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Pharmacy & Therapeutics Update: Drug Information for Health Care Professionals

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## Pharmacy & Therapeutics Update: Drug Information for Health Care Professionals

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Paul W. Bush

*Medical University of South Carolina*

Kelli L. Garrison

*Medical University of South Carolina*

Jason Cooper

*Medical University of South Carolina*

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Drug Information Center  
Medical University of South Carolina  
Department of Pharmacy Services  
Charleston, South Carolina

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## Editorial Staff

**Paul W. Bush, PharmD, FASHP**  
Director, Department of Pharmacy  
Services

**Kelli L. Garrison, PharmD, BCPS**  
Coordinator, Drug Information Services  
Editor  
Newsletter Layout

**Jason Cooper, PharmD**  
Drug Information Specialist  
Associate Editor

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## Pharmacy & Therapeutics

# Update

Drug Information for  
Health Care Professionals

March 2007

### *CMS Quality Initiative Series*

## Part I: Acute Myocardial Infarction (AMI)

By: **Doug Jennings, PharmD**

*Pharmacy Practice Resident*

Health care is always a top priority in this country and often the topic of discussion and debate. In 2004, Medicare spent \$300 billion on health care costs, making it the largest purchaser of healthcare in the nation.<sup>1</sup>

In an effort to improve the quality of health care and decrease costs, the Department of Health and Human Services (DHHS) and the Centers for Medicare and Medicaid Services (CMS) have joined to create a program called the Quality Initiative. The purpose of the Initiative is to encourage health care providers to enhance the quality of care by providing financial incentive and to empower consumers with quality of care information to make more informed decisions about their health care.

This program was launched in 2002 and began with nursing homes. The Quality Initiative for hospitals and home health care agencies was nationally launched in 2003. Finally, the Initiative was expanded in 2004 to include kidney dialysis facilities.

The Initiative distributes data on hospital performance with the goal of creating incentives for hospitals to improve the care provided to patients. With hospitals improving their performance, it is expected that costs for Medicare would decrease in return.

In order to encourage hospitals to submit the quality data, a law was incorporated into the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 stating that if data for the 10 quality measures ("starter set") were not submitted, the hospital would receive a reduction of 2 percentage points in their Medicare Annual Payment Update for fiscal year 2007. Conversely, the project will provide bonuses to hospitals that excel in their achievement of quality measures. Hospitals in the top 10% for performance will get a 2% bonus on their Medicare payments, while those in the second 10% will receive a 1% bonus.<sup>1</sup>

The Hospital Quality Initiative is divided into the following 4 clinical areas: acute myocardial infarction (AMI), heart failure (HF),

community-acquired pneumonia, and surgical care improvement/surgical infection prevention.<sup>1,2</sup> There are a total of 21 specific quality measures that hospitals should strive to achieve within these clinical areas. Hospitals are required to submit data on the 10 “starter set” measures and submission of data on the expanded set of quality measures (21 measures) began with discharges that occur in the third calendar quarter of 2006 (July through September).

Starting this month there will be a 5-article series devoted to the Initiative. The purpose of the articles is to inform health care providers about the Initiative, explain how the data are reported, and report our current compliance. This month we will be focusing on the AMI measures.

Every year there are about 865,000 acute myocardial infarctions in the United States, where

20% of men and 30% of women will die within 1 year of an initial recognized event.<sup>3</sup> AMI is among the leading causes of hospital admission for Medicare beneficiaries age 65 years and older.<sup>4</sup>

Table 1 lists the current measures for AMI. These outcomes coincide with the recommendations published by the American College of Cardiology/American Heart Association for clinical performance measures for adults with AMI.<sup>3</sup> Scientific evidence indicates that the measures represent the best practice for the treatment of AMI. For more detailed information regarding the hospital measures visit the Hospital Quality Initiative Web site (<http://www.cms.hhs.gov/HospitalQualityInits/downloads/HospitalOverviewOfSpecs200512.pdf>). Starting in April 2007, the following measures will be added to the AMI Initiative: median

time to fibrinolysis, median time to PCI, LDL cholesterol assessment, and lipid lowering therapy at discharge. In June 2007, CMS will require risk-adjusted, 30-day mortality rates for all Medicare patients with principal hospital discharge diagnosis of AMI or HF from all acute care and critical access hospitals in the nation.

Once submitted, the data are accessible online to consumers through the DHHS Web site Hospital Compare ([www.hospitalcompare.hhs.gov](http://www.hospitalcompare.hhs.gov)). The rates of compliance with each measure are available for MUSC, other local hospitals, as well state and national averages.

The Outcomes and Quality Management division collects data on all patients who were discharged with a primary diagnosis of AMI. The data regarding performance with the specific measures are en-

**Table 1. AMI Quality Measures**

Measure	Description
Aspirin at arrival	AMI patients without contraindications to aspirin therapy who received aspirin within 24 hours before or after hospital arrival.
Aspirin at discharge	AMI patients without contraindications to aspirin therapy who are prescribed aspirin at hospital discharge.
ACEI or ARB for LVSD	AMI patients with left ventricular systolic dysfunction (LVSD) and without both angiotensin-converting enzyme inhibitor (ACEI) and angiotensin receptor blocker (ARB) contraindications who are prescribed an ACEI or ARB at hospital discharge.
Beta-blocker at arrival	AMI patients without contraindications to beta-blocker therapy who received a beta-blocker within 24 hours after hospital arrival.
Beta-blocker at discharge	AMI patients without contraindications to beta-blocker therapy who are prescribed a beta-blocker at hospital discharge.
Fibrinolytic therapy within 30 minutes of hospital arrival	AMI patients receiving fibrinolytic therapy during the hospital stay and having a time from hospital arrival to fibrinolysis of 30 minutes or less. [Part of the expanded set of quality measures]
PCI within 120 minutes of hospital arrival	AMI patients receiving percutaneous coronary intervention (PCI) during the hospital stay with a time from hospital arrival to PCI of 120 minutes or less. [Part of the expanded set of quality measures]
Smoking cessation advice/counseling	AMI patients with a history of smoking cigarettes (defined as smoked at any time during the past 12 months) who are given smoking cessation advice or counseling during hospital stay. [Part of the expanded set of quality measures]

**Table 2. 2006 Compliance Rate with Quality Measures**

Quality Measure	MUSC Rate of Compliance		National Average Through March 2006
	Jan to Jun 2006	Jul to Sept 2006	
Aspirin at arrival	100%	100%	92%
Aspirin at discharge	99%	100%	89%
ACEI or ARB for LVSD	85%	90%	81%
Beta blocker at arrival	100%	100%	86%
Beta blocker at discharge	98%	100%	89%
Fibrinolytic therapy within 30 minutes	NA*	NA*	30%
PCI within 120 minutes	59%	50%	67%
Smoking cessation advice or counseling	97%	100%	85%

\* No patients meet the criteria for inclusion for this measure—patients are taken directly to PCI

tered into a database and submitted to CMS. Currently, data are available for discharges during the months of January through June 2006 and July through September 2006 (Table 2).

To remain compliant with the measures, it is important that each measure is properly documented in the patient's medical record. For AMI, the adult cardiac admission preprinted order form ([www.musc.edu/cce/ORDFRMS/pdf/cardiacadmit.pdf](http://www.musc.edu/cce/ORDFRMS/pdf/cardiacadmit.pdf)) contains check areas for prescribing the specified medications (ie, aspirin, beta blocker, ACEI or ARB) on admission. For discharges, the cardiovascular discharge form ([www.musc.edu/cce/ORDFRMS/pdf/cardiavascdc.pdf](http://www.musc.edu/cce/ORDFRMS/pdf/cardiavascdc.pdf)) is available on the clinical order forms web page under cardiology. The discharge medication section specifically lists aspirin, beta blocker and ACEI or ARB to provide an area for documentation. Most of the failures for the medication measures may be due to poor documen-

tation of the reason for not prescribing.

If there is any contraindication for therapy, it *must* be documented in the patient's medical record for both admission and discharge. This can be docu-

mented on the admission form by marking "not prescribed because" and listing the reason on the discharge form. For smoking cessation advise/counseling, the following preprinted order forms have designated places to document that this was provided:

- Adult Cardiac Admission
- Cardiovascular Discharge
- Inpatient History and Physical form (page 6 of the form)
- Discharge Orders - general (page 2 of the form)
- Emergency Department Cardiac.

The CMS quality measures encourage hospitals to improve the quality of patient care. The individual measures for the 4 clinical areas offer hospitals specific goals that can be used to improve patient care in those disease states. As part of the MUSC Excellence campaign, the organization has established a goal of at least 95% compliance with all CMS quality

## The **MED•U•WAY** To Care For Patients

### \*\*\* An MUSC Lecture Series \*\*\*

The next MED•U•WAY Program will focus on attention deficit disorder (ADD) and attention deficit/hyperactivity disorder (ADHD). The program will be held on Thursday, April 19, 2007, at 12:00 PM, in 2 West Amphitheater.

The featured speakers will be Mark Wagner, MD, Assistant Professor, Department of Psychiatry and Behavioral Sciences, Shannon Drayton,

PharmD, BCPP, Assistant Professor, College of Pharmacy and Mary Lou Shoemaker, MSW, LISW-CP, Assistant Professor, Department of Psychiatry and Behavioral Sciences.

Attendees will receive 1 credit hour of continuing education, and lunch is provided.

MED•U•WAY is sponsored by the Pharmacy and Therapeutics Committee.

measures; therefore, is it critical that every health care professional is aware of the CMS Initiative, how the organization is performing, and where we need to focus our efforts. In 5 of the 8 AMI measures, the organizational goal of at least 95% has been reached.

Additionally, MUSC exceeds the national average in all measures except for primary PCI. However, there is still a need for improvement in prescribing ACEI or ARB at discharge and primary PCI within 90 minutes. Therefore, our efforts should focus on

proper documentation.

All health care providers have a role in improving our performance in these quality measures. This will translate into improved patient outcomes.

*References available upon request*

## FORMULARY UPDATE

The Pharmacy and Therapeutics Committee recently approved the actions listed below, which were effective on March 15, 2007.

### Added with Restriction:

Etonogestrel (Implanon<sup>®</sup>)

#### Subdermal implant

Prescribing is restricted to patients in the outpatient setting who receive prior authorization. Additionally, any physician that intends to use the device must undergo clinical training prior to procurement.

Ertapenem (Invanz<sup>®</sup>)

#### 1-gram vial

Prescribing is restricted to the infectious diseases and surgery services for the following indications: treatment of intra-abdominal infections; treatment of gynecologic infections; and treatment of complicated skin and skin structure infections. The ertapenem order form must be used for prescribing. *The formulary effective will be set when the pre-printed order form is approved by the forms committee.*

### Automatic Therapeutic Substitution (ATS) Protocol:

*Effective March 15, 2007*

An ATS for meropenem has been developed by the Anti-infective Subcommittee to assist with ap-

propriate dosing due to the formulary changes. Please visit the Formulary and Drug Information Resources Web page for more details.

[www.formularyproductions.com/musc](http://www.formularyproductions.com/musc)

### Restriction Removed:

*Effective March 15, 2007*

Meropenem (Merrem<sup>®</sup>)

The formulary restriction was removed with the deletion of imipenem/cilastatin.

### Restriction Added:

*Effective March 15, 2007*

Levonorgestrel intrauterine device (Mirena<sup>®</sup>)

Prescribing is restricted to patients in the outpatient setting who receive prior authorization.

### No Change in Restriction

Tigecycline (Tygacil<sup>®</sup>)

A request to remove the current restriction for tigecycline (ie, attending physicians and fellows on the Infectious Diseases service [Formal Consult Required]) was denied. The current restriction will remain in place.

### Line extensions:

Triamcinolone hexacetonide (Aristospan<sup>®</sup>)

**5 mg/mL (5-mL vial)**

BCG live vaccine (TICE<sup>®</sup>)

**50-mg vial**

Glycerin 50% solution

**Extemporaneous solution**

### Deletions:

Imipenem/cilastatin (Primaxin<sup>®</sup>)

**250-mg/250-mg and 500-mg/500-mg powder for injection**

BCG live vaccine (Theracys<sup>®</sup>)

**81-mg vial**

Glycerin 50% (Osmoglyn<sup>®</sup>)

**50% solution**

Dorzolamide (Trusopt<sup>®</sup>)

**10-mL bottle**

### Orders Approved:

*Children's Emergency Services  
Pain Standing Orders*

Standing orders were developed in an effort to increase pain management for children receiving non-emergent painful procedures. This order form will allow nursing staff to have evidence-based orders to increase analgesia and decrease anxiety for common painful procedures.

*Standing Orders for the Medical  
Emergency Team (MET)*

Standing orders were developed for nurses on the Medical Emergency Team. Any other orders will be written by the physician.