

**AMI – Beta Blockers Prescribed at Discharge Achieving  
the Standard of Care**

**Tools and Resources for Hospital Performance Measurement  
Improvement Activities**

**Fifth in a series of targeted quality improvement articles**

**July 23, 2004**

**Illinois Hospital Association**

**AMI – Beta Blocker Prescribed at Discharge -  
Achieving the Standard of Care  
Tools and Resources for Hospital Performance Measurement Improvement  
Activities**

**Achieving the Highest Standard of Care**

Beta Blocker Prescribed at Discharge examines patients with acute myocardial infarction (AMI) without contradictions to beta blocker administration are prescribed a beta blocker at discharge. In 4<sup>th</sup> quarter 2003, Illinois hospitals reported 92.9% compliance as compared to 91.5% compliance for nationally reporting Joint Commission on Accreditation of Healthcare Organizations (JCAHO) hospitals for the same period. Illinois hospitals achieved higher compliance with beta blocker prescribed at discharge (92.9%) than with beta blocker at arrival (89.0%). The goal for all Illinois hospitals is **100% compliance** with the standards of care.

**Beta Blocker Prescribed at Discharge Measurement Description**

Evidence-based practice has shown decreased morbidity and mortality when beta blocker is administered during the initial stages of a heart attack and during the post heart attack phase. Beta blockers reduce the oxygen demand of the heart and improve the heart's ability to pump blood. During the initial stages of a heart attack, beta blockers lessen the magnitude of the damage to the heart tissues and associated complications. Long-term administration of beta blockers after hospital discharge prevents re-occurrence and improves survival.

*Calculating the Measure's Performance.* Beta blocker prescribed at discharge is reported as a percent, based on:

- . • Numerator includes AMI patients who are prescribed a beta blocker at hospital discharge.
- . • Denominator includes AMI patients without beta blocker contraindications.
- . • Eligible patients include discharges:
  - o Principle Diagnosis code of 410.1xx, with some exceptions; refer to technical specifications.

The *Technical Specifications* manuals are a resource for the measure description, rationale, the numerator and denominator, inclusions and exclusions, contraindications, and how data is processed including what results in *missing data* and *not in measure populations*. To view, click on the direct links below.

- JCAHO:

<http://www.jcaho.org/pms/core+measures/information+on+final+specifications.htm>

## **Successful Quality Improvement and Compliance Experiences Shared by Illinois Hospitals**

The experiences and successes for achieving compliance with beta blockers prescribed at hospital discharge are presented below from hospitals representing a variety of characteristics and locations throughout Illinois. The Illinois Hospital Association appreciates the efforts of these hospitals in sharing their experiences with others and also the sharing of contact names at each hospital for additional follow up questions or discussions.

Some common and unique success factors or strategies include:

- . • Corporate vision and goal setting
- . • Standing order sets and care maps
- . • Emphasis on interdisciplinary communication
- . • Nurse-physician interaction and communication
- . • Use of American Heart Association's Guidelines Program

### **Alton Memorial Hospital**

Alton Memorial Hospital is a full service hospital serving Alton and surrounding communities in the River Bend area of southwest Illinois. Guy Johnson, Performance Improvement Coordinator details Alton Memorial Hospital's experience with the AMI core measures. Johnson traces the early efforts in improvement of AMI core measures to the direction and leadership provided from the corporate level and the establishment of annual goals and targets. As a result an AMI Team was formed to align care processes with evidenced-based practices to achieve the care goals.

The AMI Team initiated several actions that Johnson attributes to Alton Memorial Hospital's success. "Teams developed protocol driven standing order sets based on evidenced-based practice and included the clinical actions identified in the AMI core measures," states Johnson. The protocol driven processes are a means to ensure patients receive the appropriate tests, medications, and other care requirements.

Care maps play a vital role in sustaining Alton Memorial Hospital's high compliance with the care standards. Nurses use process care maps to track the progress of the patient and document why care departs as in the case of contraindications. Johnson shares, "Care maps have led to better communication and act as a reminder to prompt nurses to action. Consequently, there has been more nurse-physician interaction and discussion about the patient care process. Communication is up."

Also key to sustaining high compliance is the reporting and evaluation of performance data. Johnson reports, "Performance data is available each month for physicians, nurses and administration and allows for timely assessment. When the data shows compliance issues with care standards and processes, the AMI Team reviews these cases to identify cause and take appropriate action." Johnson notes that Administrative support is critical in the success of reaching and maintaining high levels of efficiency. Contact: Guy Johnson, Coordinator, Performance Improvement at [gjj2110@bjc.org](mailto:gjj2110@bjc.org).

### **OSF Saint James – John W. Albrecht Medical Center**

OSF Saint James located in Pontiac, Illinois is a 47-bed facility and is classified as a small and rural hospital. Teri Saxton, R.N., M.S.N., Director of Clinical Compliance/Patient Safety describes the unique aspects of being a small hospital and how this relates to the AMI core measures. Teri shares, “Being small is to our advantage. We do not have the issues of being large with a large medical staff; we have a small number of cardiologists to work with and that simplifies things. Our primary care physicians refer many of their AMI patients to the cardiologists. Our efforts are physician driven and reflect their standards of care.”

Standing orders for AMI patients are an important part of the care process and achieving high compliance. OSF Saint James has standing order sets in place that the cardiologist helped to develop to reflect the standards of care.

Being a small and rural hospital offers other challenges. Saxton states, “We keep very few of our AMI patients. Many times, patients may require an interventional therapy that is not part of our services and we have to ship them out to the bigger hospitals.” Being part of a hospital system, OSF Saint James transfers patients a sister facility or one of patient choice for continued care. Contact: Teri Saxton, R.N., M.S.N. at [teresa.a.saxton@osfhealthcare.org](mailto:teresa.a.saxton@osfhealthcare.org).

### **Edward Hospital and Health Services**

Edward Hospital located in Naperville, Illinois, combines cardiovascular inpatient and outpatient services, physician offices and educational programs under one roof. Lynn Cochran, Director, Cardiovascular Inpatient Services, credits their commitment to best practice standards and unified cardiovascular services for achieving their high compliance with AMI core measures.

Central to their care management strategy was the decision to use the American Heart Association’s Get With The Guidelines (AHA-GWTG). Edward Heart Hospital and Northwestern Memorial Hospital were the first two hospitals in the state to use the AHAGWTG standards for coronary artery disease. “The guidelines incorporate what is known about best practices and the standards of care,” states Cochran. GWTG program provides a useful framework for ensuring comprehensive care delivery. “We are able to track the progress of our patients with the expectation that patient care will meet all the standards of care and therefore all the core measures and more.”

“Our cardiologists and advanced practice nurse are all knowledgeable about and committed to best practice guidelines for managing coronary artery disease. They discuss the performance measurements data at their service meetings,” relates Cochran. Data is also shared with other members of the multidisciplinary team.

Nurses are central to sustained compliance. GWTG program has facilitated communication and interaction between the nurses and physicians. “The bedside nurse is inextricably involved in the care and achieving high compliance with the standards,”

states Cochran. “The guidelines program has promoted action among nurses who assess and track patient progress and collaborate with physicians on care steps and requirements. Contact: Lynn Cochran, Director, Cardiovascular Inpatient Services at [lcochran@edward.org](mailto:lcochran@edward.org).

### **Beta Blocker Prescribed at Discharge Web Based Resources**

See Appendix I. for additional web based resources for beta blockers prescribed at discharge.

### **Future Series**

August 13 LVF Assessment (HF-2)

September 03 ACEI Prescribed at Discharge (HF-3)

September 24 Pneumococcal Screening and/or Vaccination (CAP-2)

October 15 Antibiotic Timing (CAP-5)

November 05 Oxygenation Assessment at Arrival (CAP-1)

For additional information about beta blocker prescribed at discharge, the Ten National or Starter Measurements, or to comment on this series, please contact Tim Philipp, Director, Quality Improvement at [tphilipp@ihastaff.org](mailto:tphilipp@ihastaff.org).

## **APPENDIX I. Beta blocker Prescribed at Discharge Web Based Resources**

Both **beta blocker** and **discharge** have been addressed in the 2<sup>nd</sup> and 3<sup>rd</sup> articles in this series. To review:

- **Beta Blockers** for AMI patients in the core measures, see the second article in this series on the IHA web site, Beta Blocker at Arrival,
- Hospital **discharge** in the AMI core measures, see the third article in this series

on the IHA web site, ACEI Prescribed at Discharge. See the sections addressing Frequently Asked Questions (FAQs) and the American Health Quality Association (AHQA) projects.

### **Other Resources in this Series**

Acute Myocardial Infarction Web Based Resources listed on the IHA web site describes a common set of web-based resources identified for the AMI core measures in this series. This document outlines web resources addressing clinical guidelines, educational materials, evidence-based materials, and intervention tools relevant to all the AMI core measures.

Generic Sources of Information for All Measures provides a general description of the web sites used in this series. Both of these documents can be viewed at the IHA web site described above.