# Report on the Quality of Healthcare Provided at the University of Illinois Medical Center at Chicago To University of Illinois Board of Trustees

The Medical Center engages in numerous dynamic programs to improve quality and safety of care across the organization. This report highlights the initiatives of those teams involved with the national quality alliance of the Center for Medicare and Medicaid Services (CMS) as well as The Joint Commission. The success of each hospital is published in comparative "report cards" for the public consumer, as well as CMS has provided financial incentives for participation.

#### **Surgical Care Improvement**

This team includes members from departments of Anesthesia, Surgery, Nursing, Infection Control, Pharmacy, Medicine, and Quality. The original focus related to proper timing and selection of antibiotics to prevent infection as a result of surgery. UIMCC has done extremely well with the correct antibiotic given 97% of the time, and proper timing occurring 93% of the time. Both measures exceed national rates.

New measures have more recently been adopted by the national groups as well as the UIMCC team. At 87% compliance, we are exceeding national rates to start high risk patients on beta blockade medications before non-cardiac procedures. This treatment lowers the patient's heart rate during surgery and reduces the risk of adverse events such as a heart attack.

Another area we are working to improve relates to increasing the post-operative body temperature of colon surgery patients, since this is now known to decrease infection. We are using special gowns to increase temperature, as well as working with engineering to regulate a higher operating room temperature.

## **Deep Venous Thrombosis (DVT/VTE)**

The potential for patients admitted to a hospital to develop blood clots in their legs and deep veins of the pelvis, that can be dislodged and flow to the lungs always exists. This "pulmonary embolus" can cause disability and death. The key to reducing the risk is to assess a patient's risk at the time of admission and implement appropriate prevention therapy-usually medication. A team at the hospital designed guidelines and a screening tool to accomplish this goal, and worked with Information Technology Services to build this tool into our electronic medical record. The process assures that 100% of every patient admitted to the hospital is screened for DVT risk factors and where indicated,

started on treatment. The results were a positive 32% increase in patients receiving medication treatment, and a 16.6% reduction in the proportion of patients with a hospital acquired DVT event. This represents a substantial improvement and puts us amongst the national leaders.

### **Stroke**

Under leadership of the Neurology Department, multiple departments take part in assuring highest compliance with patient care standards, including Emergency Medicine, Neurosurgery, Internal Medicine, Pharmacy, Nursing, Quality and Safety. The team has demonstrated high compliance with all national quality measures, and recently passed a site visit by The Joint Commission in September 2007 to become a re-certified center of excellence in primary stroke care. Recent program enhancements include implementation of a one-step stroke code pager to expedite notification of the stroke team, creation of a standardized dysphagia process to evaluate stroke patient ability to swallow and eat, and design of a patient satisfaction survey tool to receive patient and family feedback on effectiveness of the education we provide.

#### Pneumonia

Pneumonia represents the 5<sup>th</sup> leading cause of death in the United States in patients 65 years and older. Rapid diagnosis and antibiotic treatment within six hours of patients arriving in the Emergency Department is the goal. Nationally, hospitals have had difficulty achieving this due in part to emergency room overflow and the complexity of making a quick diagnosis. At UIMCC, this has been a challenge. The highest rate we have achieved has been 78%; however, a redesigned ED Triage protocol has been showing improved preliminary results of 84% or higher within 6 hours. Another measure the team has focused to improve is the administration of pneumovax and flu vaccines prior to discharge so that these patients have reduced risk of being infected in the future. Strategies to achieve this include screening utilizing the electronic medical record, as well as standing orders that can be placed by Pharmacy once the patient consents. The vaccines are now stocked on the units rather than in central pharmacy to expedite vaccination prior to discharge. One unit has achieved our goal of 90% with this standard, and we plan to bring other units up to this same level of service.

#### **Acute Myocardial Infarction and Heart Failure**

The Cardiology department has led this initiative, with involvement of the departments of Medicine, Emergency Medicine, Pharmacy, Nursing, and Quality & Safety. Most of the measures focus on appropriate medication treatment, and UIMCC has done well, with results consistently between 90-100%. Our smoking cessation education for our heart failure patients is currently at 90%, and we offer special outpatient appointments for other treatment options to quit smoking. Other aspects of discharge education also meet standards, with the exception of documenting that the patient received a complete list of all of their medications at discharge. We expect this to improve with the recent implementation of new software in the electronic medical record to create and reconcile one medication list among multiple care providers and disciplines.