

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

Measure Information Form

Measure Set: Acute Myocardial Infarction (AMI)

Set Measure ID#: AMI-5

Performance Measure Name: Beta Blocker Prescribed at Discharge

Description: Acute myocardial infarction (AMI) patients without beta blocker contraindications who are prescribed a beta blocker at hospital discharge

Rationale: The use of beta blockers for patients who have suffered an acute myocardial infarction can reduce mortality and morbidity. Studies have demonstrated that the use of beta blockers is associated with about a 20% reduction in this risk (Yusuf, 1985 and Yusuf, 1988), and there is evidence of effectiveness in broad populations of patients with AMI (Krumholz, 1998). National guidelines strongly recommend long-term beta blocker therapy for the secondary prevention of subsequent cardiovascular events in patients discharged after AMI (Antman, 2004 and Braunwald, 2002). Despite these recommendations, beta blockers remain under-utilized in eligible older patients discharged after AMI (Jencks, 2000).

Type of Measure: Process

Improvement Noted As: An increase in the rate

Numerator Statement: AMI patients who are prescribed a beta blocker at hospital discharge

Included Populations: Not Applicable

Excluded Populations: None

Data Elements:

Beta Blocker Prescribed at Discharge

Denominator Statement: AMI patients without beta blocker 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
- Patients who expired
- Patients who left against medical advice
- Patients discharged to hospice
- Patients with comfort measures only documented by a physician, nurse practitioner, or physician assistant
- Patients with one or more of the following beta blocker contraindications/reasons for not prescribing a beta blocker documented in the medical record:
 - o Beta blocker allergy
 - o Bradycardia (heart rate less than 60 bpm) on day of discharge or day prior to discharge while not on a beta blocker
 - o Second or third degree heart block on ECG on arrival or during hospital stay and does not have a pacemaker
 - o Other reasons documented by a physician, nurse practitioner, or physician assistant for not prescribing a beta blocker at discharge

Data Elements:

- *Admission Date*
- *Birthdate*
- *Comfort Measures Only*
- *Contraindication to Beta Blocker at Discharge*
- *Discharge Status*
- *ICD-9-CM Principal Diagnosis Code*

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:

- 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. Available at www.acc.org/clinical/guidelines/stemi/index.pdf

- Braunwald E, Antman EM, Beasley JW, Califf RM, Cheitlin MD, Hochman JS, Jones RH, Kereiakes D, Kupersmith J, Levin TN, Pepline CJ, Schaeffer JW, Smith EE III, Steward DE, Theroux P. ACC/AHA 2002 guideline update 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). 2002. Available at www.acc.org/clinical/guidelines/unstable/unstable.pdf
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- Krumholz HM, Radford MJ, Wang Y, Chen J, Heiat A, Marciniak TA. National use and effectiveness of β -blockers for the treatment of elderly patients after acute myocardial infarction: National Cooperative Cardiovascular Project. *JAMA*. 1998;280:623-629.
- Smith SC Jr, Blair SN, Bonow RO, Brass LM, Cerqueira MD, Dracup K, Fuster V, Gotto A, Grundy SM, Miller NH, Jacobs A, Jones D, Krauss RM, Mosca L, Ockene I, Pasternak RC, Pearson T, Pfeffer MA, Starke RD, Taubert KA. AHA/ACC guidelines for preventing heart attack and death in patients with atherosclerotic cardiovascular disease: 2001 Update. A statement for healthcare professionals from the American Heart Association and the American College of Cardiology. *Circulation*. 2001;104:1577-79. Available at <http://www.acc.org> and <http://www.americanheart.org>.
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