

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

Measure Information Form

Measure Set: Acute Myocardial Infarction

Set Measure ID#: AMI-3

Performance Measure Name: ACEI for LVSD

Description: Acute myocardial infarction (AMI) patients with left ventricular systolic dysfunction (LVSD) and without angiotensin converting enzyme inhibitor (ACEI) contraindications who are prescribed an ACEI 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 function (LVF) consistent with moderate or severe systolic dysfunction.

Rationale: ACEI therapy reduces mortality and morbidity in patients with left ventricular systolic dysfunction (LVSD) after AMI (Pfeffer, 1992). National guidelines strongly recommend ACEI for patients hospitalized with AMI (Braunwald, 2000 and Ryan, 1999). Despite these recommendations, ACEIs remain 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 are prescribed an ACEI at hospital discharge

Included Populations: Not Applicable

Excluded Populations: None

Data Elements:

ACEI Prescribed at Discharge

Denominator Statement: AMI patients with LVSD and without ACEI contraindication

Included Populations: Discharges with:

- An *ICD-9-CM Principal Diagnosis Code* for AMI as defined in Appendix A, Table 1.1 AND
- Chart documentation of a LVEF less than 40% or a narrative description of LVEF consistent with moderate or severe systolic dysfunction

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 chart documentation of participation in a clinical trial testing alternatives to ACEIs as first-line heart failure therapy
- Patients with one or more of the following ACEI contraindications/reasons for not prescribing ACEI documented in the medical record:
 - ACEI allergy
 - Moderate or severe aortic stenosis
 - Other reasons documented by a physician, nurse practitioner, or physician assistant for not prescribing ACEI at discharge

Data Elements:

- *ACEI Clinical Trial*
- *Admission Date*
- *Birthdate*
- *Contraindication to ACEI at Discharge*
- *Discharge Status*
- *ICD-9-CM Principal Diagnosis Code*
- *LVSD*

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>.
- 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.
- Pfeffer MA, Braunwald E, Moye LA, Basta L, Brown EJ, Jr., Cuddy TE, Davis BR, Geltman EM, Goldman S, Flaker GC, for the SAVE Investigators. Effect of captopril on mortality and morbidity in patients with left ventricular dysfunction after myocardial infarction. Results of the Survival and Ventricular Enlargement Trial. *N Engl J Med*. 1992;327:669-77.
- 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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