NATIONAL
QUALITY FORUM

Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to subcriterion 1b).

Brief Measure Information

NQF #: 0286
Corresponding Measures:
De.2. Measure Title: Aspirin at Arrival
Co.1.1. Measure Steward: Centers for Medicare and Medicaid Services
De.3. Brief Description of Measure: 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.
1b.1. Developer Rationale: The early use of aspirin in patients with AMI results in a significant reduction in adverse events and subsequent mortality. The benefits of aspirin therapy on mortality are comparable to fibrinolytic therapy. The combination of aspirin and fibrinolytics provides additive benefits for patients with ST-segment elevation myocardial infarction (ISIS-2, 1988). Aspirin is also effective in patients with non-ST-segment elevation myocardial infarction (Theroux, 1988 and RISC Group, 1990). National guidelines strongly recommend early aspirin for patients hospitalized with AMI (Antman, 2008 and Wright, 2011).

S.4. Numerator Statement: 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
S.7. Denominator Statement: Emergency Department AMI or Chest Pain patients (with Probable Cardiac Chest Pain) without aspirin contraindications

Included Populations:
• An E/M Code for emergency department encounter as defined in Appendix A, Table 1.0, and
• Patients discharged/transferred to a short term general hospital for inpatient care, or to a Federal healthcare facility, and
• An ICD-9-CM Principal Diagnosis Code for AMI as defined in Appendix A, OP Table 1.1 or an ICD-9-CM Principal or Other Diagnosis Codes for Angina, Acute Coronary Syndrome, or Chest Pain as defined in Appendix A, OP Table 1.1a with Probable Cardiac Chest Pain

Excluded Populations:
•Patients less than 18 years of age
•Patients with a documented Reason for No Aspirin on Arrival

Data Elements:
•Birthdate
•Discharge Code
•E/M Code
•ICD-9-CM Other Diagnosis Codes
•ICD-9-CM Principal Diagnosis Code
•Outpatient Encounter Date
•Probable Cardiac Chest Pain
•Reason for No Aspirin on Arrival
S.10. Denominator Exclusions: Excluded Populations:
• Patients less than 18 years of age
• Patients with a documented Reason for No Aspirin on Arrival

De.1. Measure Type: Process
S.23. Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical

Records
S.26. Level of Analysis: Facility, Population : National

IF Endorsement Maintenance – Original Endorsement Date: Nov 15, 2007 **Most Recent Endorsement Date:** Jan 17, 2012

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results? NQF 0286 does not have to be grouped or paired with other measures to interpret results.

1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. ***Measures must be judged to meet all subcriteria to pass this criterion and be evaluated against the remaining criteria.***

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form
MeasSubm_Evidence_OP4_0286-635411184657807238.docx

1b. Performance Gap
   Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:
   - considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
   - disparities in care across population groups.

1b.1. Briefly explain the rationale for this measure *(e.g., the benefits or improvements in quality envisioned by use of this measure)*
The early use of aspirin in patients with AMI results in a significant reduction in adverse events and subsequent mortality. The benefits of aspirin therapy on mortality are comparable to fibrinolytic therapy. The combination of aspirin and fibrinolytics provides additive benefits for patients with ST-segment elevation myocardial infarction (ISIS-2, 1988). Aspirin is also effective in patients with non-ST-segment elevation myocardial infarction (Theroux, 1988 and RISC Group, 1990). National guidelines strongly recommend early aspirin for patients hospitalized with AMI (Antman, 2008 and Wright, 2011).

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. *(This is required for endorsement maintenance. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included). This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.*
Min 0; Max 100%
5th %ile= 75
10th %-ile = 87
25th %-ile= 100
50th = 100
75th = 100
90th = 100
95th = 100
Trends with benchmarks (BM) and national rates (Natl);
5 quarters of rolling data 1Q2012 to 1Q2013
1Q2012 BM = 99.7; Natl = 96.8%
2Q2012 BM = 99.9; Natl = 96.6%
3Q2012 BM = 99.9; Natl = 96.5%
4Q2012 BM = 99.8; Natl = 96.3%
1Q2013 BM = 99.9; Natl = 96.4%

**1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of

measurement.
Data from 1Q2013:
Benchmark rate used 67 hospitals, 2930 cases
National rate used 2822 hospitals, 29029 cases
Cases are sampled at the facility level.

1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability. *(This is required for endorsement maintenance. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.*
See measure testing report.

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations.
See measure testing report.

1c. High Priority (previously referred to as High Impact)
   The measure addresses:
   - a specific national health goal/priority identified by DHHS or the National Priorities Partnership convened by NQF; OR
   - a demonstrated high-priority (high-impact) aspect of healthcare (e.g., affects large numbers of patients and/or has a substantial impact for a smaller population; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and severity of patient/societal consequences of poor quality).

1c.1. Demonstrated high priority aspect of healthcare
Affects large numbers, A leading cause of morbidity/mortality
1c.2. If Other:

1c.3. Provide epidemiologic or resource use data that demonstrates the measure addresses a high priority aspect of healthcare. List citations in 1c.4.
In their 2013 report on heart disease and stroke statistics, the American Heart Association (AHA) estimates that there are 635,000 incident cases of acute myocardial infarction (AMI) or coronary heart disease death per year. Additionally, they estimate that there are an additional 280,000 recurrent coronary attacks and 150,000 "silent first myocardial infarctions" annually. The AHA estimates the prevalence of myocardial infarction to be 7.6 million American adults1. Based on an analysis of Medicare data, AMI is associated with a risk-standardized mortality rate of 16.6% and a risk standardized readmission rate of 19.9%2. In addition to serious medical consequences, AMI is associated with significant costs as well. In 2011, AMI was the 5th most expensive condition treated in U.S. hospitals, accounting for approximately $11.5 billion or 3% of total national healthcare costs.

Each year, an estimated 785,000 Americans will have a new coronary event, and approximately 470,000 will have a recurrent event. An estimated additional 195,000 silent first myocardial infarctions occur each year. Approximately every 25 seconds, an American will have a coronary event, and approximately every minute, one will die. In 2004, AMI resulted in 695,000 hospital stays and $31 billion in health expenditures. The risk of further cardiovascular complications, including recurrent MI, sudden cardiac death, heart failure, stroke, and angina pectoris, among AMI survivors is substantial.

ED volume increased by 3-5% from 2011 to 2012. The acuity of patients seen in ED has increased. About 16.4% of patients seen in the ED are admitted to inpatient status. Over 68% of hospital admissions are processed through the ED.
From the CDC for 2010:
•Number of visits: 129.8 million
•Number of injury-related visits: 37.9 million
•Number of visits per 100 persons: 42.8
•Percent of visits with patient seen in fewer than 15 minutes: 25.1%
•Percent of visits resulting in hospital admission: 13.3%
•Percent of visits resulting in transfer to a different (psychiatric or other) hospital: 2.1%

Source: National Hospital Ambulatory Medical Care Survey: 2010 Emergency Department Summary Tables, tables 1, 4, 14, 24

The early use of aspirin in patients with AMI results in a significant reduction in adverse events and subsequent mortality. The benefits of aspirin therapy on mortality are comparable to fibrinolytic therapy. The combination of aspirin and fibrinolytics provides additive benefits for patients with ST-segment elevation myocardial infarction (ISIS-2, 1988). Aspirin is also effective in patients with non-ST-segment elevation myocardial infarction (Theroux, 1988 and RISC Group, 1990). National guidelines strongly recommend early aspirin for patients hospitalized with AMI (Antman, 2004 and Anderson, 2007).

1c.4. **Citations for data demonstrating high priority provided in 1a.3**

•   Lloyd-Jones D, Adams RJ, Brown TM, Carnethon M, Dai S, De Simone G, Ferguson TB, Ford E, Furie K, Gillespie C, Go A, Greenlund K, Haase N, Hailpern S, Ho PM, Howard V, Kissela B, Kittner S, Lackland D, Lisabeth L, Marelli A, McDermott MM, Meigs J, Mozaffarian D, Mussolino M, Nichol G, Roger VL, Rosamond W, Sacco R, Sorlie P, Stafford R, Thom T, Wasserthiel-Smoller S, Wong ND, Wylie-Rosett J; on behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2010 update: a report from the American Heart Association. Circulation. 2010;121:e46–e215.

Emergency Department Benchmarking Alliance (EDBA) Data Guide.
 (CDC) National Hospital Ambulatory Medical Care Survey: 2010 Emergency Department Summary Tables, tables 1, 4, 14, 24
• Institute of Medicine of the National Academies. Future of emergency care: Hospital-based emergency care at the breaking point. The National Academies Press 2006.
• Institute of Medicine. IOM Report: the future of emergency care in the United States health system. Acad Emer Med. 2006;13(10):1081-5.
• Peacock WF, Hollander JE, Smalling RW, and Bresler MJ. Reperfusion Strategies in the emergency treatment of ST-segment elevation myocardial infarction. Am J Emerg Med 2007; 25: 353-66.

•   Anderson JL, Adams CD, Antman EM, Bridges CR, Califf RM, Casey DE Jr, et al. ACC/AHA 2007 guidelines for the management of patients with unstable angina/non–ST-elevation myocardial infarction: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Revise the 2002 Guidelines for the Management of Patients With Unstable Angina/Non–ST-Elevation Myocardial Infarction): developed in collaboration with the American College of Emergency Physicians, American College of Physicians, Society for Academic Emergency Medicine, Society for Cardiovascular Angiography and Interventions, and Society of Thoracic Surgeons. J Am Coll Cardiol. 2007;50:e1–157.
•   Antman EM, Anbe DT, Armstrong PW, Bates ER, Green LA, Hand M, Hochman JS, Krumholz HM, Kushner FG, Lamas GA, Mullany CJ, Ornato JP, Pearle DL, Sloan MA, Smith SC Jr. ACC/AHA guidelines for the management of patients with ST-elevation myocardial infarction: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee to Revise the 1999 Guidelines for the Management of Patients With Acute Myocardial Infarction). 2004.
•   Krumholz HM, Anderson JL, Bachelder BL, Fesmire FM, Fihn SD, Foody JM, et al. ACC/AHA 2008 performance measures for adults with ST-elevation and non-ST-elevation myocardial infarction: a report of the American College of Cardiology/American Heart Association Task Force on Performance Measures (Writing Committee to Develop Performance Measures for ST-Elevation and Non-ST-Elevation Myocardial Infarction). J Am Coll Cardiol. 2008;52:2046-99.
•   Randomized trial of intravenous streptokinase, oral aspirin, both or neither among 17,187 cases of suspected acute myocardial infarction: ISIS-2. ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. Lancet. 1988 Aug 13;2(8607):349-60.
•   Risk of myocardial infarction and death during treatment with low dose aspirin and intravenous heparin in men with unstable coronary artery disease. The RISC Group. Lancet 1990; 336(8719):827-30.
•   Theroux P, Ouimet H, McCans J et al. Aspirin, heparin, or both to treat acute unstable angina. N Engl J Med 1988; 319:1105-11.

1c.5. **If a PRO-PM (e.g. HRQoL/functional status, symptom/burden, experience with care, health-related behaviors), provide evidence that the target population values the measured PRO and finds it meaningful.** *(Describe how and from whom their input was obtained.)*

2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, <u>as specified</u>, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. ***Measures must be judged to meet the subcriteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.***

2a.1. Specifications The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

De.5. Subject/Topic Area *(check all the areas that apply):*
Cardiovascular, Cardiovascular : Acute Myocardial Infarction

De.6. Cross Cutting Areas *(check all the areas that apply):*
Safety

S.1. Measure-specific Web Page *(Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)*
http://qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1196289981244

S.2a. If this is an eMeasure, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)
This is not an eMeasure **Attachment:**

S.2b. Data Dictionary, Code Table, or Value Sets *(and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)*
Attachment **Attachment:** Appendix_A_codes-635161869653119253-635411184649227128.xlsx

S.3. For endorsement maintenance, please briefly describe any changes to the measure specifications since last endorsement date and explain the reasons.
There were updates to data elements to provide clarification in abstraction, based on Q and As submitted. References in the MIFs were updated to reflect the most recent recommendations from the ACC/AHA.
Release Notes are provided with the online submission.

S.4. Numerator Statement *(Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome)*
IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.
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

S.5. Time Period for Data *(What is the time period in which data will be aggregated for the measure, e.g., 12 mo, 3 years, look back to August for flu vaccination? Note if there are different time periods for the numerator and denominator.)*
Facilities are required to report this data quarterly.

S.6. Numerator Details *(All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)*
IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.
Data Element Name: Aspirin Received
Collected For: OP-4
Definition: Aspirin received within 24 hours before emergency department arrival or administered prior to transfer. Aspirin reduces the tendency of blood to clot by blocking the action of a type of blood cell involved in clotting. Aspirin improves the chances of surviving a heart attack and reduces the risk of recurrence in patients who have experienced a heart attack.

Suggested Data Collection Question: Was aspirin received within 24 hours before emergency department arrival or administered prior to transfer?

Allowable Values:
Y (Yes)   Aspirin was received within 24 hours before emergency department arrival or administered prior to transfer.

N (No)   Aspirin was not received within 24 hours before emergency department arrival or administered prior to transfer or unable to determine from medical record documentation.

Notes for Abstraction:
• In the absence of explicit documentation that the patient received aspirin within 24 hours prior to Arrival Time:
o In cases where the patient was received as a transfer from another hospital (inpatient, outpatient, ED, observation):
? Aspirin listed as "home" medication: Do not make inferences. Additional documentation is needed which clearly suggests the patient took aspirin at home within 24 hours prior to Arrival Time.
? Aspirin listed as "current" medication:
- If there is documentation that aspirin was a current medication at the transferring facility (e.g., aspirin noted on transfer summary, aspirin noted as "current medication" in your facility's H&P), then infer aspirin was taken within 24 hours prior to Arrival Time, unless documentation suggests otherwise.
- If documentation suggests "current" aspirin refers to home regimen or documentation is not clear whether "current" means patient was on aspirin at the transferring facility or at home, do not make inferences. Additional documentation is needed which clearly suggests the patient either took aspirin at home or at the transferring facility within 24 hours prior to Arrival Time.

o In non-transfer cases: - Aspirin listed as "current" or "home" medication should be inferred as taken within 24 hours prior to Arrival Time, unless documentation suggests otherwise (e.g., Documentation that aspirin is on hold prior to arrival for a scheduled procedure).
? If ASA is listed as home medication and last dose is noted as the day prior to arrival but no time, then infer aspirin was taken within 24 hours.
o When aspirin is noted only as received prior to arrival, without information about the exact time it was received (e.g. "baby ASA x4" per the "Treatment Prior to Arrival" section of the Triage Assessment), infer that the patient took it within 24 hours prior to Arrival Time, unless documentation suggests otherwise.
o Aspirin documented as a PRN current/home medication does not count unless documentation is clear it was taken within 24 hours prior to Arrival Time.

Suggested Data Sources:
• Ambulance record
• Emergency Department record

Inclusion Guidelines for Abstraction:
Refer to Appendix C, OP Table 1.1, Aspirin and Aspirin-Containing Medications.

Exclusion Guidelines for Abstraction:
Aggrenox (aspirin/dipyridamole)

S.7. **Denominator Statement** *(Brief, narrative description of the target population being measured)*
Emergency Department AMI or Chest Pain patients (with Probable Cardiac Chest Pain) without aspirin contraindications

Included Populations:
• An E/M Code for emergency department encounter as defined in Appendix A, Table 1.0, and
• Patients discharged/transferred to a short term general hospital for inpatient care, or to a Federal healthcare facility, and
• An ICD-9-CM Principal Diagnosis Code for AMI as defined in Appendix A, OP Table 1.1 or an ICD-9-CM Principal or Other Diagnosis Codes for Angina, Acute Coronary Syndrome, or Chest Pain as defined in Appendix A, OP Table 1.1a with Probable Cardiac Chest Pain

Excluded Populations:
•Patients less than 18 years of age
•Patients with a documented Reason for No Aspirin on Arrival

Data Elements:
•Birthdate
•Discharge Code
•E/M Code
•ICD-9-CM Other Diagnosis Codes

•ICD-9-CM Principal Diagnosis Code
•Outpatient Encounter Date
•Probable Cardiac Chest Pain
•Reason for No Aspirin on Arrival

S.8. **Target Population Category** *(Check all the populations for which the measure is specified and tested if any):*
 Senior Care

S.9. **Denominator Details** *(All information required to identify and calculate the target population/denominator such as definitions, specific data collection items/responses , code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)*
Patients with:
• An E/M Code for emergency department encounter as defined in Appendix A, Table 1.0, and
• Patients discharged/transferred to a short term general hospital for inpatient care, or to a Federal healthcare facility, and
• An ICD-9-CM Principal Diagnosis Code for AMI as defined in Appendix A, OP Table 1.1 or an ICD-9-CM Principal or Other Diagnosis Codes for Angina, Acute Coronary Syndrome, or Chest Pain as defined in Appendix A, OP Table 1.1a with Probable Cardiac Chest Pain (See below)

Data Elements:
• Birthdate
• Discharge Code
• E/M Code
• ICD-9-CM Other Diagnosis Codes
• ICD-9-CM Principal Diagnosis Code
• Outpatient Encounter Date
• Probable Cardiac Chest Pain
• Reason for No Aspirin on Arrival

ICD-9-CM Principal Diagnosis codes, Appendix A, OP Table 1.1, Acute Myocardial Infarction (AMI):
410.00: Anterolateral wall, acute myocardial infarction-episode of care unspecified
410.01: Anterolateral wall, acute myocardial infarction-initial episode
410.10: Other anterior wall, acute myocardial infarction-episode of care unspecified
410.11: Other anterior wall, acute myocardial infarction-initial episode
410.20: Inferolateral wall, acute myocardial infarction-episode of care unspecified
410.21: Inferolateral wall, acute myocardial infarction-initial episode
410.30: Inferoposterior wall, acute myocardial infarction-episode of care unspecified
410.31: Inferoposterior wall, acute myocardial infarction-initial episode
410.40: Other inferior wall, acute myocardial infarction-episode of care unspecified
410.41: Other inferior wall, acute myocardial infarction-initial episode
410.50: Other lateral wall, acute myocardial infarction-episode of care unspecified
410.51: Other lateral wall, acute myocardial infarction-initial episode
410.60: True posterior wall, acute myocardial infarction-episode of care unspecified
410.61: True posterior wall, acute myocardial infarction-initial episode
410.70: Subendocardial, acute myocardial infarction-episode of care unspecified
410.71: Subendocardial, acute myocardial infarction-initial episode
410.80: Other specified sites, acute myocardial infarction-episode of care unspecified
410.81: Other specified sites, acute myocardial infarction-initial episode
410.90: Unspecified site, acute myocardial infarction-episode of care unspecified
410.91: Unspecified site, acute myocardial infarction-initial episode

ICD-9-CM Principal Diagnosis codes for Chest Pain, Angina, Acute Coronary Syndrome Codes, Appendix A, OP Table 1.1a:
411.1 INTERMED CORONARY SYND
411.89 AC ISCHEMIC HRT DIS NEC
413.0 ANGINA DECUBITUS

413.1 PRINZMETAL ANGINA
413.9 ANGINA PECTORIS NEC/NOS
786.51 PRECORDIAL PAIN
786.52 PAINFUL RESPIRATION
786.59 CHEST PAIN NEC

S.10. **Denominator Exclusions** *(Brief narrative description of exclusions from the target population)*
Excluded Populations:
• Patients less than 18 years of age
• Patients with a documented Reason for No Aspirin on Arrival

S.11. **Denominator Exclusion Details** *(All information required to identify and calculate exclusions from the denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)*
Specifications available at
http://qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1196289981244

The data element Reason for No Aspirin at Arrival:
Collected For: OP-4

Definition: Reasons for not administering aspirin on arrival:
•   Aspirin allergy
•   One or more of the medications listed in Inclusion List as pre-arrival medication
•   Other reasons documented by a physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist

Aspirin reduces the tendency of blood to clot by blocking the action of a type of blood cell involved in clotting. Aspirin improves chances of surviving a heart attack and reduces the risk of occurrence in patients who have experienced a heart attack.

Suggested Data Collection Question:
Select one of the following documented reasons for not administering aspirin on arrival.

Format:
Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:
1   Allergy/Sensitivity to aspirin: There is documentation of an aspirin allergy/sensitivity.
2   Documentation of one or more of the medications listed in Inclusion List prescribed pre-arrival: One or more of the medications listed in the Inclusion List is prescribed as a pre-arrival home medication.
3   Other documented reasons: There is documentation of a reason for not administering aspirin on arrival.
4   No documented reason or Unable to determine (UTD): There is no documentation of a reason for not administering aspirin on arrival or unable to determine from medical record documentation.

Notes for Abstraction:
•   When conflicting information is documented in a medical record, a positive finding (aspirin allergy) should take precedence over a negative finding (no known allergy).
•   Aspirin "allergy" or "sensitivity" documented anytime during the hospital stay counts as an allergy regardless of what type of reaction might be noted (e.g., "Allergies: ASA – Upsets stomach" – select value "1").
•   Notation of an aspirin allergy prior to arrival counts as a reason for not administering aspirin, select value "1."
•   Documentation of an allergy/sensitivity to one particular type of aspirin is acceptable to take as an allergy to the entire class of aspirin-containing medications (e.g., "Allergic to Empirin").
•   Other reasons include any physician/APN/PA or pharmacist documentation of a reason for not administering aspirin. (e.g., ASA not administered because patient has a gastric ulcer).
o   There must be a documented reason. Documentation of "Aspirin not administered" will not be sufficient.

Physician/APN/PA or pharmacist crossing out of an aspirin order counts as an "other reason" for not administering aspirin.

• Pre-arrival hold or discontinuation of aspirin or notation such as "No aspirin" counts as a reason for not administering aspirin.

• Pre-arrival "other reason" counts as reason for not administering aspirin (e.g., "Intolerance to aspirin" or "Hx GI bleeding with aspirin").

• In situations where there is documentation that would support more than one of the allowable values, 1-4, select the lowest value. Example: Patient has a documented aspirin allergy and documentation of Coumadin as a pre-arrival medication, select value "1."

• Consider a medication listed in the Inclusion List to be a pre-arrival medication (a reason for not prescribing aspirin on arrival) if there is documentation the patient was on it prior to arrival, regardless of setting. Include cases where there is indication the medication was on temporary hold or the patient has been non-compliant/self-discontinued their medication (e.g., refusal, side effects, cost).

Suggested Data Sources:
• Emergency Department record

Inclusion Guidelines for Abstraction:

Inclusion List: Pre-arrival medications that count as an automatic reason for no aspirin
• Apixaban
• Coumadin
• Dabigatran
• Eliquis
• Jantoven
• Pradaxa
• Rivaroxaban
• Warfarin
• Warfarin Sodium
• Xarelto

Refer to Appendix C, OP Table 1.1, Aspirin and Aspirin-Containing Medications.

Exclusion Guidelines for Abstraction:
None

S.12. Stratification Details/Variables *(All information required to stratify the measure results including the stratification variables, definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b)*

S.13. Risk Adjustment Type (Select type. Provide specifications for risk stratification in S.12 and for statistical model in S.14-15)
No risk adjustment or risk stratification
If other:

S.14. Identify the statistical risk model method and variables *(Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development and testing should be addressed with measure testing under Scientific Acceptability)*
None

S.15. Detailed risk model specifications *(must be in attached data dictionary/code list Excel or csv file. Also indicate if available at measure-specific URL identified in S.1.)*
Note: Risk model details (including coefficients, equations, codes with descriptors, definitions), should be provided on a separate worksheet in the suggested format in the Excel or csv file with data dictionary/code lists at S.2b.

S.15a. Detailed risk model specifications (*if not provided in excel or csv file at S.2b*)

S.16. **Type of score:**
Rate/proportion
If other:

S.17. **Interpretation of Score** *(Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)*
Better quality = Higher score

S.18. **Calculation Algorithm/Measure Logic** *(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.)*
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.
Denominator: Emergency Department AMI or Chest Pain patients (with Probable Cardiac Chest Pain).

1.	Start. Run cases that are included in the AMI and Chest Pain Hospital Outpatient Population Algorithms and passed the edit defined in the Data Processing Flow through this measure. Proceed to ICD-10-CM Principal Diagnosis Code.
2.	Check ICD-10-CM Principal Diagnosis Code.
a.	If the ICD-10-CM Principal Diagnosis Code is not on Appendix A, OP Table 1.1, the case will proceed to Probable Cardiac Chest Pain.
b.	If the ICD-10-CM Principal Diagnosis Code is on Appendix A, OP Table 1.1, the case will proceed to Aspirin Received.
3.	Check Probable Cardiac Chest Pain.
a.	If Probable Cardiac Chest Pain is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
b.	If Probable Cardiac Chest Pain equals NO, the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
c.	If Probable Cardiac Chest Pain equals YES, the case will proceed to Aspirin Received.
4.	Check Aspirin Received.
a.	If Aspirin Received is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
b.	If Aspirin Received equals NO, the case will proceed to Reason for No Aspirin on Arrival.
c.	If Aspirin Received equals YES, the case will proceed to a Measure Category Assignment of E. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
5.	Check Reason for No Aspirin on Arrival.
a.	If Reason for No Aspirin on Arrival is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
b.	If Reason for No Aspirin on Arrival equals 1, 2, or 3, the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
6.	If Reason for No Aspirin on Arrival equals 4, the case will proceed to a Measure Category Assignment of D. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.

S.19. **Calculation Algorithm/Measure Logic Diagram URL or Attachment** *(You also may provide a diagram of the Calculation Algorithm/Measure Logic described above at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*
Available at measure-specific web page URL identified in S.1

S.20. **Sampling** *(If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)*
IF a PRO-PM, identify whether (and how) proxy responses are allowed.
Sampling Approaches
Hospitals have the option to sample from their population, or submit their entire population. Hospitals that choose to sample must ensure that the sampled data represent their outpatient population by using either the simple random sampling or systematic random sampling method and that the sampling techniques are applied consistently within a quarter. For example, quarterly samples for a sampling population must use consistent sampling techniques across the quarterly submission period.

• Simple random sampling - selecting a sample size (n) from a population of size (N) in such a way that every case has the same chance of being selected.

• Systematic random sampling - selecting every kth record from a population of size (N) in such a way that a sample size of n is obtained, where k = N/n rounded to the lower digit. The first sample record (i.e., the starting point) must be randomly selected before taking every kth record. This is a two-step process:

a) Randomly select the starting point by choosing a number between one and k using a table of random numbers or a computer-generated random number; and

b) Then select every kth record thereafter until the selection of the sample size is completed.

Each hospital is ultimately responsible that the sampling techniques applied for their hospital adhere to the sampling requirements outlined in this manual. Performance measurement systems are responsible for ensuring that the sampling techniques are applied consistently across their client hospitals.

Monthly Sampling Guidelines

It is important to point out that if a hospital elects to use the monthly sampling guidelines, the hospital is still required to meet the minimum quarterly sampling requirements. A hospital may choose to use a larger sample size than is required. Hospitals whose population size is less than the minimum number of cases per quarter for the measure set cannot sample (i.e., the entire population of cases must be selected). Given the potential for substantial variation in monthly population sizes, the monthly sample sizes should be based on the known or anticipated quarterly population size. When necessary, appropriate oversampling should be employed to ensure that the hospital meets the minimum quarterly sample size requirements. Refer to Table 3 below for guidelines in determining the number of cases that need to be sampled for each population per month per hospital based on the quarterly population size.

Table 3: Sample Size Guidelines per Hospital
Population per Quarter

Quarterly Sample Size

Population per Quarter	Quarterly Sample Size
<= 80	use all cases
81-100	80
101-125	95
126-150	109
151-175	121
176-200	132
201-225	143
226-250	152
251-275	161
276-300	169
301-325	177
326-350	184
351-75	191
376-400	197
401-425	203
426-450	208
451-500	218
501-600	235
601-700	249
701-800	260
801-900	270
901-1,000	278
1,001-2,000	323
2,001-3,000	341
3,001-4,000	351
4,001-5,000	357
5,001-10,000	370
>=10,001	377

S.21. Survey/Patient-reported data *(If measure is based on a survey, provide instructions for conducting the survey and guidance on minimum response rate.)*

IF a PRO-PM, specify calculation of response rates to be reported with performance measure results.

S.22. Missing data (specify how missing data are handled, e.g., imputation, delete case.)

Required for Composites and PRO-PMs.

Missing and Invalid Data

For rejected data to be accepted, errors must be corrected and the data resubmitted before the transmission deadline.

• The majority of general data elements that are missing data* cause the encounter record to be rejected. Refer to the Data Dictionary Introduction in this manual for the complete list of general data elements.

• In addition, if both the ICD-9-CM Principal Diagnosis Code and the CPT® Code data elements are missing data*, the entire record will be rejected.

• Not all patients have ICD-9-CM Other Diagnosis Codes. Records will be accepted for missing data for this data element.

• Measure-specific data elements that are missing data* cause the record to be rejected if any measure algorithm results in a Measure Category Assignment = "X" (missing data). If no measure evaluates to a category assignment of "X", the record will be accepted.

• General and measure- specific data elements that contain invalid data cause the record to be rejected.

Note:

*A missing value occurs when the abstractor does not select an answer for a data element (leaves it blank) or the software incorrectly transmits a "null" instead of the correct value for a data element. A "UTD" allowable value is not considered missing data.

S.23. Data Source *(Check ONLY the sources for which the measure is SPECIFIED AND TESTED).*

If other, please describe in S.24.

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

S.24. Data Source or Collection Instrument *(Identify the specific data source/data collection instrument e.g. name of database, clinical registry, collection instrument, etc.)*

IF a PRO-PM, identify the specific PROM(s); and standard methods, modes, and languages of administration.

Data collection occurs through vendors or via the CART tool which can be dowloaded free of charge at http://qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=12054420570

S.25. Data Source or Collection Instrument *(available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*

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

S.26. Level of Analysis *(Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)*

Facility, Population : National

S.27. Care Setting *(Check ONLY the settings for which the measure is SPECIFIED AND TESTED)*

Hospital/Acute Care Facility

If other:

S.28. COMPOSITE Performance Measure - Additional Specifications *(Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)*

2a. Reliability – See attached Measure Testing Submission Form
2b. Validity – See attached Measure Testing Submission Form
MeasSubm_MeasTesting_OP4_0286-635267781196781364-635411184667479362.docx

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without

undue burden and can be implemented for performance measurement.

3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. Data Elements Generated as Byproduct of Care Processes.
Abstracted from a record by someone other than person obtaining original information (e.g., chart abstraction for quality measure or registry)
If other:

3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

3b.1. To what extent are the specified data elements available electronically in defined fields? *(i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields)*
Some data elements are in defined fields in electronic sources

3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources.
NQF #132 is currently undergoing electronic retooling. It is expected the retooling may be applicable to NQF measure 286.
It is difficult to capture the data element "Probable Cardiac Chest Pain" from electronic fields. A proxy would have to be used which may not accurately represent this concept. See the following sepcifications for Probable Cardiac Chest Pain:

Data Element Name: Probable Cardiac Chest Pain
Collected For: OP-4, OP-5
Definition: Documentation that a nurse or physician/APN/PA presumed the patient's chest pain to be cardiac in origin.
Suggested Data Collection Question: Was the patient's chest pain presumed to be cardiac in origin?
Format:
Length: 1
Type: Alphanumeric
Occurs: 1
Allowable Values:
Y (Yes) There was nurse or physician/APN/PA documentation the chest pain was presumed to be cardiac in origin.
N (No) There was no nurse or physician/APN/PA documentation the chest pain was presumed to be cardiac in origin or unable to determine from medical record documentation.
Notes for Abstraction:
• If there is documentation of a differential/working diagnosis of acute myocardial infarction select "Yes."
• Disregard documentation of inclusions/exclusions described with terms indicating the condition is not acute, such as "history of."
• If there is documentation by the nurse or physician of an exclusion term, select "No", unless there is a working/differential diagnosis of AMI continue to select "Yes".
EXCLUDED DATA SOURCES:
• Chest X-Ray Reports
• Radiology Reports
Suggested Data Sources:
NURSE or PHYSICIAN/APN/PA DOCUMENTATION ONLY
• Emergency Department record
Inclusion Guidelines for Abstraction:
Acute Myocardial Infarction and Chest Pain Inclusions
• Acute coronary syndrome
• Acute myocardial infarction (AMI)
• Angina
• Cardiac
• Cardiac Chest Pain
• Chest Pain

• Heart attack
• Ischemia
• Myocardial Infarction
• Unstable angina
The following qualifiers should be abstracted as positive findings if listed with any of the above inclusion terms;
• Appears to have
• Cannot exclude
• Cannot rule out
• Consider
• Consistent with (c/w)
• Could/may/might be
• Could/may/might have been
• Diagnostic of
• Differential diagnosis
• Evidence of
• Indicative of
• Likely
• Could/may/might have had
• Could/may/might indicate
• Most likely
• Possible
• Probable
• Questionable (?)
• Representative of
• Risk of
• Rule(d) out (r/o)
• Suggestive of
• Suspect
• Suspicious
• Versus (vs)
• Working diagnosis
• +
Exclusion Guidelines for Abstraction:
• Atypical Chest Pain
• Chest Pain musculoskeletal
• Chest Pain qualified by a non-cardiac cause
• Chest wall pain
• Non Cardiac Chest Pain
• Non-specific Chest Pain
• Traumatic Chest Pain
• Trauma
• MVA (Motor Vehicle Accident)

3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL.
No feasibility assessment **Attachment:**

3c. Data Collection Strategy
　　Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.1. Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.

IF a PRO-PM, consider implications for both individuals providing PROM data (patients, service recipients, respondents) and those whose performance is being measured.

Specifications (including codes and data elements) are modified every 6 months according to feedback received from clinicians, facilities and experts. Data is available in the medical record and there are no feasability or implementation issues identified. Missing data regarding timing issues can result in cases being assigned to a noncalculable outcome which does not impair the integrity of our data results but provides a mechanism for facilities to evaluate internal quality improvement efforts to assure accuracy and completion of data collection.

3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified *(e.g., value/code set, risk model, programming code, algorithm)*.
N/A

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

4a. Accountability and Transparency
Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

4.1. Current and Planned Use
NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.

Planned	Current Use (for current use provide URL)
	Public Reporting CMS HOQR Program https://qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1191255879384 Payment Program CMS HOQR Program https://qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1191255879384 Regulatory and Accreditation Programs Joint Commission Accreditation http://www.jointcommission.org/accreditation_process_overview/ Quality Improvement with Benchmarking (external benchmarking to multiple organizations) CMS HOQR Program https://qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1191255879384

4a.1. For each CURRENT use, checked above, provide:
- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included

CMS HOQR Program has approximately 3323 hospitals participating nationwide. See link above for purpose details.
Joint Commission Accreditation; geographic area and other information unknown, but similar to CMS program. See link above for

purpose details.

4a.2. **If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons?** (*e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?*)

4a.3. **If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement.** (*Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.*)

4b. Improvement
Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4b.1. **Progress on Improvement. (Not required for initial endorsement unless available.)**
Performance results on this measure (current and over time) should be provided in 1b.2 and 1b.4. Discuss:
- **Progress (trends in performance results, number and percentage of people receiving high-quality healthcare)**
- **Geographic area and number and percentage of accountable entities and patients included**

Trends were provided for the last 5 quarters of available data.
ASA at Arrival for the OP setting has not reached the level that it has for the inpatient setting, but the performance rate is very high.

4b.2. **If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.**

4c. Unintended Consequences
The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

4c.1. **Were any unintended negative consequences to individuals or populations identified during testing; OR has evidence of unintended negative consequences to individuals or populations been reported since implementation? If so, identify the negative unintended consequences and describe how benefits outweigh them or actions taken to mitigate them.**
No unintended consequences were identified.

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5. Comparison to Related or Competing Measures

If a measure meets the above criteria <u>and</u> 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.

5. Relation to Other NQF-endorsed Measures
Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.
Yes

5.1a. **List of related or competing measures (selected from NQF-endorsed measures)**
0092 : Emergency Medicine: Aspirin at Arrival for Acute Myocardial Infarction (AMI)
0132 : Aspirin at arrival for acute myocardial infarction (AMI)

5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.

5a. Harmonization

The measure specifications are harmonized with related measures;

OR

The differences in specifications are justified

5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):

Are the measure specifications completely harmonized?

No

5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.

0092 is specified for EHRs and at the physician level, not facility level.

5b. Competing Measures

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

OR

Multiple measures are justified.

5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):

Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)

Measure is applicable to the Outpatient setting. Based on separate payment initiatives, the inpatient measure and the PQRS measure is not considered competing.

Appendix

A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

No appendix **Attachment:**

Contact Information

Co.1 Measure Steward (Intellectual Property Owner): Centers for Medicare and Medicaid Services
Co.2 Point of Contact: Kristie, Baus, Kristie.baus@cms.hhs.gov, 410-786-8161-
Co.3 Measure Developer if different from Measure Steward: Centers for Medicare & Medicaid Services
Co.4 Point of Contact: Fiona, Larbi, Fiona.larbi@cms.hhs.gov, 410-786-6738-

Additional Information

Ad.1 Workgroup/Expert Panel involved in measure development
Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.

The measure set has a Technical Expert Panel that provides direction and support. The TEP is involved in revision of measure specifications based on guidelines and emerging science. All changes are vetted through this group.
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2. Fred Masoudi, MD, MSPH, FACC, FAHA   TEP Workgroup Chair

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Measure Developer/Steward Updates and Ongoing Maintenance
Ad.2 Year the measure was first released: 2008
Ad.3 Month and Year of most recent revision: 10, 2014
Ad.4 What is your frequency for review/update of this measure? Bi-annual
Ad.5 When is the next scheduled review/update for this measure? 07, 2015

Ad.6 Copyright statement: N/A
Ad.7 Disclaimers: None

Ad.8 Additional Information/Comments: None