In October 2001, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) awarded the Cleveland Clinic Health System the coveted Ernest A. Codman Award for demonstrating successful use of data for measuring and improving care.

“We’re thrilled that our process improvement has not only paid off in terms of better patient care, but that we’ve been recognized by the Joint Commission for our efforts,” says Reginald Dickerson, M.D., Department of Medicine medical director at Huron Hospital and co-chair of the CCHS CHF Quality Improvement team.

**Award-winning initiative**

Specifically, the Cleveland Clinic Health System (CCHS) won the award in the network category for a systemwide, physician-led initiative to improve and standardize care for congestive heart failure patients.

Congestive heart failure (CHF) is a chronic disease with only one real cure: heart transplant. It is one of the most serious and most common diseases of the heart, affecting as many as 5 million Americans. In 1997, CHF was the leading non-obstetric cause of hospitalization among all the CCHS hospitals.

James Young, M.D., medical director of the Kaufman Center for Heart Failure, head of the Section of Heart Failure and Cardiac Transplant Medicine, and co-chair of the CHF team, believed that CHF was an area where a standardized approach to care would pay off quickly and offer better outcomes.

“Length of stay could have been dramatically reduced in congestive heart failure patients,” says Dr. Young. Patient days were fully 6,000 days in excess of targets in 1997, and a high number of patients had to be readmitted for the same condition within only a few days.

At the time, CHF was a high volume, high cost health issue, and it was the perfect starting point for a quality improvement process.

(continued on page 2)
CCHS Quality Initiative Improves Patient Outcomes

A team effort
In 1998, a CHF project team that included cardiologists, internists and representatives from each CCHS hospital was established.

“Engaging physician leadership across the health system was key to the project,” says Robert Kay, M.D., chief of staff of the Cleveland Clinic Foundation and chairman of the Cleveland Clinic Health System Medical Operations Council. “Physician leadership of multidisciplinary teams at each hospital promoted and strengthened the positive effect of this quality improvement activity.”

The CHF team met to assess the quality of care provided to CHF patients. It was their belief that angiotension-converting enzymes (ACE) inhibitors were underprescribed for high-risk, qualifying CHF patients. The result was an initiative to optimize the use of ACE inhibitors with congestive heart failure patients with severe systolic dysfunction.

ACE inhibitors slow the progression of heart failure by widening blood vessels to increase blood flow. According to multiple studies, the use of ACE inhibitors improves the mortality and morbidity and reduces hospital readmission rates of CHF patients.

“We began by educating physicians about the positive effect of ACE inhibitors on patients with severe systolic dysfunction,” says James Young, M.D., co-chair of the team.

Team members presented a systemwide continuing medical education program for cardiologists and internists, as well as grand rounds at each hospital. They demonstrated how CHF care varied among the system hospitals, and introduced the CHF project team and plan to continue monitoring the use of ACE inhibitors, while each hospital implemented actions to improve use.

Enhanced data collection
Under the leadership of Drs. Young and Dickerson, the team also worked to improve data collection. They tracked the demographics of the CHF population treated, as well as length of stay, readmission rate, medications prescribed at discharge, admit and discharge measurements for weight, blood pressure, and pulse, among others, for later analysis and interpretation.

New clinical pathways
In addition, the role of clinical pathways and algorithms was analyzed, and the value of various treatment options was weighed. A CHF guideline was devised, and revised. Suggested doses of ACE inhibitors were established, and a goal was set: 80 percent of high-risk CCHS CHF patients would be administered these drugs. (The remaining 20 percent likely would be ineligible to take an ACE inhibitor for a variety of possible reasons.)

CCHS hospitals implemented several new processes in an effort to improve the use of ACE inhibitors with high-risk CHF patients. Laminated cards with the CHF guideline were created...
since 1999, the Cleveland Clinic Health System hospitals have been measuring patient satisfaction using a new, standardized process. Today, teams from each hospital are studying survey results from patients seen in the inpatient, emergency department, outpatient surgery and subacute care settings to determine their facility’s strengths and weaknesses. The Quality Institute is tracking patient satisfaction systemwide and facilitating inter-hospital sharing of effective strategies for improvement.

“It’s all about understanding our patients’ expectations so that we can better meet them,” explains Deborah Nadzam, Ph.D., F.A.A.N., Quality Institute director.

Random patient surveys
Two to three weeks after discharge, the National Research Corporation (NRC) – the contracted outside vendor - randomly selects patients to receive brief surveys inquiring about their care and whether they would recommend their CCHS hospital to others. Each survey asks the same questions, customized according to the setting (inpatient, emergency department, outpatient surgery, and subacute care settings). Hospitals were made more accountable for reporting action plans for improvement.

Successful results
After analyzing the data, it was found that the CHF team had racked up some big successes, although CHF still remains a high volume health issue for all CCHS hospitals. Each of the hospitals increased its use of ACE inhibitors with high-risk congestive heart failure patients. The CCHS physicians and nurses also are working on other performance improvements for stroke, heart attack, diabetes, chronic obstructive pulmonary disease, obstetrics, breast cancer, emergency department, colorectal surgery, critical care and skin care.

For additional information, contact the CCHS Quality Institute at 216/738-4851.

“Engaging physician leadership across the health system was key to the project,” says Robert Kay, M.D.
Despite relatively positive scores throughout the system, the CCHS patient satisfaction team has agreed to focus on several areas systemwide, especially those most related to the quality of communication with the patient.

of their projects. Survey results are available quarterly and monthly on the Internet, and include comparative data from other CCHS hospitals and other NRC clients.

“Each inpatient unit gets its own patient satisfaction data, distinct from the hospital as a whole,” notes performance improvement coordinator Mardi Atkins, R.N., M.P.A.

Factors of influence

Key factors found to influence patient satisfaction are quality of doctor care, quality of nursing care, pain control, dignity and respect shown by health care staff, and communications and explanations to patients and families.

“CCHS has done well on patient satisfaction surveys systemwide, on overall quality of doctor care and overall quality of nursing care,” reports Ms. Atkins.

Dr. Nadzam adds that “some hospitals have been stellar performers in certain areas where others have recognized an opportunity to better understand their patients’ expectations.”

Despite relatively positive scores throughout the system, the CCHS patient satisfaction programs have had a positive impact on satisfaction scores,” she says.

Dr. Nadzam stresses that “we all contribute to a patient’s perception and experience while receiving care.”

For more information about what you can do to positively affect your patients’ experiences or about the surveys patients receive, please contact your hospital’s CCHS Patient Satisfaction team representative.

It’s All About Quality

What is Quality Improvement?

The phrase quality improvement can apply to many activities. All of them have one thing in common. They involve measurement.

In quality improvement, we measure (or benchmark) a specific activity or set of activities we’d like to do better. Then we apply these measurements to get better results.

Numbers give us hard facts. When we measure what we do, and give it numerical value, we no longer have to guess what works or whether we are meeting our goals. The numbers give us rapid feedback on the success or failure of an action or actions in terms of meeting our goals.

By analyzing these numbers, and comparing them to our goals, we can refine our activities, and meet our goals in the most effective, most efficient way possible.

How Does CCHS Improve Quality?

The Quality Institute (or QI) is a system-wide function that promotes the use of measurement and benchmarking to improve care at Cleveland Clinic Health System hospitals.

The QI reports to the CCHS Medical Operations Council, which is made up of physician leaders from each of the CCHS hospitals under the leadership of Robert Kay, M.D.

For additional information, contact the CCHS Quality Institute at 216/738-4851.
The advent of intravenous tPA for the treatment of acute ischemic stroke has called for widespread changes in stroke care throughout the country.

For the past four years, the American Heart Association has sought to increase public awareness of stroke warning signs and symptoms, and to speed acute stroke treatment, through its “Operation Stroke” initiative. For the medical community, the goals have been to improve stroke patient transport and evaluation, and tPA administration, in the emergency setting.

The Cleveland Clinic Health System is at the vanguard of hospital systems in the 36 cities now participating in Operation Stroke, says Anthony Furlan, M.D., head of the Greater Cleveland Chapter. Dr. Furlan chairs the CCHS Stroke Clinical Quality Improvement Team, and also heads the Cleveland Clinic Neurology Department’s Section of Stroke and Neurologic Intensive Care.

Standardizing care
Robert Kay, M.D., chairman of the CCHS Medical Operations Council and Cleveland Clinic chief of staff, stresses that “when an effective treatment such as tPA exists for such a potentially debilitating condition, we must work together to ensure its use consistently throughout our system, whenever indicated and appropriate.”

Adds Dr. Furlan, “The CCHS Stroke Team has systematically monitored stroke care, including IV-tPA use, since 1999, providing feedback to individual hospitals so as to standardize acute stroke care throughout the system.”

Results above national average
Last year, the CCHS Stroke Team, facilitated by the Quality Institute, tracked the number of stroke patients who arrived at the hospital under three hours from symptom onset. They also tracked the rate of IV-tPA usage both across the system and at each CCHS hospital.

“Approximately 50 percent of patients who met the strict criteria for IV-tPA use actually received it at CCHS hospitals. This is higher than has been reported nationally. When reasonable exclusions are considered, such as dementia and advanced age, the rate of IV-tPA use is 75 percent among remaining patients,” says Irene Katzan, M.D., a Cleveland Clinic neurologist active on the Stroke Committee.

“Currently, about 3 percent of all stroke patients admitted to Cleveland Clinic Hospital System hospitals are treated with IV-tPA, which approaches the Operation Stroke target rate of 5 percent.”

Adds Mike Waggoner, M.D., medical director of Eastern Region CCHS medical management, “All Eastern Region hospitals focus on treating stroke patients. While improving hospital care will improve tPA usage, the biggest impact will come from raising public awareness so that patients will come for treatment as soon as symptoms occur.”

Emergency room protocol
All CCHS hospitals have active emergency rooms and are well-prepared to administer IV-tPA.

At Marymount Hospital, Romeo Craciun, M.D., division head of Neurology, reports that “whenever a stroke victim comes to our Emergency Department, the stroke team is immediately activated. We have solid support from enthusiastic ER physicians certified in use of the NIH scale for stroke assessment, from nursing personnel, and from ICU staff who continuously and closely monitor stroke patients.”

At Fairview Hospital, Peter Bambakidis, M.D., head of the Section of Neurology, reports that “our Section of Neurology formulated an instrument for rapid evaluation and treatment of appropriate patients shortly after IV-tPA use was approved by the FDA for acute stroke. It’s worked out well, but a commitment to rapid evaluation and prompt communication is
In Coming Issues...

We’ll cover the efforts and successes of our other Quality Improvement teams that are working to enhance the care of frequent patient conditions, such as breast cancer and diabetes. The teams include physicians and nurses from each CCHS hospital and are chaired by: Anthony Senagore, MD, The Cleveland Clinic (Colorectal Surgery Team); Sethu Reddy, MD, The Cleveland Clinic (Diabetes Team); Mike Waggoner, MD, QI/Eastern Region (Medication and Therapeutics Team); Joseph Crowe, MD, The Cleveland Clinic, Thomas Slawinski, MD, Euclid, and Dale H. Cowan, MD, The Cleveland Clinic (Breast Cancer Team); James K. Stoller, MD, The Cleveland Clinic, and David Weiner, MD, Marymount (Pulmonary Team); Elliot Philipson, MD, The Cleveland Clinic (Obstetrics Team); Lou Barone, PharmD, The Cleveland Clinic, and Mardi Atkins, RN, MPA, Quality Institute (Medication Systems Team); Molly Samson, The Cleveland Clinic (Skin Integrity Team); Deborah Nadzam, PhD, Quality Institute (Patient Safety Team); and Steven M. Gordon, MD, The Cleveland Clinic (Occupational Exposures Team).

By working together and learning from one another, we can give our patients the best care possible!