

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

Measure Information Form

Measure Set: Acute Myocardial Infarction (AMI)

Set Measure ID#: AMI-8a

Performance Measure Name: PCI Received Within 120 Minutes of Hospital Arrival

Description: Acute myocardial infarction (AMI) patients receiving percutaneous coronary intervention (PCI) during the hospital stay with a time from hospital arrival to PCI of 120 minutes or less.

Rationale: The early use of primary angioplasty in patients with acute myocardial infarction who present with ST-segment elevation or LBBB results in a significant reduction in mortality and morbidity. The earlier primary coronary intervention is provided, the more effective it is (Brodie, 1998). National guidelines recommend the prompt initiation of PCI in patients presenting with ST elevation myocardial infarction (Ryan, 1999). Despite these recommendations, few older patients hospitalized with AMI receive primary angioplasty within a timely manner (Jencks, 2000).

Type of Measure: Process

Improvement Noted as: An increase in the rate

Numerator Statement: AMI patients whose time from hospital arrival to PCI is 120 minutes or less

Included Populations: Not Applicable

Excluded Populations: None

Data Elements:

- *Arrival Date*
- *Arrival Time*
- *First PCI Date*
- *First PCI Time*

Denominator Statement: AMI patients with ST elevation or LBBB on ECG who received PCI

Included Populations: Discharges with:

- An *ICD-9-CM Principal Diagnosis Code* for AMI as defined in Appendix A, Table 1.1
- AND
- PCI (*ICD-9-CM Principal and Other Procedure Codes* for PCI as defined in Appendix A, Table 1.2)
- AND
- ST segment elevation or LBBB on the ECG performed closest to hospital arrival
- AND
- PCI performed within 24 hours after hospital arrival

Excluded Populations:

- Patients less than 18 years of age
- Patients received in transfer from another hospital, including another emergency department
- Patients administered thrombolytic agents

Data Elements:

- *Admission Date*
- *Admission Source*
- *Arrival Date*
- *Arrival Time*
- *Birthdate*
- *First PCI Date*
- *First PCI Time*
- *ICD-9-CM Other Procedure Codes*
- *ICD-9-CM Principal Diagnosis Code*
- *ICD-9-CM Principal Procedure Code*
- *Initial ECG Interpretation*
- *Thrombolytic Administration*
- *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: The measure rate for PCI received within 120 minutes of hospital arrival should be analyzed in conjunction with the mean time to PCI measure (AMI-8). These measures, used together, will assist in understanding the number of AMI patients that are receiving PCI within 120 minutes of hospital arrival, and will identify the hospital's mean time to PCI and potential opportunities for improvement to increase the rate of patients receiving PCI in 120 minutes or less.

Sampling: Yes, for additional information see the Sampling section

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

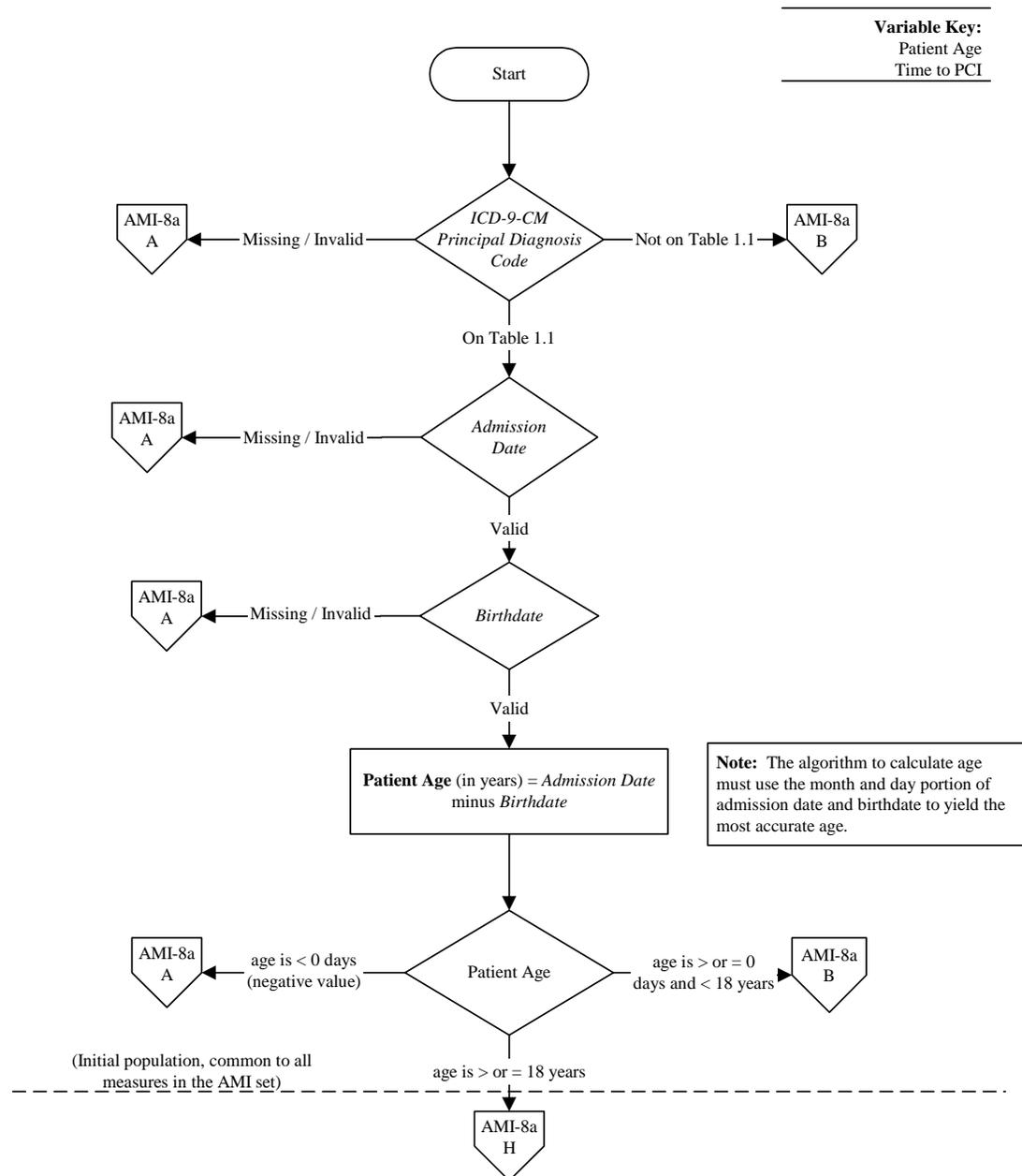
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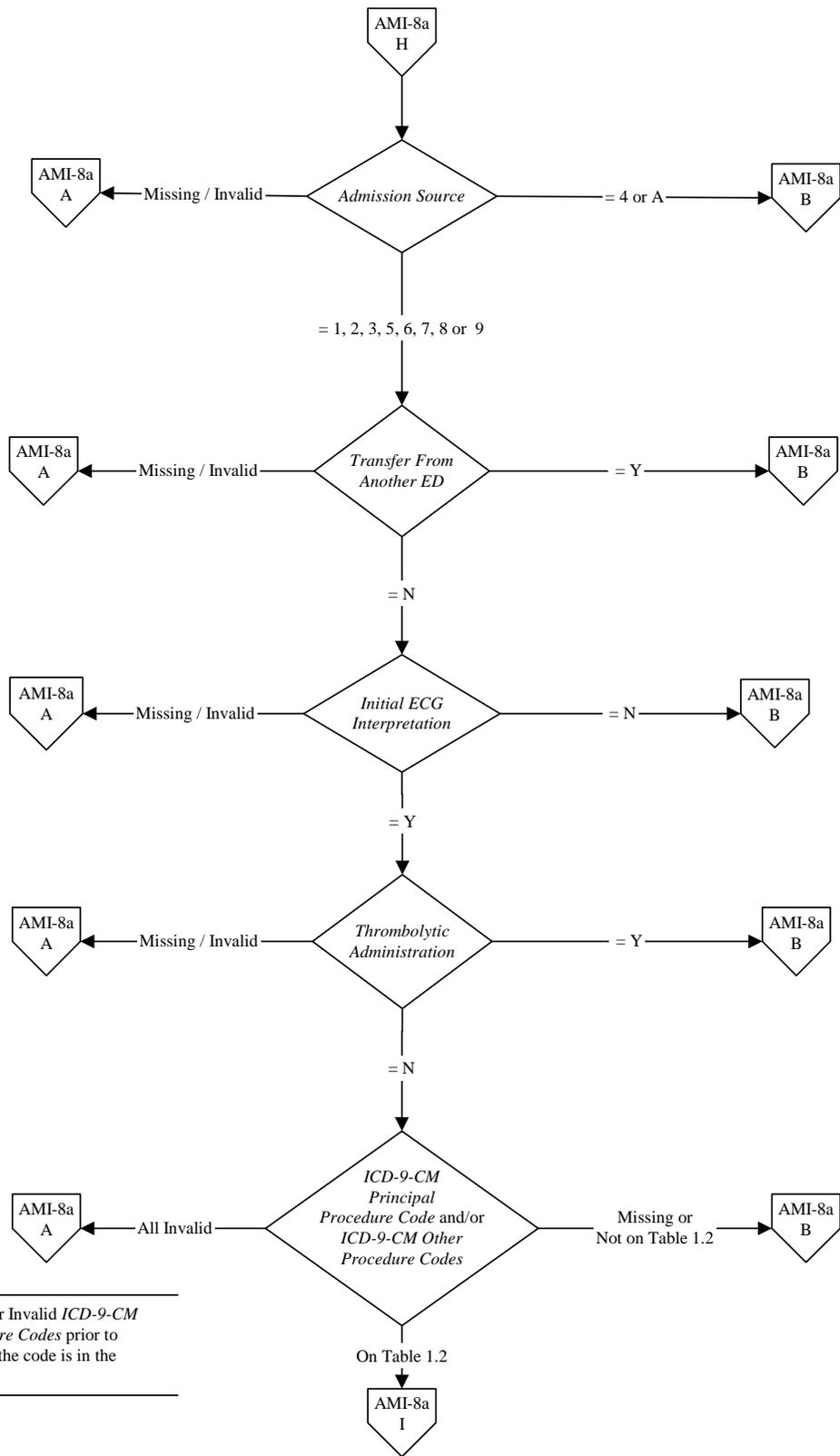
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- Ryan TJ, Antman EM, Brooks NH, Califf RM, Hillis LD, Hiratzka LF, Rapaport E, Riegel B, Russell RO, Smith EE III, Weaver WD. 1999 update: ACC/AHA guidelines for the management of patients with acute myocardial infarction: a report of the American 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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Numerator: AMI patients whose time from hospital arrival to PCI is 120 minutes or less.

Denominator: AMI patients with ST elevation or LBBB on ECG who received PCI.





Note: Look for Invalid *ICD-9-CM Other Procedure Codes* prior to determining if the code is in the population.

