age
- Transferred to another acute care hospital or federal hospital
- Expired
- Left against medical advice
- Discharged to hospice
- Patients with comfort measures only documented by a physician, nurse practitioner, or physician assistant
- One or more of the following aspirin contraindications/reasons for not prescribing aspirin documented in the medical record:
  - Aspirin allergy;
  - Active bleeding on arrival or during hospital stay;
  - Warfarin/Coumadin prescribed at discharge; or
  - Other reasons documented by physician, nurse practitioner, or physician assistant for not prescribing aspirin at discharge

**Methods/ Risk Adjustment:**

**Target Outcome (unadjusted numerator) Details:**

**Target Population (denominator) Details:**

**Target Population (denominator) Exclusion Details:**
#0160: Beta blocker prescribed at discharge for AMI
Centers for Medicare & Medicaid Services

**Description:** Percentage of acute myocardial infarction (AMI) patients without beta blocker contraindications who are prescribed a beta blocker at hospital discharge

**Setting:** Hospital  **Level of Analysis:** Facility/Agency

**Data Source:** Paper medical record/flow-sheet; Electronic administrative data/claims

**Target Outcome (unadjusted numerator):** AMI patients who are prescribed a beta blocker at hospital discharge

**Target Population (denominator):** AMI patients without beta blocker contraindications (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91)

**Target Population (denominator) Exclusions:** Exclusions
- <18 years of age
- Transferred to another acute care hospital or federal hospital
- Expired
- Left against medical advice
- Discharged to hospice
- Patients with comfort measures only documented by a physician, nurse practitioner, or physician assistant
- One or more of the following beta blocker contraindications/reasons for not prescribing a beta blocker documented in the medical record:
  - Beta blocker allergy;
  - Bradycardia (heart rate <60 beats per minute) on day of discharge or day prior to discharge while not on a beta blocker;
  - Second or third degree heart block on ECG on arrival or during hospital stay and does not have a pacemaker;
  - Other reasons documented by a physician, nurse practitioner, or physician assistant for not prescribing a beta blocker at discharge

**Methods/ Risk Adjustment:**

**Target Outcome (unadjusted numerator) Details:**

**Target Population (denominator) Details:**

**Target Population (denominator) Exclusion Details:**
<table>
<thead>
<tr>
<th><strong>#0161: AMI inpatient mortality (risk-adjusted)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Joint Commission</strong></td>
</tr>
</tbody>
</table>

| **Description:** | Percentage of acute myocardial infarction (AMI) patients who expired during hospital stay. |
| **Setting:**     | Hospital |
| **Level of Analysis:** | Facility/Agency |
| **Data Source:** | Electronic administrative data/claims |
| **Target Outcome (unadjusted numerator):** | Inpatient mortality of AMI patients |
| **Target Population (denominator):** | AMI patients (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91) |
| **Target Population (denominator) Exclusions:** | Exclusions: |
| | • <18 years of age |
| | • Transferred to another acute care hospital or federal hospital |
| | • Received in transfer from another acute care hospital |
| | • Discharged to hospice |
| | • Patients with comfort measures only documented by a physician, nurse practitioner, or physician assistant |
| Note: | The measure population does not include deaths that occurred in the emergency department. |

| **Methods/Risk Adjustment:** | Risk adjustment: hierarchical logistic regression. Users calculate the predicted values (case-level risk adjusted rate) for each EOC (environment of care) record using the risk model information provided by the Joint Commission. More information about the risk adjustment model can be found here: http://www.jointcommission.org/NR/rdonlyres/DADB51BD-D0E2-4023-9667-B9D465A5CF8D/0/risk_adustment_guide.pdf (last accessed June 20, 2008) |

| **Target Outcome (unadjusted numerator) Details:** |
| **Target Population (denominator) Details:** |
| **Target Population (denominator) Exclusion Details:** |
#0163: Primary PCI within 90 minutes of Hospital Arrival
Centers for Medicare & Medicaid Services

<table>
<thead>
<tr>
<th>Description: Percentage of acute myocardial infarction (AMI) patients receiving percutaneous coronary intervention (PCI) during the hospital stay with a time from hospital arrival to PCI of 90 minutes or less.</th>
</tr>
</thead>
</table>
| Setting: Hospital  
Level of Analysis: Facility/Agency |
| Data Source: Paper medical record/flow-sheet; Electronic administrative data/claims |
| Target Outcome (unadjusted numerator): AMI patients whose time from hospital arrival to Percutaneous Coronary Intervention (PCI) is 90 minutes or less. |
| Target Population (denominator): Principal discharge diagnosis of AMI (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91 and PCI: 00.66); and ST segment elevation or left bundle block (LBB) on the ECG performed closest to hospital arrival; and PCI performed within 24 hours after hospital arrival. |
| Target Population (denominator) Exclusions: Exclusions:  
• <18 years of age  
• Received in transfer from another acute care hospital, including another emergency department  
• Patients with comfort measures only documented by a physician, nurse practitioner, or physician assistant  
• Patient administered fibrinolytic therapy  
• PCI described as non-primary by physician, nurse practitioner, or physician assistant  
• Patients who did not receive PCI within 90 minutes and had a reason for delay documented by a physician, nurse practitioner, or physician assistant (e.g., social, religious, initial concern or refusal) |

Methods/ Risk Adjustment:

Target Outcome (unadjusted numerator) Details:

Target Population (denominator) Details:

Target Population (denominator) Exclusion Details:
<table>
<thead>
<tr>
<th>Target Outcome (unadjusted numerator):</th>
<th>AMI patients whose time from hospital arrival to fibrinolysis is 30 minutes or less</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target Population (denominator):</strong></td>
<td>Principal diagnosis of AMI (International Classification of Diseases, 9th revision, Clinical Modification [ICD-9-CM] principal diagnosis code of AMI: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91); and ST segment elevation or LBBB on the ECG performed closest to hospital arrival; and fibrinolytic therapy within 6 hours after hospital arrival</td>
</tr>
</tbody>
</table>

**Target Population (denominator) Exclusions:**
- <18 years of age
- Transferred from another acute care hospital including another emergency department
- Patients with comfort measures only documented by a physician, nurse practitioner, or physician assistant
- Patients who did not receive fibrinolytic therapy within 30 minutes and had a reason for delay documented by a physician, nurse practitioner, or physician assistant (e.g., social, religious, initial concern or refusal)
## 0165: Percutaneous coronary intervention (PCI) volume

**American College of Cardiology**

**Description:** Percentage of patient admissions for percutaneous coronary intervention (PCI) procedure

**Setting:** Hospital  **Level of Analysis:** Facility/Agency

**Data Source:** Electronic administrative data/claims

**Target Outcome (unadjusted numerator):** All patient admissions with a PCI procedure

**Target Population (denominator):** N/A

### Target Population (denominator) Exclusions:

### Target Outcome (unadjusted numerator) Details:

### Target Population (denominator) Details:

### Target Population (denominator) Exclusion Details:

## 0230: Acute Myocardial Infarction 30-day Mortality

**Centers for Medicare & Medicaid Services**

**Description:** Percentage of patients with AMI age 65 years and older, with hospital-specific, risk standardized, all-cause 30-day mortality (defined as death from any cause within 30 days after the index admission date) for patients discharged form the hospital with a principal diagnosis of AMI.

**Setting:** Hospital  **Level of Analysis:** Facility/Agency

**Data Source:** Electronic administrative data/claims

**Target Outcome (unadjusted numerator):** Patients who died of any cause within 30 days of index admission

**Target Population (denominator):** Patients with AMI age 65 years and older (ICD-9-CM codes 410.xx except for 410.x2). Patients who are transferred from one acute care facility to another must have a principal discharge diagnosis of AMI at both hospitals. The initial hospital for a transferred patient is designated as the responsible institution for the episode.

**Target Population (denominator) Exclusions:**
- Patients who have a total length of stay less than or equal to one day and were discharged alive and not against medical advice are excluded from the measure;
- Patients without a minimum one year of history in Medicare Fee-for-Service or with incomplete information are excluded;
- Patients with one or more Medicare hospice claims at any time during the 12 months prior to the index hospitalization are excluded.

**Methods/ Risk Adjustment:** risk-adjustment: hierarchical logistic regression**

**Target Outcome (unadjusted numerator) Details:

**Target Population (denominator) Details:

**Target Population (denominator) Exclusion Details:
<table>
<thead>
<tr>
<th><strong>#0282: Angina without procedure (PQI 13)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agency for Healthcare Research and Quality</strong></td>
</tr>
</tbody>
</table>

**Description:** All non-maternal discharges of age 18 years and older with ICD-9-CM principal diagnosis code for angina. See Notes.

**Setting:** Hospital  
**Level of Analysis:** Population: counties or cities

**Data Source:** Electronic administrative data/claims

**Target Outcome (unadjusted numerator):** Population in Metro Area or county, age 18 years and older.

**Target Population (denominator):** Population in Metro Area or county, age 18 years and older.

**Target Population (denominator) Exclusions:** Exclude cases:
- transferring from another institution (SID ASOURCE=2)
- MDC 14 (pregnancy, childbirth, and puerperium)
- MDC 15 (newborn and other neonates)
- with a code for cardiac procedure in any field

**Methods/ Risk Adjustment:**

**Target Outcome (unadjusted numerator) Details:**

**Target Population (denominator) Details:**

**Target Population (denominator) Exclusion Details:**
### #0286: Aspirin at Arrival
Oklahoma Foundation for Medical Quality Inc

**Description:** Percentage of emergency department acute myocardial infarction (AMI) patients or chest pain patients (with Probable Cardiac Chest Pain) without aspirin contraindications who received aspirin within 24 hours before ED arrival or prior to transfer.

**Setting:** Ambulatory Care: Emergency Dept  **Level of Analysis:** Facility/Agency

**Data Source:**

**Target Outcome (unadjusted numerator):** Emergency Department AMI or Chest Pain patients (with Probable Cardiac Chest Pain) who received aspirin within 24 hours before ED arrival or prior to transfer

**Target Population (denominator):** Emergency Department AMI or Chest Pain patients (with Probable Cardiac Chest Pain) without aspirin contraindications. Included Populations:
- ICD-9-CM Principal or Other Diagnosis Code for AMI as defined in Appendix A1, OP Table 6.1 or an ICD-9-CM Principal or Other Diagnosis Code for Angina, Acute Coronary Syndrome, or Chest Pain as defined in Appendix A1, OP Table 6.1a with Probable Cardiac Chest Pain, and
- E/M Code for emergency department encounter as defined in Appendix A1, Table 1.0a, and
- Patients discharged/transferred to a short term general hospital for inpatient care, to a Federal healthcare facility, or to a Critical Access Hospital

**Target Population (denominator) Exclusions:**
- Patients less than 18 years of age
- Patients with a Contraindication to Aspirin as defined in the Appendix A1

**Methods/ Risk Adjustment:**

**Target Outcome (unadjusted numerator) Details:**

**Target Population (denominator) Details:**

**Target Population (denominator) Exclusion Details:**
**#0287: Median to Fibrinolysis**  
Oklahoma Foundation for Medical Quality Inc

**Description:** Percentage of patients with extended median time from emergency department arrival to administration of fibrinolytic therapy in ED patients with ST-segment elevation or left bundle branch block (LBBB) on the electrocardiogram (ECG) performed closest to ED.

**Setting:** Hospital; Ambulatory Care: Emergency Dept  
**Level of Analysis:** Facility/Agency

**Data Source:** Paper medical record/flow-sheet

**Target Outcome (unadjusted numerator):** Continuous Variable Statement:  
Time (in minutes) from emergency department arrival to administration of fibrinolytic therapy in AMI patients with ST-segment elevation or LBBB on the ECG performed closest to ED arrival and prior to transfer  
Included Populations:
- An ICD-9-CM Principal Diagnosis Code for AMI as defined in Appendix A1, OP Table 6.1, and  
- An E/M Code for emergency department encounter as defined in Appendix A1, OP Table 1.0a, and  
- ST-segment elevation or LBBB on the ECG performed closest to ED arrival, and  
- Fibrinolytic Administration as defined in Appendix A1, and  
- Patients discharged/transferred to a short-term general hospital for inpatient care, to a Federal healthcare facility, or to a Critical Access Hospital.

**Target Population (denominator):** See Numerator

**Target Population (denominator) Exclusions:**  
- Patients less than 18 years of age  
- Patients who did not receive Fibrinolytic Administration within 30 minutes and had a Reason for Delay in Fibrinolytic Therapy as defined in Appendix A1

**Methods/ Risk Adjustment:**

**Target Outcome (unadjusted numerator) Details:**

**Target Population (denominator) Details:**

**Target Population (denominator) Exclusion Details:**
**#0288: Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival**

**Oklahoma Foundation for Medical Quality Inc**

<table>
<thead>
<tr>
<th><strong>Description:</strong></th>
<th>Percentage of emergency department acute myocardial infarction (AMI) patients receiving fibrinolytic therapy during the ED stay and having a time from ED arrival to fibrinolysis of 30 minutes or less.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Setting:</strong></td>
<td>Hospital; Ambulatory Care: Emergency Dept  <strong>Level of Analysis:</strong> Facility/Agency</td>
</tr>
<tr>
<td><strong>Data Source:</strong></td>
<td>Paper medical record/flow-sheet</td>
</tr>
<tr>
<td><strong>Target Outcome (unadjusted numerator):</strong></td>
<td>Emergency Department AMI patients whose time from ED arrival to fibrinolysis is 30 minutes or less</td>
</tr>
<tr>
<td><strong>Target Population (denominator):</strong> Emergency Department AMI patients with ST-segment elevation or LBBB on ECG who received fibrinolytic therapy</td>
<td></td>
</tr>
</tbody>
</table>
| Included Populations: | • An ICD-9-CM Principal Diagnosis Code for AMI as defined in Appendix A1, OP Table 6.1, and  
• An E/M Code for emergency department visit as defined in Appendix A1, OP Table 1.0a, and  
• ST-segment elevation or LBBB on the ECG performed closest to ED arrival, and  
• Fibrinolytic Administration as defined in Appendix Al, and  
• Patients discharged/transferred to a short term general hospital for inpatient care, to a Federal healthcare facility, or to a Critical Access Hospital. |
| **Target Population (denominator) Exclusions:** | • Patients less than 18 years of age  
• Patients who did not receive Fibrinolytic Administration as defined in the Appendix Al AND had a Reason for Delay in Fibrinolytic Therapy as defined in Appendix Al |
| **Methods/ Risk Adjustment:** | |
| **Target Outcome (unadjusted numerator) Details:** | |
| **Target Population (denominator) Details:** | |
| **Target Population (denominator) Exclusion Details:** | |
#0289: Median to ECG
Oklahoma Foundation for Medical Quality Inc

**Description:** Percentage of patients with extended median time from emergency department arrival to ECG (performed in the ED prior to transfer) for acute myocardial infarction (AMI) or Chest Pain patients (with probable cardiac chest pain).

**Setting:** Ambulatory Care: Emergency Dept  **Level of Analysis:** Facility/Agency

**Data Source:** Paper medical record/flow-sheet

**Target Outcome (unadjusted numerator):** Continuous Variable Statement:
Time (in minutes) from emergency department arrival to ECG (performed in the ED prior to transfer) for acute myocardial infarction (AMI) or Chest Pain patients (with Probable Cardiac Chest Pain)

**Included Populations:**
- ICD-9-CM Principal or Other Diagnosis Code for AMI as defined in Appendix A1, OP Table 6.1 or an ICD-9-CM Principal or Other Diagnosis Code for Angina, Acute Coronary Syndrome, or Chest Pain as defined in Appendix A1, OP Table 6.1a, and
- E/M Code for emergency department encounter as defined in Appendix A1, OP Table 1.0a, and
- Patients receiving an ECG as defined in the Appendix A1, and
- Patients discharged/transfered to a short term general hospital for inpatient care, to a Federal healthcare facility, or to a Critical Access Hospital.

**Target Population (denominator):** See Numerator

**Target Population (denominator) Exclusions:** • Patients less than 18 years of age

**Methods/ Risk Adjustment:**

**Target Outcome (unadjusted numerator) Details:**

**Target Population (denominator) Details:**

**Target Population (denominator) Exclusion Details:**

**#0290: Median Time to Transfer to Another Facility for Acute Coronary Intervention**  
Oklahoma Foundation for Medical Quality Inc

**Description:** Percentage of patients with median time from emergency department arrival to time of transfer to another facility for acute coronary intervention

**Setting:** Hospital; Ambulatory Care: Emergency Dept  
**Level of Analysis:** Facility/Agency

**Data Source:** Paper medical record/flow-sheet

**Target Outcome (unadjusted numerator):** Continuous Variable Statement:  
Time (in minutes) from emergency department arrival to transfer to another facility for acute coronary intervention

Included Populations:
- ICD-9-CM Principal Diagnosis Code for AMI as defined in Appendix A, OP Table 6.1, and
- E/M Code for emergency department encounter as defined in Appendix A, OP Table 1.0a, and
- Patients discharged/transferred to a short-term general hospital for inpatient care, to a Federal healthcare facility, or to a Critical Access Hospital, and
- Patients not receiving Fibrinolytic Administration as defined in the Data Dictionary, and
- Patients with Transfer for Acute Coronary Intervention as defined in the Data Dictionary

**Target Population (denominator):** See Numerator

**Target Population (denominator) Exclusions:**  
- Patients less than 18 years of age
- Patients receiving Fibrinolytic Administration as defined in the Data Dictionary

**Methods/ Risk Adjustment:***

**Target Outcome (unadjusted numerator) Details:**

**Target Population (denominator) Details:**

**Target Population (denominator) Exclusion Details:**
### #0355: Bilateral Cardiac Catheterization Rate (IQI 25)
Agency for Healthcare Research and Quality

| Description | Percent of discharges with heart catheterizations in any procedure field with simultaneous right and left heart (bilateral) heart catheterizations. |
| Setting | Hospital |
| Level of Analysis | Facility/Agency |
| Data Source | Electronic administrative data/claims |

### Target Outcome (unadjusted numerator):
Discharges with simultaneous right and left heart catheterizations

### Target Population (denominator):
Discharges with heart catheterizations in any procedure field

### Target Population (denominator) Exclusions:
Patients with valid indications for right side catheterization in any diagnosis field; with MDC 14 (pregnancy, childbirth, and puerperium); and with MDC 15 (newborns and other neonates)

### Methods/ Risk Adjustment:

### Target Outcome (unadjusted numerator) Details:
ICD-9-CM codes 3910 through 4049, 74684 through 7479

### Target Population (denominator) Details:
ICD-9-CM codes 41000 through 4149

### Target Population (denominator) Exclusion Details: