

Quality Collaborative

A Partnership Sponsored by the Greater New York Hospital Association and the United Hospital Fund

Tackling the Misuse and Overuse of Antibiotics

As part of the Antimicrobial Stewardship Program, which the Greater New York Hospital Association (GNYHA) and the United Hospital Fund (UHF) launched earlier this year, 61 participating hospitals completed internal surveys to establish baseline measurements about their current practices related to implementing antibiotic stewardship interventions. While the survey found that 67 percent of participants currently have their own antimicrobial stewardship programs, virtually all participants feel there is opportunity for improvement.

In fact, 56 percent of participants currently operating such programs

found them only “somewhat effective” or “not at all effective”—demonstrating their commitment to unflinching self-assessment, which is critical in documenting baseline data.

“The self-assessments that our participating hospitals have conducted really point to the need for this new collaborative effort,” said Zeynep Sumer, Vice President, Regulatory and Professional Affairs, GNYHA. “We now know, for example, how many of these hospitals currently have electronic systems to track antibiotic use—62 percent—and how they are currently measuring antibiotic use—nearly two-thirds are using ‘dollars spent’ rather than clinical metrics. This is great information to help us shape the work of our initiative.”

“We also learned that most of the participating hospitals already have more than one antibiotic management intervention implemented,” said Hillary Jalon, Director, Quality Improvement, UHF. “At the same time, most reported that they need to focus on more than one area to improve antibiotic management practices. So, no one is starting from scratch, and the opportunities to make meaningful progress are there.”

The next step for participating hospitals is to conduct a “point prevalence survey”—a detailed assessment of antibiotic utilization for

each hospital’s last 10 patients with *Clostridium difficile*, the potentially life-threatening bacterium that strikes many hospitalized patients, often following long-term treatment with antibiotics. Data from the hospitals will be aggregated and inform the program’s next steps.

Another key part of the program is its Antimicrobial Stewardship Certificate program, which provides two days of intensive training to clinicians to promote rigorous hospital practices for ensuring proper antibiotic use. Conducted in collaboration with the New York State Council of Health-system Pharmacists, the certificate program has already trained and certified 148 physicians, pharmacists, and nurses from 64 hospitals at sessions held in May and July.

“The lectures were great, and we came away with ideas that we may incorporate in our program,” said Belinda Ostrowsky, MD, MPH, Director of the Montefiore Medical Center/Albert Einstein College of Medicine Antimicrobial Stewardship Program, who is also one of the GNYHA/UHF Antimicrobial Stewardship Program’s faculty leaders. “What impressed me most was the outpouring of interest and the spirit of collaboration among participants. Hospitals were making connections with other hospitals, and the shared learning is already happening.” ■

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Shared Learning Opportunities: A Key to Performing Consistently for Our Patients

GUEST COLUMNIST

Scott Cooper, MD
President and Chief Executive Officer
SBH Health System

The GNYHA/UHF quality and patient safety collaboratives have been critical to SBH Health and other individual hospitals like mine. As a practicing pulmonologist, I observe first-hand how clinicians benefit from the opportunity to learn from others in the field, outside of their own organizations, and network on challenging patient care and system issues. I applaud GNYHA and UHF for their quality improvement and patient safety leadership and for what has been accomplished through the clinical collaboratives.

Most recently, SBH Health has been an active participant in the GNYHA/UHF Clinical Quality Fellowship Program. Two of our physicians, Eric C. Appelbaum, DO, Associate Medical Director, Ambulatory Care, and Manisha Kulshreshtha, MD, Medical Director, Care Transitions and Physician Practice, have successfully completed the program. At present, Daniel Lombardi, DO, Program Director, Emergency Medicine, is a member of the current class. The program has offered a rich learning opportunity for these physicians on health policy and its associated quality metrics and components, as well as teaching them how policy drives reimbursement and operational change. The skills and behaviors essential to becoming a leader in quality improvement have also been imparted

in a meaningful way through the varied components of the program, including the Capstone project. The fellowship program gives graduates a new perspective on the myriad demands on clinicians and how they are being held accountable in the health care delivery system. These things aren't necessarily taught during medical school or training. The clinicians fortunate enough to be selected for this program are energized to

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take a leadership role and have a leg up on their peers not only for what they are taught but also for the relationships they build as part of this vital regional quality improvement network.

A major goal for SBH Health is to become a high-reliability organization, one that performs consistently at a high level for all patients, no matter how sick or in need they may be. David A. Perlstein, MD, Chief Medical Officer, is actively involved in the effort to meet this goal each and every day. The GNYHA and UHF improvement collaboratives and training programs help us achieve the goal. Equally

important to achieving improvement is sustaining it over time. I believe that GNYHA and UHF serve an important role in that regard by helping us periodically look back to ensure that the gains achieved are lasting.

Two of the earlier initiatives in which SBH Health participated were the Perinatal Safety and *STOP* Sepsis Collaboratives. Both helped us further our core mission by engaging physicians and creating a network to facilitate the sharing of best practices. The relationship building that occurs when clinicians and other members of the care team become engaged in these projects is critical to sustainability.

Through *STOP* Sepsis, GNYHA and UHF increased access to valuable information, techniques, and protocols that improved processes at SBH Health. Data collection is a challenge for any community hospital, and SBH Health has been able to make strides in this area because of our involvement in the GNYHA/UHF collaboratives.

Sharing SBH Health leadership is also an important component. The Perinatal Safety Collaborative gave Mark A. Rosing, MD, MPH, Chair of Obstetrics and Gynecology, the opportunity to demonstrate his leadership skills beyond SBH Health as a core member of the Collaborative Clinical Advisory team.

I am enormously grateful for the many and varied opportunities the GNYHA/UHF quality partnership has afforded SBH Health staff and patients. ■

Engaging Home Care Providers to Improve Care Transitions

Reflecting the increase in patients moving from hospitals to home care, the *IMPACT (Improve Processes And Care Transitions)*

to Reduce Readmissions Collaborative has expanded to include five hospital/home care teams. Since February 2015, the collaborative's goal of reducing avoidable readmissions and transfers back to the emergency department is being pursued by improving care transitions not only from hospital to nursing home but also to home care.

Developed in 2014 by GNYHA and UHF, the collaborative initially focused on transitions between hospitals and nursing homes. The 19 hospital and 28 nursing home partner participants have reported significant improvement in building relationships between facilities and developing communication. More work is needed to fully achieve collaborative goals, particularly on further refining processes and information sharing in areas such as medication reconciliation, and on incorporating patients, families, and caregivers in planning for and carrying out transitions. GNYHA and its long-term care affiliate the Continuing Care Leadership Coalition continue to assist participants with standardizing handoff processes and provide hands-on support to ensure patients are received in a safe and effective manner.

Safer Transitions with Care Paths and "Teach-Back"

With the same goals as those of the original partnerships, the five new teams of hospitals and home health organizations meet regularly to develop working relationships and understand opportunities

for improvement through an assessment of current practices. Education to support these partnerships has focused on clinical care path tools and on systematic discharge instruction that uses the teach-back approach to ensure patients and their family caregivers can replicate post-hospitalization steps.

In April, GNYHA invited Kathryn Hyer, Director of Clinical Research, Florida Policy Exchange Center on Aging, to review the INTERACT clinical path tools focused on the common conditions and symptoms that lead to hospital emergency department returns, including gastrointestinal symptoms, shortness of breath, and other symptoms of congestive heart failure. Sea View Hospital Rehabilitation Center and Home and New York Congregational Nursing Center made presentations on their successful use of these tools.

In June, Joshua Gregoire, RN-BC, Care Manager for Cardiovascular and Cardiothoracic Surgery, NYU Langone Medical Center, shared NYU's successful application of the teach-back method, designed to give patients a working understanding of their discharge instructions and medications to be taken at home, and to better coordinate their care with home health care providers. The teach-back method, applicable to discharges to home as well as nursing homes, is grounded in the use of plain language patients can readily understand, and in patients' demonstrating their understanding of those instructions in turn.

Medication Reconciliation: A Continuing Challenge

Although *IMPACT* participants have reported significant improvements, ensuring accurate and complete medication reconciliation is still a major challenge.

To address this issue, GNYHA engaged Jeffrey Schnipper, MD, Director of Clinical Research at Brigham and Women's Hospitalist Service and developer of the MARQUIS (Multi-Center Medication Reconciliation Quality Improvement Study) toolkit, to educate participants on best practices to improve how medication is prescribed, documented, and reconciled during care transitions. Although these sessions were instructive, the hospitals, nursing homes, and home health care organizations attending indicated they needed more assistance in applying the information. In response, GNYHA hosted a medication reconciliation workshop in July, providing hands-on support and a work plan for implementing practices to ensure accuracy and completeness of the medication information shared during a transition. The session, led by Amanda Ryan, RPh, PharmD, Assistant Vice President, Quality and Patient Safety, GNYHA, proved effective in assisting teams to identify areas of improvement and potential solutions, and GNYHA plans to hold similar workshops on other topics in the future.

What's Ahead?

GNYHA and the Continuing Care Leadership Coalition plan to offer continued programmatic and educational support to help participants meet collaborative goals, with a particular focus on ensuring safe handoffs with complete documentation. GNYHA is also exploring ways to help partnerships measure whether they are carrying out best practices for care transitions reliably and systematically. For more information about the *IMPACT* Collaborative, contact Amanda Ryan (aryan@gnyha.org) or Melissa Miller (mmiller@gnyha.org) at GNYHA. ■

Health IT, “Inextricable” to Quality Improvement

“Although pretty novel just two years ago, quality and IT are inextricably linked today,” says Jonathan Austrian, MD, Medical Director, Inpatient Clinical Informatics, NYU Langone Medical Center, and a 2014 graduate of GNYHA and UHF’s Clinical Quality Fellowship Program.

Dr. Austrian is not alone in his thinking. A growing number of the Clinical Quality Fellowship Program participants use electronic health records, messaging systems, and other technologies in their Capstone quality improvement projects.

“Hospitals generate a significant amount of data through patient encounters, but just creating data and doing nothing with it is meaningless,” says Winston Ramkissoon, RN, Performance Improvement and Regulatory Compliance Manager, Hackensack University Medical Center, and a 2015 program graduate.

“Many quality improvement efforts include communication as a central challenge, and today’s technology offers real-world solutions,” notes Chhavi Katyal, MD, a pediatric critical care medicine intensivist at the Children’s Hospital at Montefiore and a 2014 program graduate.

Dr. Katyal’s, Mr. Ramkissoon’s, and Dr. Austrian’s Capstone projects use sustainable IT for results that have expanded since being launched.

Supporting Surgical to Inpatient Care Handoff

Standardizing handoffs from the surgical team to the inpatient team with electronic health records was Dr. Katyal’s goal. When a paper form was used for transitions, only 25 percent of patients transitioned from surgery to an inpatient floor with the requisite surgery handoff

documentation completed before the patient arrived on the floor. As a result, staff on the inpatient floor would have to page the surgeon to complete the handoff.

“Not only did the new electronic system address this problem but it also improved the quality of the patient admission notes—increasing accuracy from 40 percent to almost 100 percent.” While the project focused strictly on pediatric patients, its success led to use with adult patients.

Standardizing Nurse-to-Nurse Handoffs

Using electronic reporting tools to standardize and eliminate gaps in nurse-to-nurse shift handoffs was the focus of Mr. Ramkissoon’s Capstone. “Part of the problem we identified was the variation in tools used by nurses to communicate information,” he says.

Following staff surveys and consultations with in-house team experts, a paper precursor of an electronic tool was created and pilot-tested on five inpatient hospital units. Quality measures for several common conditions, including heart failure and pneumonia, featured prominently. Lessons from the pilot were incorporated, and a few weeks later programming was completed for the electronic version. Five months after introduction, the standardized handoff tool is being used on 14 units. Plans are underway to introduce the electronic tool to the hospital’s Women and Children’s division. “The nurses have adapted to it and shared positive feedback on its use. We’ve also seen an improvement in some nursing quality metrics and a 1.2 day reduction in average length of stay for the pilot units.”

Reducing Sepsis Mortality

Recognizing that a major barrier to

sepsis treatment is delayed identification, Dr. Austrian designed his Capstone project to integrate a sepsis alert system within the electronic health records. “There’s not one single test to diagnose sepsis,” he explains. “Diagnosis is based on patterns of signs, symptoms, vitals, and labs. And computers are great at rapidly evaluating disparate data to identify those patterns.”

After researching existing algorithms and consulting with colleagues, Dr. Austrian pursued an approach that would trigger an alert in the electronic health record based on specific vital sign and lab criteria. But just as critical was thinking through the work flow related to the alert. Training and support for participating staff were needed.

The alert was piloted for adults in the emergency department and intensive care units, and has since expanded to cover pediatric units and general medicine floors in the hospital as well. The alert has led to the lowest sepsis mortality rates in the state.

As the role of technology in quality improvement evolves, the innovative Capstone projects of the Clinical Quality Fellowship Program fellows hint at the multitude of future possibilities. ■

Quality Collaborative

Quality Collaborative is published three times a year, covering the efforts of the UHF/GNYHA partnership to improve hospital quality of care and patient safety.

GNYHA is a trade association representing more than 160 member hospitals and health systems, in the metropolitan New York area and throughout the State, as well as New Jersey, Connecticut, and Rhode Island.

United Hospital Fund (UHF) is a health services research and philanthropic organization whose primary mission is to shape positive change in health care for the people of New York.

