

GNYHA Leads the Fight to Reduce Infection

Increasing rates of infections due to multidrug-resistant organisms (MDROs) like *Clostridium difficile* (*C. difficile*) and methicillin-resistant *Staphylococcus aureus* (MRSA) have stirred much concern and anxiety within the health care community and the public. These health care-associated infections (HAIs) not only cause significant morbidity and mortality, but also generate considerable costs for health care facilities. Over the last several years, GNYHA and its members have taken a leadership role in reducing HAI rates.

This issue of *Health Care News In-Depth* describes GNYHA's infection prevention initiatives and examines how GNYHA has helped member hospitals address rising HAI rates.

According to the Centers for Disease Control and Prevention (CDC), one of every 10-20 hospitalized patients in the United States develops an HAI.¹ Infections among patients in hospital intensive care units (ICUs), such as central line-associated bloodstream (CLAB) infections, cause as many as 28,000 ICU patient deaths a year.^{2,3} Moreover, the additional cost of hospital care associated with a single CLAB infection averaged up to \$40,000, generating as much as \$296 million to \$2.3 billion in additional nationwide health care costs per year. The incidence of MDROs like MRSA also continues to rise. According to a 2007 report by the Agency for Healthcare Research and Quality (AHRQ), 368,600 hospital stays in 2005 were due to MRSA infections, a 30% increase since 2004.

Despite these sobering statistics, it is important to underscore that many HAIs are preventable. Over the past five years, GNYHA has used a "collaborative" model to support the implementation of system-

wide programs to promote basic infection prevention strategies. Under this approach, hospitals have taken what has traditionally been considered the sole responsibility of the infection control department and made it the responsibility of the entire health care facility staff, including clinicians, nurses, support staff, senior leaders—even patient families and friends. In short, everyone in a health care facility should be responsible and held accountable for controlling the transmission of infections.

To help its members build and implement the necessary infrastructures, GNYHA has partnered with the United Hospital Fund (UHF) to create a number of collaborative initiatives to improve patient safety. Under this model, hospitals come together to work collegially and cooperatively toward the goal of improving patient outcomes. Importantly, the model includes an "expert-on-call," a physician expert who agrees to provide clinical and other advice to participating hospitals

The Infection Prevention Bundles

Prior to the launch of an infection prevention collaboratives, GNYHA forms a steering committee comprising an interdisciplinary group of experts in infection control and prevention, as well as representatives of UHF and the New York State Department of Health (DOH) to guide the collaborative. Using evidence-based and experience-based practices, the steering committee then develops "bundles" of best practices for each collaborative, which contribute to the reduction of HAIs if appropriately implemented and consistently followed. For example, to address MDROs such as *C. difficile* or MRSA, the respective steering committees developed a bundle of practices that includes:

- Use of contact precautions and signage
- A method to alert staff if a patient goes to another department for a procedure or therapy
- Proper hand hygiene
- Readily available and properly used personal protective equipment (PPE)
- Dedicated patient equipment (e.g., dedicated thermometer, blood pressure cuff)
- Proper patient room placement (e.g.,

1. Yokoe DS, Mermel LA, Anderson DJ, et al. A compendium of strategies to prevent healthcare-associated infections in acute care hospitals. *Infection Control and Hospital Epidemiology* 2008; 29 (1): S12-S21.

2. Pittet D, Tarara D, Wenzel RP. Nosocomial bloodstream infection in critically ill patients. Excess length of stay, extra costs, and attributable mortality. *JAMA*. 1994 May 25;271(20):1598-601.

3. Mermel LA: Erratum: Prevention of intravascular catheter-related infections. *Ann Intern Med* 133:5, Sep. 2000.

Fight to Reduce Infection continued from front page

private room vs. cohorted room)

- Proper environmental decontamination (bleach for *C. difficile*)
- Education for health care personnel, hospital administration, and patients and families

While each bundle of practices is tailored to address a specific infection, the use of universal contact precautions and compliance with basic hand hygiene protocols apply to all infections and should be followed by all staff in hospitals.

GNYHA/UHF Initiatives

CLABs Collaborative

Begun in the fall of 2004, the CLABs Collaborative was the first infection prevention collaborative offered by GNYHA in partnership with UHF. During a 33-month period, 36 hospitals focused on eliminating CLABs in hospital ICUs through the adoption of a bundle of proven infection control practices, including basic hand washing and other activities. Participating hospitals saw an average 54% decrease in CLAB infections. According to preliminary data released by DOH and collected under the State's Hospital-Acquired Infection Reporting System, New York City hospitals participating in the Collaborative had statistically significant lower rates of CLAB infections than hospi-

tals elsewhere in the State. For more information on this Collaborative, please see the December 2008 issue of *The Joint Commission Journal on Quality and Patient Safety*.

C. difficile Collaborative

In partnership with UHF and DOH, GNYHA launched the *C. difficile* Collaborative in March 2008 to fight the increasing incidence of the highly volatile MDRO. Forty-two hospitals have adopted and are monitoring compliance with a bundle of evidence-based practices developed by the GNYHA/UHF *C. difficile* steering committee, which includes the basic infection prevention practices of hand hygiene and contact precautions, but expands upon them to incorporate *C. difficile*-specific practices such as the use of hypochlorite-based (bleach) products to decontaminate rooms and equipment. As a result, hospitals have already begun to observe decreased rates of *C. difficile* infection within the first year of this Collaborative.

MRSA Collaborative

GNYHA, in partnership with UHF, DOH, and IPRO, the quality improvement organization for New York State, launched a third collaborative in November 2008 designed to prevent and reduce the transmission of MRSA in ICUs. Modeled after the CLABs

and *C. difficile* Collaboratives, GNYHA will help 63 hospitals develop strategies for early identification and implementation of basic infection control and prevention practices.

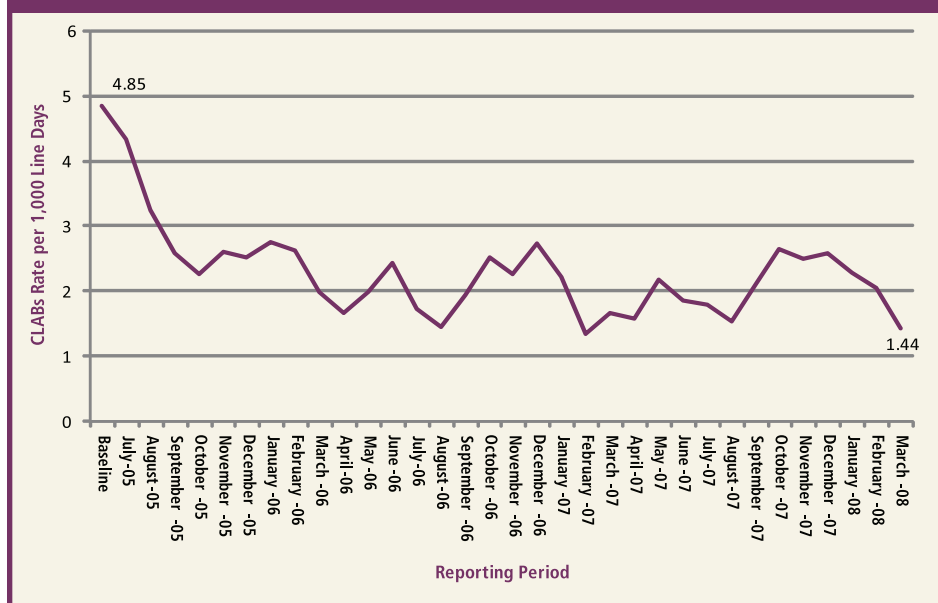
GNYHA Infection Prevention Coach Training Program

Critical to a health care facility's success in reducing HAI rates is the engagement of frontline staff and the use of a team approach to safety. Thus GNYHA, in collaboration with the 1199 SEIU United Healthcare Workers East and the 1199 SEIU Training and Upgrading Funds, launched the Infection Prevention Coach (IPC) training program in September 2007 to help frontline staff understand the crucial role they play in controlling the spread of HAIs. Since its launch, GNYHA has provided 20 trainings and has trained over 850 frontline staff from 30 member hospitals. GNYHA has worked specifically with hospital transporters with the idea that proper cleaning of equipment such as wheelchairs and stretchers is essential to reducing HAI rates. Transporters from one GNYHA member hospital created their own bundle—fanny packs that contain individually packed germicidal wipes to ensure that wheelchairs and stretchers are properly cleaned after each use.

The National Healthcare Safety Network Surveillance System

In response to public outcry for better infection control and surveillance, the CDC developed the National Healthcare Safety Network (NHSN), which uses data collected from health care facilities to trend and estimate the magnitude of HAIs as well as provider adherence to prevention practices. The CDC is now creating a new NHSN module, which will be used to collect data on MDROs such as *C. difficile* and MRSA. Recognizing GNYHA's experience with infection control initiatives, the CDC is collaborating with GNYHA and DOH in order to develop a tool that is effective and meaningful to both the CDC and health care facilities. ■

Monthly ICU CLABs Rates for Hospitals Participating in the GNYHA/UHF CLABs Collaborative: Round 1 Hospitals



For additional information on GNYHA's efforts to reduce infection, please contact Terri Straub or Gina Shin at GNYHA.