

****NQF-ENDORSED VOLUNTARY CONSENSUS STANDARD FOR HOSPITAL CARE****

Measure Information Form

Measure Set: Acute Myocardial Infarction

Set Measure ID #: AMI-1

Performance Measure Name: Aspirin at Arrival

Description: Acute myocardial infarction (AMI) patients without aspirin contraindications who received aspirin within 24 hours before or after hospital arrival.

Rationale: The early use of aspirin in patients with acute myocardial infarction results in a significant reduction in adverse events and subsequent mortality. Aspirin therapy provides a percent reduction in mortality that is comparable to thrombolytic therapy and the combination provides additive benefit (ISIS-2,1988). National guidelines strongly recommend early aspirin for patients hospitalized with AMI (Braunwald, 2000 and Ryan, 1999). Despite these recommendations, aspirin remains underutilized in older patients hospitalized with AMI (Jencks, 2000).

Type of Measure: Process

Improvement Noted As: An increase in the rate

Numerator Statement: AMI patients who received aspirin within 24 hours before or after hospital arrival

Included Populations: Not Applicable

Excluded Populations: None

Data Elements:

Aspirin Received Within 24 Hours Before or After Hospital Arrival

Denominator Statement: AMI patients without aspirin contraindications

Included Populations: Discharges with an *ICD-9-CM Principal Diagnosis Code* for AMI as defined in Appendix A, Table 1.1

Excluded Populations:

- Patients less than 18 years of age
- Patients transferred to another acute care hospital or federal hospital on day of arrival
- Patients received in transfer from another acute care hospital, including another emergency department
- Patients discharged on day of arrival
- Patients who expired on day of arrival
- Patients who left against medical advice on day of arrival
- Patients with 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
 - Coumadin/warfarin as pre-arrival medication
 - Other reasons documented by a physician, nurse practitioner, or physician assistant for not giving aspirin within 24 hours before or after hospital arrival

Data Elements:

- *Admission Date*
- *Admission Source*
- *Arrival Date*
- *Birthdate*
- *Contraindication to Aspirin on Arrival*
- *Discharge Date*
- *ICD-9-CM Principal Diagnosis Code*
- *Transfer From Another ED*

Risk Adjustment: No

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical records.

Data Accuracy: Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: None

Sampling: Yes, for additional information see the Sampling section

Data Reported As: Aggregate rate generated from count data reported as a proportion

Selected References:

- Braunwald E, Antman EM, Beasley JW, Califf RM, Cheitlin MD, Hochman JS, Jones RH, Kereiakes D, Kupersmith J, Levin TN, Pepine CJ, Schaeffer JW, Smith EE III, Steward DE, Theroux P. ACC/AHA guidelines for the management of patients with unstable angina and non-ST-segment elevation myocardial infarction: a report of the American College of

Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on the Management of Patients with Unstable Angina). *J Am Coll Cardiol* 2000;36:970-1062. Available at <http://www.acc.org> and <http://www.americanheart.org>.

- Randomised 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.
- Jencks SJ, Cuerdon T, Burwen DR, Fleming B, Houck PM, Kussmaul AE, Nilasena DS, Ordin DL, Arday DR. Quality of medical care delivered to Medicare beneficiaries: a profile at state and national levels. *JAMA*. 2000;284:1670-1676.
- Ryan TJ, Antman EM, Brooks NH, Califf RM, Hillis LD, Hiratzka LF, Rapaport E, Riegel B, Russell RO, Smith EE III, Weaver WD. 1999 update: ACC/AHA guidelines for the management of patients with acute myocardial infarction: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on Management of Acute Myocardial Infarction). *J Am Coll Cardiol* 1999;34:890-911. Available at <http://www.acc.org> and <http://www.americanheart.org>.
- Ryan, TJ, Anderson, JL, Antman, EM, Braniff, BA, Brooks NH, Califf, RM, Hillis LD, Hiratzka L F, Rapaport E, Riegel BJ, Russell RO, Smith EE III, Weaver WD. ACC/AHA guidelines for the management of patients with acute myocardial infarction: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on Management of Acute Myocardial Infarction). *J Am Coll Cardiol* 1996;28:1328-1428. Available at <http://www.acc.org> and <http://www.americanheart.org>.

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Denominator: AMI patients without aspirin contraindications.



