QUALITY LEADS:
Lakewood’s Stroke Program

Stroke is the third leading cause of death and a leading cause of disability in the United States. Until recently, there were few treatment options for patients suffering from a stroke. Today, however, rapid identification of stroke symptoms and transportation to medical centers equipped to treat stroke have dramatically improved the options and outcomes of stroke patients.

Health System Best Practice
CCHS and The Quality Institute identified stroke care improvement as one of the first priority areas for quality improvement. The stroke program at Lakewood Hospital was quickly recognized as a health system best practice and has been a leader in community hospital participation in stroke trials, expanding the use of active interventions for stroke and coordinated care throughout a patient’s hospitalization.

Part of Lakewood’s success is due to what happens before the patient even arrives at the hospital. Community education through public lectures, print and television ads, information kiosks and direct mail have been used to increase awareness of signs and symptoms of stroke, to recognize stroke as an emergency and to describe the hospital’s capabilities.

Close coordination with first responders (EMS) has also been key. Lakewood provided staff to train EMS workers in the identification and management of stroke. The hospital also helped to prepare its own emergency department (ED) to handle stroke patients.

Coordinated Approach
A coordinated team manages stroke patients from the time they arrive at Lakewood to when they are finally discharged. Neurology and ED physicians and nurses are trained in the assessment and treatment of stroke. Simplified protocols and order sets have been jointly developed to expedite necessary tests and patient management. Radiology and Lab Medicine follow protocols for rapid testing, and a stroke case manager is introduced to coordinate patient care.

Eligible patients receive active intervention with IV tPA. Patients who require surgical intervention have access to a Lakewood Hospital neurosurgeon. A Neuro Integrated Care Unit has also been established to provide intensive care specifically for stroke patients.

Patients are evaluated daily using a standardized triage score to determine the earliest appropriate time for transfer to a regular nursing unit. Case managers facilitate early assessment by speech, physical and occupational therapists and, if recommended, coordinate rehabilitative care.

For more information about Lakewood’s stroke program, call Joan Novak at 216/529-7428 or Arthur Dick, M.D., at 216/529-7090. For more information about the CCHS stroke performance improvement project, call Eric Hixson at 216/445-0083 or Anthony Furlan, M.D., at 216/444-5535.
“Managing Diabetes Safely and Effectively”

Since 2003, the Diabetes Team has presented two programs on the care of the diabetic patient. The first program, held in March 2003, was designed to help health professionals better manage their diabetic patients in the outpatient setting. The second program, held in October 2004, focused on managing the diabetic patient in the inpatient setting.

Sethu Reddy, M.D., chairman of the Cleveland Clinic Department of Endocrinology, Diabetes and Metabolism, introduced a new sliding-scale regimen form that will aid health system efforts to reduce insulin-related adverse drug events (ADEs). The discussion of insulin-related ADEs was one of the highlights of the first continuing education program.

National diabetes care standards established by the Diabetes Quality Improvement Project (DQIP) were discussed. These standards are used by the American Diabetes Association Provider Recognition Program, CMS peer review organizations, and JCAHO performance measures. National and local data suggest that both primary care physicians and specialists have an opportunity to improve their performance in meeting these measure goals.

Dr. Reddy, who also chairs the national American Association of Clinical Endocrinologists coding committee, presented an overview of strategies to minimize reimbursement problems associated with the delivery of diabetes care. Faculty presented CCHS diabetes care data and activities designed to reduce insulin-related ADEs.

Insulin errors are among the most common types of medication errors and are vastly under-reported nationally. Errors of omission, commission and timing result in poor glucose control and poor outcomes. Faculty discussed reducing insulin-related ADEs by improving sliding-scale insulin regimens. A new sliding-scale regimen form, which can be customized for each patient on insulin, was introduced to help improve the medication use process for patients receiving insulin.

The October 2004 program focused on strategies for managing the hospitalized diabetic patient. A review of insulin-related errors was presented with a follow-up report on the implementation of sliding scale insulin orders at all CCHS hospitals. Euclid Hospital’s Kevin Cummins, M.D., Ph.D., discussed the rationale for the use of intravenous insulin with specific critical and/or surgical inpatients. Data from multiple studies confirm that patients with hyperglycemia suffer excess mortality and morbidity, longer lengths of stay, excess costs and unfavorable post-discharge outcomes. Early identification and aggressive treatment of hyperglycemia positively influence all of these factors. Several CCHS hospitals have implemented insulin drip protocols.

The program continued with a review of external expectations related to diabetes care; South Pointe Hospital’s Tom Ebner, D.O., summarized recommendations for diabetes monitoring and treatment.

The program concluded with Sue Cotey, R.N., C.D.E., of Huron Hospital discussing key elements of an effective patient education program. Patients must learn self-management skills and make lifestyle changes to effectively manage diabetes and avoid or delay the complications associated with the disease. Education must begin in the inpatient setting and continue in the outpatient setting.

For a copy of the insulin form, or for more information about these programs, contact The Quality Institute at 216/445-0080.

<table>
<thead>
<tr>
<th>Checkpoint</th>
<th>Goal</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Pressure</td>
<td>&lt; 140/90</td>
<td>Every visit</td>
</tr>
<tr>
<td>Foot exam</td>
<td></td>
<td>Every visit</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td>Every visit</td>
</tr>
<tr>
<td>HbA1C (normal range 4–6%)</td>
<td>&lt; 7%</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Eye Exam (dilated)</td>
<td></td>
<td>Yearly</td>
</tr>
<tr>
<td>HDL</td>
<td>&gt; 40 Males; &gt; 50 Females</td>
<td>Yearly</td>
</tr>
<tr>
<td>LDL</td>
<td>&lt; 100</td>
<td>Yearly</td>
</tr>
<tr>
<td>Triglycerides</td>
<td>&lt; 150</td>
<td>Yearly</td>
</tr>
<tr>
<td>Urine Test (microalbumin)</td>
<td></td>
<td>Yearly</td>
</tr>
<tr>
<td>Diabetes Education</td>
<td>Annual Refresher</td>
<td>As needed</td>
</tr>
<tr>
<td>Nutritional Counseling</td>
<td>Annual Refresher</td>
<td>As needed</td>
</tr>
<tr>
<td>Self-monitoring of blood glucose</td>
<td>AC &lt; 120; PC &lt; 140</td>
<td>As needed</td>
</tr>
</tbody>
</table>

DQIP Measure Set
Project Update Corner

Post-Acute Care

The CCHS Post-Acute Care committee is overseeing the purchase and implementation of the Extended Care Information Network (ECIN) Extended Care Professional™ system for case management and discharge planning. As part of this implementation, the committee has sponsored a study to assess the value added to the organization and improved quality of care by utilizing this electronic system.

The project study hypothesis is that implementing an automated case management and discharge planning system improves organizational efficiency, patient safety and quality of patient care. The current discharge planning process may realize efficiencies by reducing the amount of manual documentation, redundant phone calls and fax transmissions to post-acute care sites, and delays in responding to referral requests. More efficient placement of patients may reduce the number of adverse events such as patient falls, pressure ulcers, line infections and nosocomial infections by shortening the potential for exposure to these events while waiting for transfer. Standardization of the content, communication and quality of patient clinical information provided to referral decision makers improves the quality of inpatient care, appropriateness of post-acute placement and satisfaction with the discharge planning process.

The ECIN implementation began at CCF and is rolling out to the rest of CCHS this winter. All CCHS hospitals should be fully operational on ECIN for all case management and post-acute referral activity by March 2005.

The CCHS Post-Acute Care committee members are: Cheryl Adams (CCF), Deb Albert (Euclid Hospital), Mardi Atkins (The Quality Institute), Patrick Carey, M.D. (Lakewood Hospital), Karen Fagnilli (CCHS Eastern Region), Pam Gill (Euclid Hospital), Eric Hixson (The Quality Institute), Deborah Nadzam (The Quality Institute), Robert Palmer, M.D. (CCF), Musood Pirzada (CCF), Candy Sanson (Lakewood Hospital), Richard Shonk, M.D. (CCHS Western Region), Jon Straffon (CCF), Joan Szabo (CCHS Eastern Region), Brian Tilow (Lakewood Hospital), Jeanine Tome (Extended Care Information Network), George Topalsky, M.D. (Marymount), Barb Volk (Cleveland Clinic Hospice), T. Declan Walsh, M.D. (CCF), and Darlene Zakrjasjek (Cleveland Clinic Home Care Services).

Get With The Guidelines: Stroke

CCHS is contributing data to the Get With The Guidelines: Stroke (GWTG) registry. The registry allows hospitals to evaluate a broad array of stroke care performance measures, as well as provide more specific measures regarding acute intervention. One important feature of the registry is the availability of patient education materials produced by the American Heart Association and the American Stroke Association. These materials can be customized and combined on demand for individual patients based on their needs, or printed, reproduced and bundled with other hospital discharge materials.

Pediatric Asthma Team

The Respiratory Therapists across the CCHS worked with two school systems to pilot a project for evaluating the frequency and management of children with asthma in elementary and middle school students. The project consisted of screening, education, asthma management and outcomes tracking. This project was important since the number of children with asthma has been increasing over the past decade. It is estimated that nearly 5 million children are affected. Underdiagnosis and poor asthma management has led to children leaving school early or missing entire days. Asthma attacks are disruptive for students, parents, teachers and classrooms. With improved education about asthma triggers and better screening, children with asthma can be treated earlier and more effectively, and learn to better manage their condition.

Our project identified 66/371 children with undiagnosed asthma, and educated students, teachers and families about asthma and reducing asthma triggers. The team is now working with other schools who have requested its services.
Transitioning to Experienced-Based Measurement

Using the Picker Survey Tools

In July, the Cleveland Clinic Health System transitioned from a patient satisfaction survey tool to one that measures the patient’s experience after visiting the health care organization. The following article describes the research behind the survey and defines the dimensions of care and is published with permission from National Research Corporation.

Background

Recognized as a leader in the health care performance measurement field, National Research Corporation (NRC), the parent company of NRC+Picker, was the first firm to dedicate its full efforts to the health care performance measurement industry. As the industry’s largest firm, NRC+Picker’s services and products assist more than 4,500 health care facilities in the United States, Asia, South America and Europe in measuring and improving patient-centered care.

In 2001, NRC acquired the Picker Institute and its family of surveys, which address performance from a patient’s perspective. Unless tools are designed to measure what matters most to patients and provide data that can be used for targeted improvement by front-line staff, the true value of an organization’s research efforts can be lost and the patient experience will not be improved. The Picker Institute, a not-for-profit entity founded by Harvey and Jean Picker, understood this.

Researchers at the institute theorized that traditional patient satisfaction tools and programs too often approach the task from an institutional mindset, thus failing to collect data most relevant to patients. Researchers conducted extensive interviews with more than 8,000 patients, family members, physicians, and hospital staff to uncover answers to these four basic questions:

• What do patients want?
• What do patients value?
• What helps or hinders their ability to manage their health problems?
• What aspects of care are most important to them and their families?

Based on results, researchers identified eight areas of care most important to patients and their family members. At the same time, they asked patients and family members to objectively report on their experience with the care provided, rather than provide simple satisfaction ratings.

Dimensions of Patient-Centered Care

The Picker Institute’s research found that unusually high scores and other considerable discrepancies exist between simple satisfaction ratings and patients’ own accounts of their actual care experiences, largely due to problematic/flawed survey design that measured quality from an institutional perspective rather than from a patient’s perspective. For example, consider the Picker Institute’s finding that, from a patient perspective, advice received about medication ranked as the sixth most important driver of satisfaction. To the physician, it ranked 58th in driving satisfaction.

Further, physicians ranked the presence of a patient’s medical chart during a visit as the fourth most important driver of satisfaction. The patients cared very little about the chart’s presence.

To assess quality through the patient’s eyes, we must focus on what truly matters to patients and what defines quality from their perspective. The eight dimensions of care that define quality through the patient’s eyes are:

• Respect for values, preferences and expressed needs: Patients indicate a need to be recognized and treated as individuals by hospital staff. They are concerned with their illnesses and conditions, and want to be kept informed. An atmosphere respectful of the individual patient should focus on quality of life, involve the patient in medical decisions, provide the patient with dignity, and respect a patient’s autonomy.

• Coordination and integration of care: Patients report feeling vulnerable and powerless in the face of illness. Proper coordination of care can ease those feelings. Patients identified three areas in which care coordination can reduce feelings of vulnerability. They are: coordination of clinical care, coordination of ancillary and support services, and coordination of “front-line” patient care.

• Information and education: Patients express a fear that information is being withheld from them and that staff members are not being completely honest about their condition and prognosis. Based on patient interviews, hospitals can focus on three communication items to reduce these fears. They are: information on clinical status, progress and prognosis; information on processes of care; and information to facilitate autonomy, self care and health promotion.

• Physical comfort: The level of physical comfort patients report has a tremendous impact on their experience. Three areas were reported as particularly important to patients. They are: pain management, assistance with activities and daily living needs, and hospital surroundings and environment.

• Emotional support and alleviation of fear and anxiety: Fear and anxiety associated with illness can be as debilitating as the physical effects. Caregivers should pay particular attention to anxiety over physical status, treatment and prognosis; anxiety over the impact of the illness on themselves and family; and anxiety over the financial impact of illness.

• Involvement of family and friends: Patients continually addressed the role of family and friends in the patient experience, and often they expressed concern about the impact illness has on family and friends. Family dimensions of patient-centered care were identified as follows: accommodations provided family and friends; involving family and close friends in decision making; supporting
family members as caregivers; and recognizing the needs of family and friends.

**Transition and continuity:** Patients often express considerable anxiety about their ability to care for themselves after discharge. Meeting patient needs in this area requires staff to provide understandable, detailed information regarding medications, physical limitations, dietary needs, etc.; coordination and planning of ongoing treatment and services after discharge; and providing information regarding access to clinical, social, physical and financial support on a continuing basis.

**Access to Care:** Patients need to know they can access care when it is needed. Focusing mainly on ambulatory care, the following areas were of importance to the patient: Access to the location of hospitals, clinics and physician offices; availability of transportation; ease of scheduling appointments; availability of appointments when needed; accessibility to specialists or specialty services when a referral is made; and clear instructions provided on when and how to get referrals.

Note that such items as parking, food service, signage – all institutionally based concerns – do not appear among the top concerns of patients. This doesn’t mean that those items are not important, but it does mean that patients are often concerned with issues that are not paramount to the hospital or staff. And yet, even today, every survey (with the exception of the Picker surveys) disproportionately focuses on amenities rather than patient concerns.

Today, NRC+Picker surveys are the world standard for measuring performance through the patient’s eyes and are being used in quality-driven organizations throughout the United States, Great Britain, Germany, Sweden and Switzerland. The Eight Dimensions of Patient-Centered Care are endorsed by advocacy groups, business coalitions, public reporting initiatives, government entities and national employers. They have been incorporated into the six aims identified by the Institute of Medicine’s “Crossing the Quality Chasm” and also are the basis for the National Standard Initiative on Quality introduced by the U.S. Department of Health and Human Services.

---

**Codman Award:**

Together we’ve made a difference for stroke patients in Northeast Ohio... and won a major award for it.

The Joint Commission on Accreditation of Healthcare Organizations named the Cleveland Clinic Health System winner of the 2003 Ernest A. Codman Award. The award recognized our hospitals and teams of health care professionals who worked together to improve and standardize care for ischemic stroke patients. Teamwork, trust and a genuine commitment to medicine guided our stroke management team toward achieving major quality improvement – and toward earning one of the most prestigious awards in health care for the second time.

---

**P. Mardi Atkins, RN, MPA, CPHQ**
The Quality Institute
The Cleveland Clinic
Chair

**Ann Biery, RN**
Fairview Hospital

**Alan Blaha**
Lutheran Hospital

**Ellen Britz**
Hillcrest Hospital

**Barbara Chema, RN**
Cleveland Clinic Children’s Hospital for Rehabilitation

**Teresa Craighead, RN**
Lakewood Hospital

**Paul Elenin, RN**
Hillcrest Hospital

**Mathew Gaug**
Marymount Hospital

**Lee Gibbs**
Euclid Hospital

**Jim Haag**
Euclid Hospital

**Rosemarie Ketler**
Lakewood Hospital

**Lowana King**
Eastern Region

**Jeff Knop, RN**
Huron Hospital

**Deborah Nadzam, PhD, FAAN**
The Quality Institute
The Cleveland Clinic

**Laura Navin**
CCHS Western Region

**Donna Owen**
South Pointe Hospital

**Mark Smith**
Fairview Hospital

**Anastasia Unruh**
The Quality Institute
The Cleveland Clinic

**CCHS Patient Satisfaction Team**
Creating a Culture of Safety
An Essential Component to Reducing Medical Errors

Patient safety is an integral component of the CCHS strategic approach to performance improvement. The single most important objective of the CCHS Patient Safety Program is to prevent unintended harm to patients by reducing the occurrence of adverse medical events.

The single most important objective of the CCHS Patient Safety Program is to prevent unintended harm to patients by reducing the occurrence of adverse medical events.

In the last issue of The Quality Institute’s newsletter, the patient safety program was briefly described. In this issue, we expand on the discussion of a culture of safety – the first of seven strategies that serve as the basis of the CCHS patient safety plan.

The foremost strategy to achieving the objective for preventing harm to the patient is to establish an organizational culture that puts patient safety first; a culture that embeds the issue of safety into each and every employee’s and caregiver’s practice; a culture that promotes discussion, awareness, and reporting of errors, “near-miss errors” and potential error-prone processes.

The Joint Commission’s definition of “culture of safety” is:

“An environment in which patients, their families, and organization staff and leaders can identify and manage actual and potential risks to patient safety. This environment encourages recognition and acknowledgement of risk to patient safety and medical/health care errors; the initiation of actions to reduce these risks; the internal reporting of what has been found and the actions taken; a focus on processes and systems; and minimization of individual blame or retribution for involvement in a medical/health care error. It encourages organizational learning about medical/health care errors and supports the sharing of that knowledge to effect behavioral changes in it and other health care organizations to improve patient safety.” (JCAHO “Standards in Support of Patient Safety,” January 2001)

A primary characteristic of a culture of safety is a non-punitive approach to the reporting of errors, with a focus on the process or system involved, instead of the culpability of individual employees. Without this culture, achievement of the other six strategies and associated goals of the CCHS patient safety initiative may be compromised.

Within a culture of safety that focuses on the weaknesses of the system and processes, employees are more likely to report and discuss errors. Through improved reporting and communication, we are more able to identify specific error-prone activities, remedied by process redesign, staff education and/or examination of the appropriate use of technology. Improving the process or system will result in a culture of gain in which the organization’s performance is improved and harm to the patient is minimized.

To promote a culture of safety, CCHS leadership adopted a non-punitive stance with regard to the reporting of adverse events. Disciplinary action is not taken with employees who report an adverse event upon discovery, as long as the employee is willing to fully cooperate with management in investigating the factors leading to the event to determine the system/process issues involved provided that none of the exceptions listed below are present:

- Intentional acts to harm or deceive;
- Reckless or intentional disregard for standard operating procedures; or
- In the event that staff performance/competency is a root cause for an adverse event, management will make every reasonable effort to determine if the involved staff member can reliably deliver safe care through further education and counseling. If it appears that a staff member cannot practice in a reliably safe manner, the situation will be treated as a staff performance/competency issue through the usual process.

To facilitate discussion and reporting, a common event-reporting system was developed for the CCHS. A committee inclusive of risk managers and quality managers selected which events to in-
clude, definitions of terms and database format. All CCHS hospitals are collecting standardized data, at least in hard copy form.

For the short-term, data entry is accomplished through an Access database, developed by The Quality Institute (QI). The QI aggregates data and generates a quarterly report for review and identification of processes needing improvement. In the long term, an online system will eliminate hard copy reports and further improve reporting capabilities for all employees who identify an issue potentially associated with patient safety.

The Cleveland Clinic Health System’s patient safety initiative has been successfully launched, with each hospital actively participating in initiative-defined strategies. Together, the CCHS hospitals, clinicians, employees and patients will continue to strive for the provision of safe, effective, high quality care throughout the system.

**Figure B. Seven strategies for safety: reducing occurrence and minimizing risk of adverse events**

1. Promote a Culture of Safety
2. Increase Reporting of Adverse Events and Error-prone Processes
3. Increase Communication about Safety Issues
4. Increase Learning from Analysis of Reported Adverse Events
5. Focused Process Redesign
6. Promote Appropriate Application of Technology
7. Focused Education about New Safety Activities

Contribute to Scientific Literature

**Patient Safety Updates**

**CCHS Patient Safety Web site**

This past fall, the CCHS Patient Safety Team’s subcommittee for education launched a patient safety Web site for employees. The site has interesting articles and information about safety programs and education for each of the CCHS hospitals. Please check out the site and send comments and articles to Linda Muscatello (muscatel@ccf.org). The Web site address is intranet.cchs.net/patientsafety.

**2005 Patient Safety Awareness Week**

National Patient Safety Week was March 7-11, 2005. The CCHS hospitals conducted various events to increase awareness about making the hospital a safer place. During Patient Safety week, a CCHS Patient Awareness Conference was held at the InterContinental Hotel and MBNA Conference Center. The featured speaker was Rober Wachter, M.D., co-author of the book, *The Truth Behind America’s Terrifying Epidemic of Medical Mistakes: INTERNAL BLEEDING.*
Quality Institute Welcomes New Staff

Lisa Sturges joined The Quality Institute staff in November 2004. Lisa’s role includes facilitating CCHS teams and assisting the CCHS hospitals with performance improvement projects. Lisa has a bachelor’s degree in anthropology from Ohio University and a master’s in public health from University of Utah, School of Medicine. For the past six years she has worked at St. Alphonsus in Boise, Idaho, as the lead performance improvement coordinator. Lisa will fill the role vacated by Anthony Warmuth, when he transferred to Euclid Hospital as the Quality Manager.

Also joining The Quality Institute as half-time medical director is Richard Shonk, M.D., Ph.D. In this role, Dr. Shonk will chair the CCHS Patient Safety Committee, oversee the new CCHS peer-review process and provide general guidance to Quality Institute activities. Dr. Shonk also will continue to serve (half-time) as the Vice President of Medical Operations at Lakewood Hospital.

Grant from FDA/MedSun Project

The CCHS was awarded a Phase I subcontract from the FDA/MedSun Project. The money will be used to develop a plan for encouraging the reporting of medical devices within our organizations. The CCHS is a charter member of the MedSun Project, which is an electronic system for reporting medical device failures that result in harm to the patient. A multi-disciplinary task force with representatives from across the health system has worked to develop a single process for reporting medical device failures. The grant will be used to further enhance this process.