The Quality Institute (QI) has reaffirmed its mission “to work with each Cleveland Clinic Health System (CCHS) hospital to promote evidence-based care within a culture of safety and respect for the patients and community it serves.” The QI staff serves as internal consultants to CCHS organizations and also draws upon the resources and experience of all system hospitals to develop, assess, and report on various performance measures and quality improvement initiatives.

Under the guidance of the CCHS Medical Operations Council, The Quality Institute operates with the philosophy that opportunities for performance improvement exist at each CCHS hospital, that there is considerable opportunity to learn from each other as well as from entities outside our health system, and that initiatives and goals should be broadly applicable to each CCHS hospital but simultaneously provide latitude for individually tailored solutions.

In 2002, The QI provided oversight to CCHS’s strategic performance improvement plan that includes three main initiatives: 1) clinical services, 2) patient safety and 3) patient satisfaction. The figure below depicts the structural model of the CCHS performance measurement and improvement plan. Each side of the performance pyramid represents one of the three strategic initiatives. The pyramid itself represents increasingly specific organizational levels supported by the performance measurement and improvement plan: the entire health system; health system regions; individual hospitals; outpatient centers; division and departments; and finally the nursing unit and caregivers.

The CCHS program serves as the unifying basis for specific activities targeted at each level of the organization. Activities on all levels point to the patients and communities we serve—the recipients of care (at the top of the diagram).
Clinical Processes and Outcomes
In 2002, The Quality Institute staffed 12 clinical quality improvement teams: eight existing teams (CHF/AMI, stroke, obstetrics, critical care, diabetes, breast cancer, COPD and colorectal cancer), and three new teams (post-acute care, percutaneous coronary intervention, and pediatric asthma). The emergency department medical and nursing directors' team also requested assistance with conducting a performance improvement project. Each team identified specific goals for the year. Details on goal attainment are included in team reports contained in this report.

Patient Safety
In 2002, The Quality Institute provided specific guidance to implement the CHS patient safety program and infrastructure. The CHS Patient Safety team met monthly and provided recommendations to CHS Medical Operations Council for priority activities to eliminate specific types of adverse events: surgery-related (wrong site/wrong procedure/wrong patient), wrong patient, type of medication errors, and pre/post-diagnostic testing related events (specimens). Specific teams are in place to promote safer practices in these three areas. The overriding theme of the focus areas is the process of patient identification. A task force was convened to look at issues related to correctly identifying a patient, and to review technology available to assist in correctly identifying patients.

In addition, the CHS Patient Safety team: provided verbiage for a revised policy associated with non-punitive action with employees who either report or are involved in an adverse event occurrence; provided oversight for the continuing development and implementation of a system-wide patient incident reporting system; held a continuing education program to present the activities of the team; implemented pilot projects of the patient participation video project; and addressed specific safety issues at CHS hospitals.

Three other teams—medications and therapeutics, medication systems, and skin care—also conducted specific work to enhance patient safety. Specific goals and accomplishments of these teams are included in team reports contained in this report.

Patient Satisfaction
The third major initiative of The Quality Institute focused on patient satisfaction. All CHS hospitals use the National Research Corporation (NRC) to measure patient satisfaction in four settings: inpatient, emergency room, outpatient surgery, and post-acute/subacute care. Each setting uses a unique survey instrument, used by all CHS hospitals for that setting. A CHS patient satisfaction team continued to meet monthly to review data and share strategies for improving scores. Implementation of specific service excellence programs is managed locally by each hospital or region within the system. Significant improvement has been made by some hospitals in some settings, including one community hospital's significant decrease in wait time in the ED.

Other Major Accomplishments
In 2002, The Quality Institute accomplished several other activities, including: implementing the Maryland Hospital Association's Quality Indicator Project at all CHS hospitals to support standardized measurement and JCAHO accreditation requirements; providing developmental and ongoing support to the Cleveland Health Network's quality program; securing IRB approval for databases; publishing and presenting papers associated with QI-sponsored teams; participating in CCF World Class Service initiative; participating in CHS network re-accreditation survey by JCAHO; and submitting several award and grant applications.

Details associated with The Quality Institute's 2002 activities follow.
Purpose
To identify opportunities to reduce inappropriate variation in clinical approach, suggest improvements, and devise metrics to plan and implement enhancements to care of breast cancer patients at any CCHS facility.

Team Members
Dale Cowan, MD, JD
Co-chair
CCF Regional Cancer Program

Joseph Crowe, MD
Co-chair
The Cleveland Clinic

Thomas Slawinski, MD
Co-chair
Euclid Hospital

Rafal Badri, MD
Huron Hospital

G. Thomas Budd, MD
The Cleveland Clinic

Roger Classen, DO
South Pointe Hospital

Richard Crownover, MD, PhD
The Cleveland Clinic

Pamela Hamilton, MD
Marymount Hospital

Ina Hardesty, RN
CCF Breast Center

James Mason, MD
Hillcrest Hospital

Joan Palomaki, MD
Lutheran Hospital

Deborah Pratt, MD
Fairview Hospital

Gary Schnur, MD
CCF Beachwood

Marvin Shie, MD
Lakewood Hospital

Barbara Thoman, RN
CCF Community Oncology

Richard Ungvarsky, MD
Marymount Hospital

The Quality Institute Staff
Anthony Warmuth, BS, CPHQ
Deborah Nadzam, PhD, RN

Measures–Focus
Initial focus included patients with early stage (0, I and II) breast cancer.

Measures of interest include the appropriate use of conservation surgery and adjuvant therapies.

2002 Accomplishments
● Reviewed 1999 and 2000 CCHS tumor registry data and identified conservation surgery and adjuvant therapies as areas of opportunity for improvement. CCHS overall was determined to perform as well as or better than available national comparative statistics.
● Held a Continuing Medical Education (CME) program attended by over 50 CCHS surgeons, radiation and medical oncologists, internal medicine and family practice physicians, gynecologists, nurses and tumor registrars.
● Developed recommendations for 2003 including planning for facility grand rounds, increasing rate of conservation therapy and subsequent adjuvant therapies, improving patient flow, and enhancing the collection of tumor registry data.

1999 and 2000 Stage 0, I and II Breast Cancer Cases Treated at each CCHS Facility

1999 and 2000 Stage 0 Breast Cancer Cases % Receiving Conservation Surgery
CCHS Chronic Obstructive Pulmonary Disease (COPD) Team

Purpose
To evaluate practice regarding management of COPD, a common condition that carries a significant disease burden and presents opportunities to address variation that may exist across CCHS hospitals.

Team Members
James Stoller, MD
Co-chair
The Cleveland Clinic
David Weiner, MD
Co-chair
Marymount Hospital
David Berzon, MD
Hillcrest Hospital
Jeffrey Chapman, MD
The Cleveland Clinic
David Denholm, MD
South Pointe Hospital
Donald Epstein, MD
Huron Hospital
Terence Kilroy, MD
Lakewood Hospital
Proasadara Kondapalli, MD
Lutheran Hospital
Andrew Liu, MD
South Pointe Hospital
Glenn Meden, MD
Hillcrest Hospital
Cecile Muehrcke, MD
Euclid Hospital
Ikram Syed, MD
Fairview Hospital

The Quality Institute Staff
Eric Hixson, MBA
Deborah Nadzam, PhD, RN

2002 Accomplishments
● The team summarized its previous activities and sponsored a CME program for CCHS medical staff, nursing personnel, and quality management staff.
● During the education program, the following was discussed: team findings; state-of-the-art management of COPD in the hospital and ICU; issues and implications of missed respiratory therapy treatments; the efficacy of respiratory protocols; COPD patient resources; and post-acute management of COPD.
● The team served as content experts and editors for standardized COPD Patient Education materials developed by the COPD Patient Education Task Force.
● Standardized COPD Patient Education materials were finalized and made available to each CCHS hospital for distribution to patients.
CCHS Colorectal Surgery Team

**Purpose**
To identify opportunities to reduce inappropriate variation in clinical approach, suggest improvements, and devise metrics to plan and implement enhancements to care of colon cancer resection patients at any CCHS facility.

**Team Members**
- **Anthony Senagore, MD, MBA**
  Chair
  The Cleveland Clinic
- **Dan Borison, MD**
  Hillcrest Hospital
- **Raphael Chung, MD**
  Huron Hospital
- **Roger Classen, DO**
  South Pointe Hospital
- **Peter Cohn, MD**
  South Pointe Hospital
- **Richard Niemczura, MD**
  Euclid Hospital
- **William O’Brien, MD**
  Marymount Hospital
- **David Perse, MD**
  Lutheran Hospital
- **Marvin Shie, MD**
  Lakewood Hospital
- **Scott Strong, MD**
  The Cleveland Clinic
- **Russ Zachem, DO**
  South Pointe Hospital

**The Quality Institute Staff**
- **Anthony Warmuth, BS, CPHQ**
- **Deborah Nadzam, PhD, RN**

**Measures-Focus**
The use of blood products for colon cancer resection patients. POSSUM risk-adjusted mortality for colon cancer resection patients.

**2002 Accomplishments**
- Collected and reviewed 2001 and 2002 blood use and POSSUM-adjusted mortality data.
- Held grand rounds at each CCHS hospital regarding reducing the use of unnecessary blood products in the perioperative period.
- Achieved better than predicted mortality rates for large bowel cancer at all CCHS hospitals. All “non-predicted” mortality cases were reviewed by each facility. Complications not considered in POSSUM risk adjustment explained these cases.
- Initiated development of electronic methods for collecting blood use data for all surgical cases.

**Colon Resection for Large Bowel Cancer 2000-2001 Cases**

**Mortality Ratio Actual/POSSUM Predicted**

```plaintext
<table>
<thead>
<tr>
<th>Facility</th>
<th>Actual</th>
<th>Predicted</th>
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<tbody>
<tr>
<td>A</td>
<td>0.0</td>
<td>0.2</td>
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<tr>
<td>B</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>C</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>D</td>
<td>1.2</td>
<td>1.4</td>
</tr>
<tr>
<td>E</td>
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<td>1.8</td>
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<td>F</td>
<td>2.0</td>
<td>2.2</td>
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<tr>
<td>G</td>
<td>2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>H</td>
<td>2.8</td>
<td>3.0</td>
</tr>
<tr>
<td>I</td>
<td>3.2</td>
<td>3.4</td>
</tr>
<tr>
<td>CCHS</td>
<td>3.6</td>
<td>4.0</td>
</tr>
</tbody>
</table>
```

Mortality rates less than 1.0 indicate fewer deaths than expected.

**2000-2001 Colorectal Cancer Resection**

**Average Number of RBC Units Transfused**

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<table>
<thead>
<tr>
<th>Year</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
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<tr>
<td>2000</td>
<td>1.2</td>
<td>1.4</td>
<td>1.6</td>
<td>1.8</td>
</tr>
<tr>
<td>2001</td>
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<td>1.2</td>
<td>1.4</td>
<td>1.6</td>
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<tr>
<td>2002</td>
<td>1.8</td>
<td>2.0</td>
<td>2.2</td>
<td>2.4</td>
</tr>
<tr>
<td>2003</td>
<td>2.4</td>
<td>2.6</td>
<td>2.8</td>
<td>3.0</td>
</tr>
<tr>
<td>2004</td>
<td>3.0</td>
<td>3.2</td>
<td>3.4</td>
<td>3.6</td>
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</table>
```
CCHS Congestive Heart Failure/Acute Myocardial Infarction Team

Purpose
To describe the population of heart failure and acute myocardial infarction patients treated at CCHS hospitals and existing practice patterns with respect to their treatment; to understand the infrastructure and data collection issues regarding system-wide quality improvement initiatives; and to assess the effectiveness of results achieved using physician teams to drive performance measurement and improvement activities.

Team Members
James Young, MD
Co-chair
The Cleveland Clinic

Reginald Dickerson, MD
Co-chair
Huron Hospital

Sorin Brener, MD
The Cleveland Clinic

Michael Hanna, MD
Hillcrest Hospital

Michael Kalus, MD
South Pointe Hospital

Wael Khoury, MD
Marymount Hospital

Marvin Koppelson, MD
Euclid Hospital

Praful Maroo, MD
Fairview Hospital

Mark Pace, DO
South Pointe Hospital

Frank Pamela, MD
Hillcrest Hospital

Vladimir Swerchowsky, MD
Lakewood Hospital

Mohammed Zahra, MD
Lutheran Hospital

The Quality Institute Staff
Eric Hixson, MBA
Deborah Nadzam, PhD, RN

Measures-Focus

2002 Accomplishments
- Medication measure rates continued to improve: CCHS ACEI utilization rate remains close to the 80 percent target. Nearly every hospital exceeded the target for one or more quarters; and CCHS beta-blocker and platelet inhibitor utilization rates have consistently remained above their 90 percent targets.
- Enrolled more than 300 hospitalized heart failure patients for the heart failure beta-blocker demonstration project at Hillcrest. A registry database was developed with standardized data definitions. Findings from follow-up phone contacts (90 days post-discharge)
CCHS Congestive Heart Failure/Acute Myocardial Infarction Team

Continued

Anemia Demonstration Project

Anemia demonstration project at Hillcrest Hospital. A registry database was developed with standardized data definitions and includes information on 519 outpatient visits. The project has been expanded to Euclid and South Pointe hospitals, where enrollment of patients began in late 2002. Initial findings include evidence of improved hemoglobin, hematocrit and creatinine clearance levels; reduced dosing of diuretic medications; and a reduction in subsequent admissions after start of treatment.

The Hillcrest Heart Failure Center was presented to the CCHS Medical Operations Council. All Eastern region hospitals have established centers. Other CCHS hospitals may propose similar centers at their locales. Definitions for CHF and AMI measures currently being used across CCHS were revised to match JCAHO core measure definitions, to be used beginning with 2002-Q3 discharges.

Assessed the current capabilities and practice patterns for treating patients with acute myocardial infarction at each CCHS hospital. Follow-up is ongoing throughout 2003.

The Quality Institute completed a comprehensive analysis of length of stay. Hospitals have implemented focused programs to address locally identified issues.

Enrolled 69 heart failure patients with mild anemia in the heart failure anemia demonstration project at Hillcrest Hospital. A registry database was developed with standardized data definitions and includes information on 519 outpatient visits. The project has been expanded to Euclid and South Pointe hospitals, where enrollment of patients began in late 2002. Initial findings include evidence of improved hemoglobin, hematocrit and creatinine clearance levels; reduced dosing of diuretic medications; and a reduction in subsequent admissions after start of treatment.

The Hillcrest Heart Failure Center was presented to the CCHS Medical Operations Council. All Eastern region hospitals have established centers. Other CCHS hospitals may propose similar centers at their locales.

Definitions for CHF and AMI measures currently being used across CCHS were revised to match JCAHO core measure definitions, to be used beginning with 2002-Q3 discharges.
Purpose
To identify appropriate utilization and outcome metrics for performance measurement and improvement activities; to improve the process of organ donor referral and donation; to review and implement organizational and educational solutions to satisfy national standards for the intensive care setting; and to facilitate the establishment of systematic data collection.

Team Members
Alejandro Arroliga, MD
Co-Chair
The Cleveland Clinic

Richard Treat, MD
Co-Chair
Fairview Hospital

Naveed Ahmed, MD
Huron Hospital

Sue Collier, RN, MSN
South Pointe Hospital

Nancy Corl, RN
Hillcrest Hospital

Sharon Cudney, RN
Lutheran Hospital

Deanne Dubyk, RN
Huron Hospital

Donald Epstein, MD
Huron Hospital

Shahpour Esfandiari, MD
The Cleveland Clinic

Marcia Grenig, RN, MBA
Marymount Hospital

Wael Khoury, MD
Marymount Hospital

Terence Kilroy, MD
Lakewood Hospital

Prasadarao Kondapalli, MD
Lutheran Hospital

Andrew Liu, MD
South Pointe Hospital

Cheryl Smith, CRTT, BA
The Cleveland Clinic

Robert Spec, MD
Euclid Hospital

Art Thomson, MA
The Cleveland Clinic

Herb Wiedermann, MD
The Cleveland Clinic

Jeffrey Woods, RN
Huron Hospital

Claire Young, RN, MBA
The Cleveland Clinic

The Quality Institute Staff
Eric Hixson, MBA

Deborah Nadzam, PhD, RN

CCHS Critical Care Team

Length of Stay

<table>
<thead>
<tr>
<th>Month</th>
<th>Cases</th>
<th>ICU (CI)*</th>
<th>Peer ICU*</th>
<th>Hosp (CI)*</th>
<th>Peer Hosp†</th>
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<tbody>
<tr>
<td>Jan-2002</td>
<td>544</td>
<td>3.2 (0.3)</td>
<td>3.9</td>
<td>9.7 (0.8)</td>
<td>13.0</td>
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<tr>
<td>Feb-2002</td>
<td>463</td>
<td>3.7 (0.4)</td>
<td>4.0</td>
<td>10.5 (0.9)</td>
<td>13.0</td>
</tr>
<tr>
<td>Mar-2002</td>
<td>445</td>
<td>3.3 (0.4)</td>
<td>4.0</td>
<td>10.1 (1.0)</td>
<td>13.0</td>
</tr>
<tr>
<td>Apr-2002</td>
<td>526</td>
<td>3.1 (0.4)</td>
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<td>10.5 (0.9)</td>
<td>12.4</td>
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<td>May-2002</td>
<td>503</td>
<td>3.1 (0.3)</td>
<td>3.8</td>
<td>8.4 (0.7)</td>
<td>12.4</td>
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<tr>
<td>Jun-2002</td>
<td>479</td>
<td>3.4 (0.5)</td>
<td>3.7</td>
<td>8.4 (0.7)</td>
<td>12.5</td>
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<td>Jul-2002</td>
<td>375</td>
<td>2.9 (0.5)</td>
<td>3.8</td>
<td>9.6 (0.9)</td>
<td>13.0</td>
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<tr>
<td>Aug-2002</td>
<td>395</td>
<td>3.3 (0.5)</td>
<td>3.6</td>
<td>8.2 (0.8)</td>
<td>12.4</td>
</tr>
<tr>
<td>Sep-2002</td>
<td>381</td>
<td>3.5 (0.4)</td>
<td>3.6</td>
<td>8.8 (0.9)</td>
<td>12.4</td>
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<tr>
<td>Oct-2002</td>
<td>318</td>
<td>3.3 (0.5)</td>
<td>3.7</td>
<td>9.6 (1.1)</td>
<td>12.4</td>
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<tr>
<td>Nov-2002</td>
<td>117</td>
<td>5.5 (0.8)</td>
<td>3.0</td>
<td>17.6 (1.5)</td>
<td>13.4</td>
</tr>
<tr>
<td>Dec-2002</td>
<td>117</td>
<td>3.0 (0.5)</td>
<td>2.0</td>
<td>21.3 (1.1)</td>
<td>12.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,663</td>
<td>3.4 (0.1)</td>
<td>3.7</td>
<td>10.7 (0.3)</td>
<td>12.8</td>
</tr>
</tbody>
</table>

* (CI): ±95% Confidence Interval; *Peer ICU: Monthly value for like ICUs as defined by the national Project Impact database; †Peer Hosp: Mean 12 month value for like ICUs as defined by the national Project Impact database.

Mean ICU Length of Stay (95% CI)
CCHS Critical Care Team
Continued

2002 Accomplishments
● Upgraded Project Impact software was implemented at all CCHS hospitals. All data abstractors have received certification from Project Impact.
● Developed a customized CCHS performance report, which is distributed monthly to critical care medical and nursing directors, quality managers, and data abstractors.
● The team focused its interest on several key performance measures: appropriateness of ICU admission, patient self-extubation of tracheal airways, anti-coagulation therapy in all intensive care patients (IV heparin, pneumatic compression, or compression hose), use of specialty beds and skin integrity issues, prevention of gastrointestinal bleeding in mechanically ventilated patients, and ICU length of stay and mortality.
● The team reviewed possible approaches for meeting The Leapfrog Group's standards related to ICU (e.g., use of telemonitoring such as the VSIICU eICU system). Certification of physicians to train other clinical staff is presently under review for CCHS hospitals.

Reason for ICU Admission Category Compositions
Treatment: Invasive interventions or medical therapies that can only be given in the ICU
Post Op Obs: close post-op monitoring, system dysfunction does not apply to another category
Safety/Close ICU Monitoring: Suicide precautions, ‘Alias,’ stable overdose, 0th close observation
Cardiovascular: Post cardiac arrest, cardiac ischemia, hypo/hypertension incident, noninvasive monitoring
Respiratory: Post resp arrest, Sp02/Pa02 monitoring, resp distress/depression, bronchospasm, 0th resp mgn
Nervous System: Neuro checks, EEG and GCS monitoring, seizures, neuromuscular function, agitation, withdrawal.
Bleeding: GI bleeding, wound monitoring, coagulopathy monitoring
Electrolyte/Acid Base/Blood Sugar: >q6hrs monitoring serum chem, ABGs, and finger stick blood sugar
Peripheral Vascular: Vascular monitoring, pulse checks, hypoperfused extremity monitoring

Reason for Admit and Baseline Acuity (MPM-0 Survival Quintile) last consecutive 12 months

Selected Procedures Related Complications (last consecutive 12 month [complication rate])

<table>
<thead>
<tr>
<th>Complications</th>
<th>Mechanical Ventilation</th>
<th>Tracheal Airways</th>
<th>Arterial Lines</th>
<th>Central Venous Lines</th>
<th>Pulmonary Artery Catheters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemothorax</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Infection of Line</td>
<td>–</td>
<td>–</td>
<td>4 (0.3%)</td>
<td>40 (2.5%)</td>
<td>1 (0.5%)</td>
</tr>
<tr>
<td>Infection of Site</td>
<td>–</td>
<td>1 (0.1%)</td>
<td>1 (0.1%)</td>
<td>4 (0.3%)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Pneumothorax (treated or untreated)</td>
<td>0 (0.0)</td>
<td>–</td>
<td>–</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Ventilator Associated Pneumonia</td>
<td>41 (3.3%)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Premature Removal</td>
<td>–</td>
<td>93 (7%)</td>
<td>33 (2.8%)</td>
<td>23 (1.4%)</td>
<td>1 (0.5%)</td>
</tr>
<tr>
<td>Reintubation</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Count of procedures</td>
<td>1,251</td>
<td>1,331</td>
<td>1,192</td>
<td>1,599</td>
<td>198</td>
</tr>
</tbody>
</table>

Complication rate: # complications / # patients with procedure
Reintubation rate: # reintubations / # patients with premature removals
CCHS Critical Care Team

Ventilator Support Distribution in Days
(last consecutive 12 months)

AHRO Patient Safety Goals

Nutrition Support—Patients w/LOS ≥ 4 days
(Initiated < 48 hrs and > 48 hrs of ICU admission)

Anti-Coagulation Therapy (IV heparin, pneumatic compression, or compression hose)

Timely and adequate nutritional support has potential to significantly reduce infectious complications, hospital stay, and mortality (AHRO, 2001).

Nutritional support includes Enteral Feeding, TPN, Lipids, TPN/Lipids, PPN, and PPN/Lipids.

Denominator is all patients with ICU LOS ≥ 4.0.

VTE prophylaxis in surgical and medical patients is generally under-utilized even though its effectiveness is well documented (AHRO, 2001).

Prophylaxis includes IV low dose or full anticoagulation dose heparin; pneumatic compression devices; or non-mechanical vascular compression hose. Does not include oral anticoagulation.

Denominators are all patients with ICU admissions for time period.
CCHS Diabetes Team

Purpose
Diabetes is a very common disease, frequently appearing as the primary reason for ambulatory care visits and as a secondary disease among hospitalized patients. If not treated optimally, diabetes results in serious complications that debilitate patients, lower their quality of life and cause unnecessary morbidity and mortality.

The mission of the CCHS Diabetes Team is to identify opportunities, suggest improvements and devise metrics to document the enhancement of care of adult patients with diabetes who are cared for at any CCHS facility or by any of the physicians or other providers affiliated with CCHS.

Team Members
Sethu Reddy, MD
Co-chair
The Cleveland Clinic

Tom Ebner, DO
Co-chair
South Pointe Hospital

Sue Cotey, RN, CDE
Huron Hospital

Kevin Cummins, MD
Euclid Hospital

Elaine Harper, CDE
Lakewood Hospital

Richard Koletsky, MD
Huron Hospital

Mark Lang, MD
Marymount Hospital

Luis Llerena, MD
Fairview Hospital

Nancy McBride, MD
Lakewood Hospital

Adi Mehta, MD
The Cleveland Clinic

Daniel Mendlovic, MD
Marymount Hospital

Jay Morrow, MD
Hillcrest Hospital

Rajesh Sharma, MD
Lutheran Hospital

Harris Taylor, MD
Lutheran Hospital

The Quality Institute Staff
Anthony Warmuth, BS, CPHQ
Deborah Nadzam, PhD, RN

Measures – Focus
Selected national Diabetes Quality Improvement Program indicators including annual HbA1c, lipid and nephropathy assessments; foot and eye exams; and patient satisfaction as areas of focus.

Working to reduce insulin-related adverse drug events and improve the prescribing of insulin products for patients with Type II diabetes.

2002 Accomplishments
● Updated the Diabetes Passport and obtained a grant to produce 10,000 passports for use throughout CCHS.
● Developed plan for expanding the use of the Diabetes Passport.
● Expanded the use of the National Diabetes Quality Improvement Project measures.
● Facilitated American Diabetes Association Provider Recognition for several CCHS physicians.
● Developed improved insulin sliding scale worksheet and order form currently being piloted at CCHS facilities.

CCHS 2000–2001 DQIP Data

[Diagram showing various metrics and targets for diabetes care]

[Image of Diabetes Passport]

[Image of Cleveland Clinic Health System]

[Image of Diabetes Mellitus Disease Management Program]

12
Team Members
David Pelini, MD
Co-chair
Fairview Hospital
Arnold Feltoon, MD
Co-chair
South Pointe Hospital

Members
Medical, Nursing and EMS
Directors of all CCHS hospitals

Measures - Focus
The CCHS Emergency Medicine Committee requested The Quality Institute assist with a performance measurement project. The committee identified three measures of interest:

The mean time between arrival at the ED and first assessment by a physician (“door-to-doctor” time);

The mean time between arrival at the ED and first dose of an antibiotic for patients diagnosed with pneumonia;

The mean times associated with pain assessment and intervention.

The Quality Institute randomly selected records for retrospective abstraction of standardized data element values. Members of the committee (or designees) collected the data and then submitted values to The Quality Institute. The results, representing the performance baselines, are displayed below. CCHS and all hospitals’ rates for door-to-antibiotic time (pneumonia) were all below the target of 180 minutes. The committee decided to focus on pain management and door-to-doctor time as performance improvement projects in 2003.
CCHS Obstetrics (Perinatal) Team

**Purpose**
The mission of the Diabetes Subcommittee is to identify opportunities, suggest improvements and devise metrics to document the enhancement of care of obstetrics patients and their newborns who are cared for at any CCHS facility.

**Team Members**
Mary Blank, MD  
Co-chair  
Hillcrest Hospital  
Elliot Philipson, MD  
Co-chair  
The Cleveland Clinic  
Baburajendra Achanti, MD  
Fairview Hospital  
Jeffrey Christian, MD  
Lakewood Hospital  
Johnny Erkins, MD  
Huron Hospital  
John Farinacci, DO  
Marymount Hospital  
William Grossman, MD  
Marymount Hospital  
Ron Holtzman, MD  
The Cleveland Clinic  
Michael Makii, MD  
Fairview Hospital  
Sharon Mikol, MD  
Lakewood Hospital  
S. Jules Moodley, MD  
Fairview Hospital  
Jeffrey Schwersenski, MD  
The Cleveland Clinic  

**Measures – Focus**
Initially the team focused on quality indicators associated with delivery only, including percent of C-sections with a coded indication, primary C-Section rate and vaginal birth after previous C-Section rate. The team has expanded its scope to include neonatology.

**2002 Accomplishments**
- Neonatologists were added to the team.
- New Neonate measures were considered.
- Data collection for JCAH O pregnancy-related core measures were implemented at all CCHS facilities with OB services.

**CCHS Percent of C-Sections with at least one coded indication**

![Graph showing CCHS Percent of C-Sections with at least one coded indication]

Temporary: UCL=98.66, Mean=93.73, LCL=88.79  
Inspected Mean=217.17, Counts Mean=203.54

**3rd and 4th Degree Lacerations during Vaginal Deliveries July–December 2002**

![Graph showing 3rd and 4th Degree Lacerations during Vaginal Deliveries]

*Includes only those facilities with OB departments.*
### Purpose
To evaluate the feasibility of implementing a pediatric asthma screening and treatment program with northeast Ohio school districts. This project would emulate the JCAHO 2001 Codman Award-winning hospital project in Yonkers, New York.

### Team Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Hospital/Institution</th>
</tr>
</thead>
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<tr>
<td>Tom Kallstrom</td>
<td>Chair</td>
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<td>Mary Bossard, RN</td>
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<td>Jeffrey Jinks</td>
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<td>Karen Kahl</td>
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<td>Lucy Kester, RT</td>
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<td>Rebecca Meredith</td>
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<td>Mary Ann Marsal, RT</td>
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<td>Rosalind Strickland</td>
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<td>Marianne Sumego, MD</td>
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<td>Dan Sutton</td>
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<td>Leslie Svoboda</td>
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<tr>
<td>Michael Wascovich, RPh</td>
<td></td>
<td>The Cleveland Clinic</td>
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</table>

All staff from The Quality Institute are involved.

### 2002 Accomplishments
- Hosted presentation in May by Jeffrey Byrnes from St. John's Riverside Hospital in Yonkers, New York, the hospital winner of the JCAHO Codman Award in 2001.
- Reviewed the CCHS hospitals’ inpatient and emergency department volume data for children with asthma.
- Identified potential legal issues to be considered.
- Identified proposed goals for collaborative project and measures for evaluating effectiveness of project.
- Developed project description and plan.
- Presented plan to the CCHS pediatric team and the CCHS Medical Operations Council.
- Identified three schools to contact about pilot project.
CCHS Percutaneous Coronary Intervention (PCI) Team
(launched June 2002)

Purpose
To evaluate the quality of PCI care provided at CCHS hospitals and implement improvement actions as indicated.

Team Members
Stephen Ellis, MD
Chair
The Cleveland Clinic
Frederick Huepler, MD
The Cleveland Clinic
Praful Maroo, MD
Fairview Hospital
E. Dean Nutka, MD
Fairview Hospital
Assad Rizk, MD
Hillcrest Hospital
Frank Pamelia, MD
Hillcrest Hospital
Simone Nader, MD
Lakewood Hospital
Marcello Mellino, MD
Lakewood Hospital

The Quality Institute Staff
Eric Hixson, MBA
Deborah Nadzam, PhD, RN

2002 Accomplishments
● Convened team, with representatives from CCHS hospitals that perform PCI.
● Disseminated ACC guidelines for PCI.
● Identified scope of project, preliminary measures and data collection requirements to assess baseline performance.
● Initiated data collection to establish baseline for preliminary measures.
CCHS Post-Acute Care Team
(launched April 2002)

**Purpose**
To identify improvement opportunities related to efficient and effective flow of patients between acute care and post-acute care settings, as well as within post-acute care settings.

**Team Members**
Debra Albert, RN  
Co-chair  
Euclid Hospital

Richard Shonk, MD, PhD  
Co-chair  
Lakewood Hospital

T. Declan Walsh, MD  
Co-chair  
The Cleveland Clinic

Robert Palmer, MD  
The Cleveland Clinic

Candy Sanson, LISW  
Lakewood Hospital

Jon Straffon  
Cleveland Clinic Home Care

Joan Szabo, MSW  
CCHS Eastern Region

George Topalsky, MD  
Marymount Hospital

All staff from The Quality Institute are involved.

**2002 Accomplishments**
- Convened team with representation from medicine, nursing leadership, case management and CCHS regions.
  1. Recommend CCHS process for transitioning inpatients to the post-acute care setting, standardizing the process where possible.
  2. Explore the feasibility of implementing the same information system across CCHS hospitals.
  3. Examine existing non-acute care setting disease management models for chronic diseases and determine the feasibility of adoption across CCHS.
  4. Define the role of the emergency department in the care of the frail elderly and chronically ill.
  5. Recommend communication process for transitioning the inpatient to the primary care or post-acute care physician.
  6. Identify high quality long-term care and assisted living providers, and explore formal collaborative relationships with the facility and medical staff.
- The team hosted on-site demonstrations of three information systems, with an eye toward identifying standardized approach across CCHS.
- Reviewed discharge disposition and admit source codes being used at CCHS hospitals, with an eye toward identifying standardized mapping for improved tracking and aggregation of various care processes.
CCHS Stroke Team

**Purpose**
To assess the care provided to stroke patients and identify variance across CCHS hospitals; to identify processes of stroke care with opportunity for improvement; to identify and benchmark stroke care performance measures; and to implement a CCHS stroke quality improvement plan for selected processes and performance measures.

**Team Members**
- **Anthony Furlan, MD**
  Chair
  The Cleveland Clinic
- **Brad Borden, MD**
  Marymount Hospital
- **Romeo Craciun, MD**
  Marymount Hospital
- **Arthur Dick, MD**
  Lakewood Hospital
- **Richard Frires, MD**
  Huron Hospital
- **Irene Katzan, MD**
  The Cleveland Clinic
- **Jonathon Kline, MD**
  South Pointe Hospital
- **Thomas Masaryk, MD**
  The Cleveland Clinic
- **Michael Mervart, MD**
  Lakewood Hospital
- **Bruce Morgenstern, MD**
  Euclid Hospital
- **Rita Nayak, MD**
  Lutheran Hospital
- **Carla O’Day, MD**
  Hillcrest Hospital
- **David Pelini, MD**
  Fairview Hospital

**The Quality Institute Staff**
- **Eric Hixson, MBA**
- **Deborah Nadzam, PhD, RN**

**2002 Accomplishments**
- The CCHS IV tPA utilization rate has consistently remained above the national average of 2 percent of all strokes every year since 1999, but additional work remains to reach the goal of 5 percent. The 2002 CCHS rate was 3.9 percent, an increase from 2.6 percent in 2001. Significant issues of adequate neurology coverage at some community hospitals have been addressed or are in the process of being addressed through on-call arrangements with physicians from other CCHS hospitals or transferring eligible patients to other CCHS hospitals (time permitting). A study was designed and executed comparing CCHS hospitals’ tPA use with eligible stroke patients in 2001 to the rate reported in 1998. Overall, tPA was administered to nearly twice as many patients in 2001 (29 in 1998 vs. 53 in 2001), and the incidence of symptomatic hemorrhage complications was reduced by half (13.8 percent in 1998 vs. 6.5 percent in 2001). Approximately 50 percent of eligible patients received IV tPA per strict adherence to NINDS criteria; and 78 percent of eligible patients received the therapy when additional, non-NINDS, reasonable exclusion criteria were included, such as advanced age.
- DVT complications in stroke patients have remained consistently below the 2 percent target. The committee has investigated the observed differences in hospital rates and identified differences in surveillance for DVT with low-extremity doppler ultrasounds as a potential contributing factor.
- CCHS hospitals have reviewed the criteria for Primary Stroke Center designation and several have expressed interest in applying. Implementation of the accreditation program sponsored by the Academy of Neurology and the JCAHO has been delayed nationally until late 2003 providing additional time to meet the Brain Attack Coalition’s criteria.
- The committee has served as a forum for sharing current and planned research protocols. Committee members have been able to refer their patients to active trials as well as establish their hospitals as study sites for other protocols.
- CCHS hospitals have been well represented in the Cleveland’s Operation Stroke coalition. Staff has participated in related CME activities; each hospital has developed stroke protocols; each hospital is participating in the acute stroke outcomes data registry (ETHOS) and continues to participate in the American Heart Association/American Stroke Association Get With The Guidelines initiative.
- Each CCHS hospital participated in the Paul Coverdell National Acute Stroke Registry prototype sponsored by the National Institutes of Health. The findings and experience of this prototype will influence the direction and content of future state and national stroke registries.
- Additional measures were proposed and are currently being operationalized for implementation. They include: arrival in the ED to the first assessment by a physician; antiplatelet treatment within 24 hours of hospital admission; utilization of lipid lowering medications; and use of doppler ultrasound for identification of DVTs.
CCHS Stroke Team
Continued

References
2 National Institute of Neurological Disorders and Stroke

Findings from the IV tPA Eligibility Study

CCHS tPA Utilization Project
IV tPA use among patient populations

Stroke Quality Improvement:
tPA Use Rate Increased/Brain Hemorrhage Rate Halved

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<tr>
<td>29 patients treated with IVtPA:</td>
<td>53 patients treated with IVtPA:</td>
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<tr>
<td>1.8% ischemic strokes (29/1572)</td>
<td>2.8% ischemic strokes (53/1892)</td>
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<td>11.1% of ischemic strokes arriving &lt;3 hrs (29/261)</td>
<td>23.4% of ischemic strokes arriving &lt;3 hrs (53/226)</td>
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<td>13.8% brain hemorrhage</td>
<td>6.5% brain hemorrhage</td>
</tr>
<tr>
<td>risk</td>
<td>(national rate = 6%)</td>
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</table>

*reasonable exclusions include NIHSS <4 OR age >77
CCHS Patient Safety Team

**Purpose**
To implement the CCHS patient safety program, set annual priorities and provide oversight for hospital and region level programs and activities.

**Team Members**
- Debra Albert, RN
  Euclid Hospital
- Caroline Armstrong, RN
  Hillcrest Hospital
- Mary Coon, RN
  Fairview Hospital
- Debra Harvey, RN
  The Children’s Hospital for Rehabilitation
- Mary Kennedy, RN
  Lutheran Hospital
- Stuart Kline
  The Cleveland Clinic
- Marcia Grenig, RN
  Marymount Hospital
- Barbara Lasko, RN
  Huron Hospital
- Richard Lyons, JD
  Huron Hospital
- Judy Malasky
  Risk Management Eastern Region
- Ron Mortus, RPh
  Eastern Region – Pharmacy
- Mary Osburn
  Lakewood Hospital
- Jan Serkey, RN, JD
  The Cleveland Clinic
- Richard Shonk, MD, PhD
  Lakewood Hospital
- Scott Strong, MD
  The Cleveland Clinic
- Paul Suchy, BS, MS
  South Pointe Hospital
- Kathy Sweeney, RN
  Western Region – Risk Mgmt
- George Thomas, DO
  Marymount Hospital

**The Quality Institute Staff:**
Co-Chairs
P. Mardi Atkins, RN, CPHQ
Deborah Nadzam, PhD, RN

**2002 Accomplishments**
- The team reviewed CCHS hospitals’ status against the list of safe practices identified by the Agency for Healthcare Research and Quality (AHRQ) and identified priorities for action.
- Subcommittees were established to address three priority areas: (1) surgery-related events; (2) specimen-related events; and (3) wrong patient type of medication error and patient identification process.
- By year’s end, all CCHS hospitals had a revised policy and procedure in place to ensure correct type/location/patient for surgery. Monitoring process is in place.
- All CCHS hospitals are collecting adverse events data using standardized definitions and reporting data to the CCHS centralized database maintained by The Quality Institute.

- Patient Safety Awareness week was held in June, including a system-wide continuing education program with guest keynote speaker, Henri Manasse, executive director of American Society of Health Systems Pharmacists.
- The team secured approval to pilot a project related to patient and family participation in care; pilots were launched at Marymount and South Pointe hospitals.
- A research grant was submitted to AHRQ to fund implementation of patient participation video project.
- Patient safety-related questions were added to all patient satisfaction surveys.
- The team assessed CCHS hospitals’ status against JCAHO’s six safety goals for 2003.
CCHS Medication Systems Team

Purpose
The CCHS Medication Systems Team is a multidisciplinary team convened to understand, measure and improve the medication systems within the health system.

Medication Systems Team Members
P. Mardi Atkins, RN
Co-chair
The Quality Institute

Louis Barone, PharmD
Co-chair
The Cleveland Clinic

Martha Duffy, RN
Hillcrest Hospital

Sue Dunson, RN
Fairview Hospital

Glen Fernandes, RPh
Euclid Hospital

Eleanor Gilbert, RN
Huron Hospital

David Gragg, PharmD
The Cleveland Clinic

Mike Jakubecz, RPh
Hillcrest Hospital

Mary Kennedy, RN
Lutheran Hospital

Jeff Klopp, RPh
Lutheran Hospital

Marci Molnar, RN
The Cleveland Clinic

Mike Moran, RPh
Huron Hospital

Ron Mortus, RPh
Eastern Region

John Remchick, RPh
Lakewood Hospital

Theresa Rubio, RPh
Maymount Hospital

Rita Sebes, RN
Lakewood Hospital

Ed Soeder, RPh
South Pointe Hospital

Pat Vogel, RN
South Pointe Hospital

The Quality Institute Staff
P. Mardi Atkins, RN, CPHQ

Anthony Warmuth, BS, CPHQ

2002 Accomplishments
● CCHS Nursing/Pharmacy ADE updates were incorporated into existing hospital newsletters beginning fourth quarter, 2002. Standardized orientation content for nurses and pharmacists related to patient safety across CCHS was implemented.
● Hospitals developed and implemented education programs about dosage calculations and pump use. Most hospitals have also included these in the annual competencies for nurses.
● ADEs remain under-reported. Hospital-specific efforts to increase ADE reporting have been implemented. Efforts continue to increase awareness of ADEs. Efforts are also under way to improve the efficiency of data entry.
● Monthly ADE reports are being distributed to the Medication Systems and Medication and Therapeutics teams, Pharmacy Directors, Quality Managers, and Chief Nurse Executives.
● Conducted medication error prevalence study in December for heparin drips. A second study—on insulin—was conducted in the first quarter, 2003
● During Patient Safety Week each hospital prepared a poster with activities related to Medication Safety. Several hospitals conducted Medication Safety Fairs, which were very successful. During the course of the year, the team members made presentations at the meetings about the initiatives in place at their hospital to ensure medication safety.
● The chemotherapy administration protocol was reviewed and approved by various CCHS groups, such as Medication and Therapeutics and Pharmacy Directors. The protocols have been implemented at most CCHS hospitals.

Medication Errors by Category, August 2001–August 2002

The above graph demonstrates the category of the reported ADEs. The high number of Category B, or near miss events (“Good Catch Reports”) indicate that an error occurred, in ordering, transcribing, or dispensing, but was discovered before it reached the patient. By tracking these, we are able to learn “what works” in the medication system that keeps these errors from reaching the patients.

A medication prevalence day was conducted in December for heparin drips. A second prevalence day for insulin was conducted in the first quarter of 2003. The results of this study will help to identify process issues associated with these drugs that require improvement. The team will then focus on actions to improve these processes in 2003.
CCHS Medication And Therapeutics Team

Purpose
To identify opportunities, suggest improvements and devise metrics to enhance the appropriate prescribing of medications and therapeutics; reduce cost when efficacy is equal; guide the proper use of new treatments; and reduce medication errors.

Team Members
James Young, MD
Co-Chair
The Cleveland Clinic

Anthony Kosoglov, MD
Co-Chair
Huron Hospital

Patrick Carey, MD
Lakewood Hospital

Kevin Cummins, MD
Euclid Hospital

Tarek Elsawy, MD
Marymount Hospital

Mark Frankel, MD
Lutheran Hospital

Mort Goldman, PharmD
The Cleveland Clinic

K. V. Gopal, MD
Fairview Hospital

Cynthia Gustaferro, MD
Hillcrest Hospital

Elizabeth Habjen, DO
South Pointe Hospital

Shakuntala Kothari, MD
The Cleveland Clinic

Bruce Long, MD
Fairview/Lutheran Hospital

John Marino, MD
Hillcrest Hospital

Ronald Mortus, RPH, MBA,
FASHP
CCHS Eastern Region

Richard Shonk, MD
Lakewood Hospital

The Quality Institute Staff
Eric Hixson, MBA
Deborah Nadzam, PhD, RN

2002 Accomplishments
● Developed and distributed to each hospital idealized protocols for both weight-based heparin and insulin sliding scales for adoption or incorporation into existing practices.
● Collaborated with Medication Systems members to implement NCCMERP Best Practices “Zero” Tolerance medication ordering standards.
● Developed and executed an analysis of perioperative beta-blocker use in patients with cardiac disease in consecutive non-cardiac surgical inpatient discharges to establish a baseline level for subsequent performance improvement programs.

References

Perioperative Beta-blocker Utilization Findings
All Patients: Surgery and Coronary Artery Disease (CAD)

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Eligible Patients: Surgery and CAD and no beta-blocker contraindication

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<th>Facility</th>
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Comparison of Findings

Schmidt et al CCHS study

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<tr>
<td>CCHS</td>
<td>5.5</td>
<td>5.8%</td>
<td>6.7%</td>
<td>5.0</td>
<td>4.5%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

Perioperative beta-blocker (percent eligible)

<table>
<thead>
<tr>
<th>Facility</th>
<th>Schmidt et al</th>
<th>CCHS study</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>158</td>
<td>1077</td>
</tr>
<tr>
<td>Eligible Patients (percent total)</td>
<td>81 (51%)</td>
<td>794 (73.7%)</td>
</tr>
<tr>
<td>Perioperative beta-blocker (percent eligible)</td>
<td>14 (17%)</td>
<td>240 (30%)</td>
</tr>
</tbody>
</table>
CCHS Skin Care Team

Purpose
The CCHS Skin Care Team was established to standardize evidence-based pressure ulcer treatment and prevention strategies across CCHS.

Skin Care Team Members
Mary Ann Sammon, RN, CWOCN
Chair
The Cleveland Clinic

Goranka Bak, RN, CWOCN
Cleveland Clinic Home Care

Ella Barney, RN
Euclid Hospital

Sue Collier, MSN
South Pointe Hospital

Martha Duffy, RN
Hillcrest Hospital

Laura Herbe, RN
Hillcrest Hospital

Linda Lewicki, RN, PhD
The Cleveland Clinic

Mary Montague, RN, CWOCN
Lakewood Hospital

Deanne Scott, RN
Huron Hospital

Jamie Smirz, RN, CNS
South Pointe Hospital

Suellen Smith, RN, ET
Marymount Hospital

Jane Traverso, RN
Huron Hospital

Linnea Van Blarcum, CNS
Fairview Hospital

Claire Wilson, RN, CWOCN
South Pointe Hospital

The Quality Institute Staff
P. Mardi Atkins, RN, CPHQ
Deborah Nadzam, PhD, RN

2002 Accomplishments
- Developed and implemented standardized prevention and treatment protocols at all CCHS hospitals.
- Developed an education program template to instruct RNs, LPNs, and Nursing Assistants about preventative skin care and skin assessments. The template is currently being incorporated into the hospitals’ skin care programs.
- Established a monitoring system to determine the level of compliance with the protocols.
- The team reviewed skin care products used in all the hospitals toward standardizing across CCHS. The vendor and product selection has been accomplished. Contract negotiations are under way with the selected vendor to determine the cost savings to the health system. Product conversion began the first quarter of 2003.
- Provided staff education on product use and documentation guidelines.
- In February 2002 a system-wide skin prevalence study was conducted. This involved a skin assessment on each patient in all CCHS hospitals on a selected day to identify the presence of pressure ulcers. The results of this study will serve as a baseline for evaluating the effectiveness of the newly implemented prevention and treatment protocols. The CCHS prevalence rate was somewhat higher than the national rate. Over 75 percent of the pressure ulcers were in the earliest stages of development, indicating effective early identification.
- In 2002, the team offered a continuing education program to launch the treatment and prevention protocols developed. Educational programs are in progress at each hospital to implement the protocols at the local level.

CCHS Compared to National Study
(KCI Prevalence Study, 2002, 212 facilities)
CCHS Patient Satisfaction Team

**Purpose**
The CCHS Patient Satisfaction Team is charged with overseeing the Patient Satisfaction Survey process and identifying system-wide projects.

**Team Members**
- **Linda Ambrosecchia**
  Lakewood Hospital
- **Ann Biery, RN**
  Fairview Hospital
- **Alan Blaha**
  Lutheran Hospital
- **Cher Bolas, PhD**
  Lakewood Hospital
- **Ellen Britz**
  Hillcrest Hospital
- **Barbara Chema, RN**
  The Children’s Hospital for Rehabilitation
- **Lee Gibb**
  Euclid Hospital
- **Jim Haag**
  Euclid Hospital
- **Jeff Knop, RN**
  Huron Hospital
- **Linda Lewicki, RN, PhD**
  The Cleveland Clinic
- **Donna Owens**
  South Pointe Hospital
- **Jeff Pike, RN**
  Lutheran Hospital
- **Sue Shirey, LPN**
  Hillcrest Hospital
- **Anastasia Unruh**
  The Cleveland Clinic
- **Cindy Vunovich**
  Marymount Hospital

- **The Quality Institute Staff**
- **P. Mardi Atkins, RN, CPHQ**
  Chair
- **Deborah Nadzam, PhD, RN**

**Measures – Focus**
- Would Recommend to Family or Friends – All Settings
- Dignity and Respect – Physicians and Nurses – All Settings
- Helpfulness to Reduce/Relieve Pain – All Settings

**2002 Accomplishments**
- Patients’ perception of pain management increased by 0.5 points; the percent of fair/poor responses remained at 5 percent of the total.
- Patient satisfaction updates have been included in hospitals’ newsletters.
- Some CCHS hospitals have implemented reward and recognition programs to recognize individuals and departments who have exceeded in the area of customer service.
- Some CCHS hospitals have recognized individuals and departments for achieving hospital level targets.
- Most CCHS hospitals have included patient satisfaction as a standing agenda item at hospital and departmental meetings.
- Hospital team members continued to gain expertise using NRC IDEAS Web site.
- In 2002 the CCHS Patient Satisfaction Team focused on presenting and learning about the patient satisfaction initiatives in place at the hospitals. This was a learning experience for all and resulted in the sharing of effective strategies and minimized “reinventing the wheel.”
- All survey tools were revised with input from various groups at the hospitals. Additional sections included a new module for maternity patients, more questions for the support areas, and new questions related to patient safety and patient/family participation in care. Huron Hospital added the Community Health Clinics and Women’s Clinic to its survey settings.
- The team examined the use of control charts to demonstrate change in the scores. The following page includes control charts generated for the three focus areas.
How Did Patients Rate Efforts to Reduce/Relief Pain

Temporary UCL=64.62, Mean=62.54, LCL=80.46 (mR=2)

How Did Patients Rate Dignity and Respect of Physicians and Nurses

These control charts indicate stable processes for two of the three questions (normal variance in monthly scores). The chart related to “dignity and respect” item indicates a special cause effect in the month of June, suggesting significant improvement may be occurring.

Temporary UCL=90.42, Mean=88.74, LCL=87.06 (mR=2)

Would Recommend to Family and Friends

Temporary UCL=90.42, Mean=88.74, LCL=87.06 (mR=2)
Additional Accomplishments of The Quality Institute

- Negotiated consensus among CCHS hospitals to select the same clinical measurement system for meeting JCAHO data submission requirements.
- Selected Maryland Hospital Association’s Quality Indicator Project (contract includes all CCHS hospitals, Ashtabula County Medical Center and Cleveland Clinic Florida-Naples).
- Anthony Warmuth from The Quality Institute serves as project manager to coordinate training, implementation and ongoing operations of the project.
- The Quality Institute Project was successfully implemented; Q3 data were collected and submitted on time.
- U.S. Department of Health and Human Services, Health Resources and Services Administration, Division of Organ Transplantation grant #H39OT00069 Utilizing the Structure and Resources of a Multi-Hospital Health System to Improve Organ Donation Rates. Principal Investigators: J. Michael Hender- son, MD, and Karl McCleary, PhD.
- Karl McCleary, PhD, an organizational behavior researcher from Penn State University, was added to the research consortium with additional HRSA funding.
- Linkages have been established with the local organ procurement organization to improve access to referral and donation data and timely reporting to each CCHS hospital. Process and performance priorities and stakeholder expectations have been developed. Detailed process maps have been constructed with performance measures for each critical node.
- Supported activities associated with CCHS network re-accreditation by JCAHO; revised communication process with owned practices, as related to performance improvement.
- Participated in special project with Anthem related to assessment of cardiac risk.
- Presented several papers and posters based on The Quality Institute’s projects:

Sumodi V, Novak B, Fagnilli K, Hana M, Hixson E. Heart Failure Center Improves the Use of ACE Inhibitors and Beta Blockers in Systolic Heart Failure. The 6th Annual Scientific Meeting of the Heart Failure Society of America, September 2002. (Poster)


The Director and all analysts at The Quality Institute successfully completed the Human Subjects course (online).

Awarded “Quality Partner” by Premier, Inc.

Secured CCF IRB approval for standardized data set (SDS) database at The Quality Institute as registry for quality improvement data (and potential manuscripts); stroke data collected to conduct in-depth analysis of tPA rates (approval at all other CCHS hospitals also secured).

Provided developmental and ongoing support to CHN quality program.

Submitted $1.2 million grant to AHRQ to fund and evaluate “Engaging the Patient and Family in Care,” the videotaped leadership project.

All Quality Institute staff are members of CCF World Class Service teams.

P. Mardi Atkins and Anthony Warmuth became Certified Professionals in Healthcare Quality (CPHQ).

CCHS Medical Operations Council: 2002 and 2003

Robert Kay, MD
Chairman, The Cleveland Clinic
Baburajendra Achanti, MD
Fairview Hospital
David Bronson, MD
The Cleveland Clinic
Neal Chadwick, MD
Fairview Hospital

Kenneth Chapman, MD
Lakewood Hospital
Romeo Craciun, MD
Marymount Hospital
Richard Freeman, MD, PhD
Lakewood Hospital
Julian Gordon, MD
South Pointe Hospital
Pamela Hamilton, MD
Marymount Hospital
Fred Kessler, MD
Hillcrest Hospital
Wael Khoury, MD
Marymount Hospital
Gus Kious, MD
CCHS, Eastern Region

Cecile Muehrcke, MD
Euclid Hospital

David Perse, MD
Lutheran Hospital

Pamela Redden, MD
Huron Hospital

Marty Sargeant
The Cleveland Clinic

Anthony Senagore, MD
The Cleveland Clinic

Marvin Shie, MD
Lakewood Hospital

Richard Shonk, MD, PhD
Lakewood Hospital

George Thomas, DO
Marymount Hospital

George Topalsky, MD
Marymount Hospital

Marcus Tower, MD
Hillcrest Hospital

Jeffrey Unger, MD
South Pointe Hospital

Tom Whitlock, DO
South Pointe Hospital

Edward Wiese, MD
Ashtabula County Medical Center

Mohammed Zahra, MD
Lutheran Hospital

CCHS Quality Managers

Linda Ambrosechia, RD, LD, EM
Lakewood Hospital

Caroline Armstrong, RN, BS
Hillcrest Hospital

June Carmean, RN
Lutheran Hospital

Barbara Chena, RN
Children’s Hospital for Rehabilitation

Mary Coon, RN, MSN
Fairview Hospital

Tracey Cummings
Huron Hospital

Marcia Grenig, RN, BSN, MSN
Marymount Hospital

Paul Kadas, RN, BSN
Euclid Hospital

Mary Kennedy, RN, BSN, MSN
Lutheran Hospital

Laura Mioranza
South Pointe Hospital

Sandy Pawlak
Fairview Hospital

Cindy Vunovich
Marymount Hospital

Lynn Woicelovich, RT, RN, BSN
Hillcrest Hospital

Claire Young, RN, MBA
The Cleveland Clinic

Jeanette Zebris
The Cleveland Clinic