Patients First
Outcomes 2007

Quality counts when referring patients to hospitals and physicians, so Cleveland Clinic has created a series of Outcomes books similar to this one for many of its institutes. Designed for a healthcare provider audience, the Outcomes books contain a summary of our nursing trends and approaches, data on patient volume and outcomes, and a review of new technologies and innovations.

Although we are unable to report all outcomes for all treatments provided at Cleveland Clinic — omission of outcomes for a particular treatment does not mean we necessarily do not offer that treatment — our goal is to increase outcomes reporting each year. When outcomes for a specific treatment are unavailable, we often report process measures that have documented relationships with improved outcomes. When process measures are unavailable, we report volume measures; a volume/outcome relationship has been demonstrated for many treatments, particularly those involving surgical technique.

Cleveland Clinic also supports transparent public reporting of healthcare quality data and participates in the following public reporting initiatives:

- Joint Commission Performance Measurement Initiative (www.qualitycheck.org)
- Centers for Medicare and Medicaid (CMS) Hospital Compare (www.hospitalcompare.hhs.gov)
- Leapfrog Group (www.leapfroggroup.org)
- Ohio Department of Health Service Reporting (www.odh.state.oh.us)

Our commitment to providing accurate, timely information about patient care is designed to help patients and referring physicians make informed healthcare decisions. We hope you find these data valuable. To view all our Outcomes books, visit Cleveland Clinic's Quality and Patient Safety website at clevelandclinic.org/quality/outcomes.
Dear Colleague:

I am proud to present the 2007 Cleveland Clinic Outcomes books. These books provide information on results, volumes and innovations related to Cleveland Clinic care. The books are designed to help you and your patients make informed decisions about treatments and referrals.

Over the past year, we enhanced our ability to measure outcomes by reorganizing our clinical services into patient-centered institutes. Each institute combines all the specialties and support services associated with a specific disease or organ system under a single leadership at a single site. Institutes promote collaboration, encourage innovation and improve patient experience. They make it easier to benchmark and collect outcomes, as well as implement data-driven changes.

Measuring and reporting outcomes reinforces our commitment to enhancing care and achieving excellence for our patients and referring physicians. With the institutes model in place, we anticipate greater transparency and more comprehensive outcomes reporting.

Thank you for your interest in Cleveland Clinic's Outcomes books. I hope you will continue to find them useful.

Sincerely,

Delos M. Cosgrove, MD
CEO and President
what’s inside

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I am pleased to present our fourth edition of Outcomes. This brief overview focuses on initiatives from the Nursing Institute at the Cleveland Clinic where we are challenged to meet the clinical, administrative and research demands of nursing today. It demonstrates Cleveland Clinic nurses are members of the interdisciplinary care team and serve as an integral part of the overall patient care experience with an emphasis on patient safety and quality care.

The information in this booklet will show the Nursing Institute at the Cleveland Clinic has much to be proud of in 2007. We recognize the need to foster innovation, continually educate and develop our nurses and anticipate the changing healthcare environment. It is the front line caregivers who make decisions regarding nursing care interventions and changes to practice in their unit practice councils. Those decisions spread Institute-wide through shared governance councils with nursing research and the resulting evidence continually guiding our practice decisions. Also demonstrated are innovative administrative practices that support the clinical arena.

Transparency is the ability to illuminate the quality of our healthcare and has become an expectation of many healthcare consumers. Therefore, it is our hope that by sharing this information with our colleagues, we can impact the quality of patient care not only at Cleveland Clinic but outside our own walls.

It is our wish to use this communication tool to share our best practices as we continue to advance the science of nursing. Because at the Cleveland Clinic, we believe we are the destination for nursing practice.

Claire M. Young, RN, MSN, MBA
Chief Nursing Officer and Chair, Nursing Institute
Institute Overview

The Nursing Institute at Cleveland Clinic is composed of registered nurses; licensed practical nurses; nurse associates; patient care nursing assistants; clinical, surgical and equipment technicians; patient service associates; clinical instructors; clinical nurse specialists; advanced practice nurses; paramedics and health unit coordinators who provide best in class care to our patient populations. Nurses and support staff practice on more than 40 specialty-based nursing units, including 14 intensive care units, an emergency department and clinical decision unit, a hospital transfer unit, a 59-bed subacute care unit and 59 operating rooms. More than 300 advanced practice nurses including certified nurse practitioners, certified registered nurse anesthetists, clinical nurse specialists and certified nurse midwives collaborate with physicians to manage patient care in the inpatient, outpatient and perioperative settings.

The Nursing Institute sponsors multiple educational programs on the main campus, including a patient care nursing assistant training program, a surgical technician training program in collaboration with Cuyahoga Community College and programs to prepare nurse anesthetists and enterostomal therapy and wound care nurses for the specialized roles they fulfill in patient care.

The inaugural class of the partnership with Cuyahoga Community College under the auspices of a U.S. Division of Labor grant completed their program of study in December and are eligible to take the licensure exam. In September, the second class of current employees seeking to become registered nurses began their studies. This class will complete the program in December 2008.

In December 2007, the Division of Nursing officially became the Nursing Institute of Cleveland Clinic.

Awards and Accolades

The hospitals, outpatient clinics, home care programs, ambulatory surgery centers and family health centers of Cleveland Clinic maintained accreditation by the Joint Commission.

In 2003, Nursing Institute staff achieved Magnet Status, the recognition of excellence in nursing by the American Nurses Credentialing Center (ANCC). Documents for Magnet redesignation were submitted and accepted in 2007 with a subsequent survey expected in early 2008. Cleveland Clinic was the 3rd hospital in Ohio to achieve this recognition and the 72nd in the United States.

According to the 2007 U.S. News & World Report “America’s Best Hospitals” survey, Cleveland Clinic is one of the top four hospitals in the United States. Cleveland Clinic’s Heart Center has been ranked first in the nation for the past 13 years and 16 of its specialties rank among the nation’s top 10.

Cleveland Clinic and its community hospitals were again recognized as 2007 NorthCoast 99 award winners, indicating great workplaces for top performers in the Northeast Ohio area.

Nursing Education and Research

Nursing practice has changed dramatically over the past few decades. Technological advances in healthcare, coupled with increasing patient acuity and complexity of care at Cleveland Clinic, challenge the nurse to integrate skills, decision making and critical thinking at a pace not previously encountered in the clinical setting. The standard and uniform teaching plans and methods of the past have been enthusiastically replaced with innovative, engaging and active teaching-learning strategies and environments.

The newly established Learning Center for Nursing Practice Excellence is a wireless facility that includes computer labs, distance learning classrooms and a state-of-the-art skills lab. Whether online or in-person, simulated clinical experiences provide nurses and nursing students of all levels the milieu in which to develop problem-solving and decision-making abilities in a safe, simulated environment. The ultra-modern skills lab is designed to replicate the practice settings of the medical-surgical, intensive care, operating room, pediatric and maternity units and features advanced human patient simulators, mobile bedside computers with access to on-line clinical documentation and the Internet as well as digitalized video and event debriefing printouts.

Technology alone will not enhance learning outcomes, but the promotion of realism in the practice environment featuring full-mission scenarios, interactive case studies and modeling by educators will significantly affect practice competencies while increasing the confidence and comfort level of nurses. With the new teaching/learning opportunities afforded by all
aspects of the Learning Center, a new experiential orientation program has evolved to include a phased process that allows the student to progress from simple to complex concepts and skills. Allowing for more clinical time, this process provides immediate opportunity for the application of information and skills learned in the classroom setting.

As our education focus moves beyond content to critical thinking and clinical judgment skills, we have the ability to provide exceptional opportunities for nurses, from novice to expert, to develop and enhance the professional practice of nursing.

**Online Clinical Placement Tool**

Clinical rotation sites for affiliating schools of nursing remain in high demand. In an effort to assist the schools and increase capacity, the Cleveland Clinic participated in a major pilot project to evaluate the use of an online clinical placement tool. Working in collaboration with the Northeast Ohio Nursing Initiative, personnel from Cleveland Clinic served on the Pilot Committee with 13 schools/colleges of nursing that tested the tool. Cleveland Clinic has now expanded use of the on-line clinical placement tool to include all of the Cleveland Clinic hospitals. The transparency and effectiveness of the tool has opened up new clinical opportunities and afforded faster turnaround for clinical placement between schools of nursing and clinical agencies.

**Nursing Research**

In 2007, the Nursing Institute continued to place emphasis on evidence-based nursing practices by conducting, translating and disseminating nursing research. Twelve new nurse-initiated research studies received Institutional Review Board approval, 36 nursing research projects were in progress and 27 projects were completed by the end of the year. Findings from research help shape nursing care practices that lead to improved patient outcomes and nurse efficiencies, and provide knowledge used in nursing management decisions.

**Patient Volumes**

<table>
<thead>
<tr>
<th>ICU Patient Days</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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<tbody>
<tr>
<td></td>
<td>34,000</td>
<td>39,000</td>
<td>44,000</td>
<td>49,000</td>
<td>54,000</td>
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The increase in intensive care unit (ICU) patient days reflects the addition of eight neurosurgical ICU beds, as well as the increasing complexity of patients cared for at Cleveland Clinic.

<table>
<thead>
<tr>
<th>Non-ICU Patient Days</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>210,000</td>
<td>225,000</td>
<td>255,000</td>
<td>270,000</td>
<td>270,000</td>
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The increase in non-ICU patient days has resulted in several efforts aimed at improving patient throughput. One of these efforts has been the initiation of daily rounds with Nursing and Case Management to identify patients who may be ready for discharge in the next 24 hours. Additionally, the increased use of Nurse Practitioners and Physician Assistants helps enhance communication among all care provider team members.
While the number of staffed beds stabilized for 2007, the Nursing Institute is making plans to support the opening of the new Sydell and Arnold Miller Family Pavilion, slated to open during the fourth quarter of 2008. Additionally, a remote Central Monitoring Unit was opened late in the third quarter of 2007. This unit monitors all telemetry patients throughout the organization.

The percent of new graduate nurses hired continues to increase significantly. This trend is the result of many efforts aimed at recruiting senior level nursing students. These initiatives include:

- summer student experience
- nurse associate program
- extended orientation
- nursing education assistance program
- increased on-site clinical rotations for nursing students

The transformation in nursing education has been vital in meeting the orientation needs of new hires.

A few specific retention efforts included:

- career coaches to assist staff in finding the “right fit” unit
- senior nurse council creating scheduling perks in recognition of tenure
- refresh center to provide night shift staff a place to rest before driving home
- shared governance driven closed staffing options
- increased staff recognition at quarterly Nursing Town Hall meetings

The above graph demonstrates significant increases in staff hired. The new hires support the increased bed capacity and demonstrate the success of a comprehensive recruitment strategy. For 2007, this strategy included hiring staff in advance of planned turnover in order to provide consistent staffing levels.
Commitment to Quality and Patient Safety

The Department of Nursing Quality leads the Nursing Institute's efforts in the improvement of nursing practice and patient care, as well as the collection, analysis and utilization of data from nurse quality indicators. In addition, Nursing Quality coordinates the efforts toward strong unit-level performance improvement through the Quality Council composed of unit level staff nurses. This council provides support, education and oversight to the Institute’s quality initiatives. Unit-based quality representatives are charged with leading the initiatives for improvement on their units in conjunction with the unit-based Shared Governance Council and unit leadership. Additionally, unit-based Patient Safety Officers lead unit specific teams focusing on identified patient safety concerns. In the past year the group focused on fall prevention on selected medical nursing units, environmental concerns and labeling of I.V. tubing and solutions. All of these efforts have resulted in consistent monitoring and improvement of the nurse-sensitive indicators over the past year.

Prevention and treatment of hospital-acquired pressure ulcers has been a focus of activity including a recommitment that “every nurse is a skin care nurse.” The Skin and Pressure Ulcer Education and Consultation Team (SPECT), consisting of three certified wound, ostomy and continence nurse specialists, is the resource for nurses across the continuum regarding pressure ulcer education and prevention.

Fall prevention continues to be an important focus. Since the implementation of the Hendrich II Falls Assessment tool in early 2006, a steady decrease in hospital falls rate has occurred with overall rates near or below the NDNQI mean. In addition, an Interdisciplinary Fall Prevention Committee, co-chaired by Nursing Quality and the Nursing Patient Safety Officer, implemented a process for review of falls-associated medications by a pharmacist and an improved process for communication between Physical Therapy and Nursing related to patients at high risk for falls to reduce the number of falls with injuries significantly.

Patient safety strategic efforts have focused on improving hand hygiene compliance among healthcare workers and the reduction of clinician collected specimen errors. Hand hygiene compliance has improved by instituting an enterprise-wide hand hygiene awareness campaign, improved accessibility to hand hygiene products and supplying unit-based hand hygiene compliance rates to each unit on a monthly basis. Unit-Based Hand Hygiene Champions on each inpatient and ambulatory nursing area are then charged with leading unit level improvement efforts. Specimen-labeling teams have targeted selected units to focus improvement efforts utilizing the Six Sigma methodology. Enhancements to the patient label and retraining on the proper procedure have been shown to decrease the number of errors on inpatient nursing units.

Quality patient outcomes are a benchmark for the healthcare environment today. Patient satisfaction, the Joint Commission’s Core Measures, and other data elements publicly reported via national databases have further enhanced attention to quality outcomes. The department collaborates with the Quality and Patient Safety Institute to coordinate Nursing’s role in the interdisciplinary efforts related to the improvement of patient outcomes and the patient experience across the organization.
Quality Indicators

Falls

Fall and fall injury for hospitalized patients are important indicators of nursing quality.

Fall etiology is related to multiple factors that include patient condition, staffing resources and knowledge and environmental issues.

2007 fall-reduction strategies include:

• Use of an evidence-based fall risk assessment tool
• Prevention strategies based upon the patient’s risk factors
• Consistent handoff communication and team work
• Modifications of environment in patient bathrooms

The national benchmark is based upon the American Nurses Association’s National Database of Nursing Quality Indicators (NDNQI®). Our hospital is compared to other hospitals (with greater than 500 beds) that participate in NDNQI. Data are stratified per unit type. There are five adult patient unit types: Critical Care Unit, Medical Unit, Surgical Unit, Medical-Surgical Unit and Step-Down Unit.

* Cleveland Clinic, fall rates below NDNQI mean for this unit type.

Adult Intensive Care Units Fall Rate

Number of Falls/1000 Patient Days

2003* 2004* 2005* 2006* 2007*

1.2 million

Approximate number of dollars Cleveland Clinic spent on nursing education assistance in 2007

Adult Stepdown Units Fall Rate

Number of Falls/1000 Patient Days

2003* 2004* 2005* 2006* 2007*
Adult Medical Care Units Fall Rate

Number of Falls/1000 Patient Days

0 1 2 3 4 5 6


Adult Medical-Surgical Units Fall Rate

Number of Falls/1000 Patient Days

0 1 2 3 4 5 6

2003* 2004 2005 2006 2007*

Adult Surgical Care Units Fall Rate

Number of Falls/1000 Patient Days

0 0.5 1.0 1.5 2.0 2.5 3.0


*Cleveland Clinic, fall rates below NDNQI mean for this unit type.
Pressure Ulcers

Prevention of pressure ulcers is a nursing quality imperative.

Pressure ulcer reduction interventions in 2007 included:

- Restructuring of skin care education and consultation services
- Implementation of multifaceted pressure ulcer reduction program entitled “Every Nurse is a Skin Care Nurse”
  - The objectives of this program are to empower every bedside nurse with education, resources and support to develop, implement and revise a patient-specific pressure ulcer prevention plan.
- Implementation of documentation for prevention and treatment of pressure ulcers in the electronic medical record

As described for falls, the pressure ulcer national benchmark is based upon the American Nurses Association's National Database of Nursing Quality Indicators (NDNQI)®.

Note: Prevalence is measured by observing the skin status of all patients present in the unit at one point in time. The rate is calculated by the number of patients observed to have a hospital-acquired pressure ulcer/total number of patients observed.

2007 Hospital-Acquired Prevalence Score per Quarter

![Graph showing quarterly hospital-acquired prevalence scores for different unit types.]

* Indicates that Cleveland Clinic's hospital acquired prevalence rate is below NDNQI mean.

Percentage of Patients at Risk for Hospital-Acquired Ulcers per Unit Type

![Graph showing percentage of patients at risk for hospital-acquired ulcers per unit type.]

* Indicates that at Cleveland Clinic, more patients are at risk for skin breakdown compared to the NDNQI mean. At risk is based on scores from a uniform skin assessment pressure ulcer risk assessment tool used by participating hospitals.

18.29

Percentage of Cleveland Clinic nurses with national certification who provided direct patient care in 2007. This number is 2 percent higher than the previous year.
**Effect of Certified Nurse Practitioner Utilization on Length of Stay in Postoperative Cardiac Surgery Patients**

In January 2007, Cleveland Clinic began utilizing certified nurse practitioners on a postoperative cardiothoracic surgery floor.

- Certified nurse practitioners work collaboratively with surgeons, medical physicians and nursing staff to manage postoperative cardiac surgery patients.
- Certified nurse practitioners’ daily activities include:
  - Physical assessment
  - Review of laboratory results
  - Review / update of medications
  - Incision healing / wound care
  - Patient self care capabilities / education
  - Oral intake / dietary progression

To evaluate the effectiveness of certified nurse practitioners, we examined the average length of hospital stay of cardiac surgery patients cared for by certified nurse practitioners and physicians (see first bar of graph) collaboratively on one nursing unit versus similar patients recovering from cardiac surgery on two nursing units cared for solely by physicians (middle and right bars on graph).

- Length of hospital stay was lower on the nursing unit where patients were managed collaboratively by advanced practice nurses and physicians.
Ambulatory Nursing

Patient Perception of Ambulatory Clinics

In 2007, patient ratings in the excellent category rose for nurses as caregivers, nurses being sensitive to patient needs and nursing teamwork. Our nurses continually strive to provide world class service to patients.

Diabetic Education by RN Diabetic Educator in an Internal Medicine Ambulatory Clinic

A normal hemoglobin (Hb) A1c level is less than 7% of total hemoglobin. Diabetes complications can be delayed or prevented when HbA1c levels are normal/close to normal. After diabetes education classes, HbA1c levels decreased toward normal.
Bariatric Education

Nursing staff sensitivity to needs is imperative when conducting patient education.

In rating our nurses’ ability to offer a clear and knowledgeable presentation, 65% of respondents receiving education in outpatient bariatric surgery clinics rated it as excellent.

3.2 million
Approximate number of ambulatory patient visits in 2007
Behavioral Health

Assaults

**Goal:** Provide an emotionally and physically safe environment. At Cleveland Clinic, less than 5% of patients required seclusion, and there was only one episode of mechanical restraints in 2007.

Our success was facilitated by:

- Unit culture based on a collaborative problem-solving approach
- Heightened focus by the interdisciplinary treatment team on prevention and safe physical crisis intervention
- Annual training on non-violent physical crisis intervention
- Review of every episode of assault or seclusion/restraint by nursing leadership

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<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
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<td>0</td>
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Pediatric Restraint and Seclusion

**Behavioral Health**

**Pediatric Restraint and Seclusion**

**Number of Episodes / 1000 Patient Days**

**Annual Pediatric Seclusion Rate**

**Number of Episodes / 1000 Patient Days**
Patient Fall Reduction

Falls rates decreased from 9.49 falls per 1,000 patient days in 2006 to 4.8 falls per 1,000 patient days in 2007.

We found that a high percentage of falls occurred around change of shift. As a result of this finding, the patient care nursing assistant change-of-shift report process was altered to occur in patient rooms and specifically address falls information including:

- Patient level of fall risk
- Verification of falls precautionary measures in use
- Other relevant personal care and safety issues

Number of Falls / 1000 Patient Days
Compliance with hand hygiene protocols (defined as washing hands for 15 seconds upon entry into a patient's room and when leaving) was initially at about 60 percent.

A program of monitoring daily compliance was initiated.

The multidisciplinary team consisted of:

- Nurses
- Physicians
- Respiratory therapists
- Environmental Services
- Lab personnel
- Quality representatives

The team identified gaps and opportunities for improvement. Within 5 weeks, compliance rates were above 85 percent and were sustained over time.
Influenza Vaccine for Children Receiving Chemotherapy

Per protocol, we provide the influenza vaccine to children who are receiving chemotherapy, have been off chemotherapy less than 6 months or have sickle cell disease.

We implemented a process to capture as many patients as possible by:

• Maintaining a list of all patients needing and receiving vaccine
• Mailing reminder letters to all eligible patients
• Making reminder phone calls prior to their appointment
• Providing follow-up flu shot appointments for patients who were ill at the time of their initial visit

Some children may not receive the vaccine due to medical therapies, having received the vaccine from another care provider or if their parents decline administration.
The Pediatric Institute & Children's Hospital has been collecting data on bloodstream infections in our intensive care units for several years.

- Neonatal Intensive Care Unit (NICU) mean infection rate has declined from 8.86 to 1.41/1,000 patient days.
- Pediatric Intensive Care Unit (PICU) mean infection rate has declined from 5.74 to 1.2/1,000 patient days.
- Interventions used to decrease bloodstream infections included:
  - Increased hand hygiene compliance
  - Adherence to evidence-based intravenous insertion techniques
- In 2008, we will be joining the National Association of Children's Hospitals and Related Institutions (NACHRI) Catheter Associated Blood Stream Infection Collaborative to learn more about processes and techniques that will help us further decrease our rates.
The Children's Hospital tracks unplanned extubation rates as well as contributing factors, such as level of sedation, duration of intubation and RN:patient ratios. The Pediatric Intensive Care Unit mean rate for 2007 is 0.65/100 ventilator days. Factors thought to positively affect our outcomes are 24-hour pediatric intensivist staff and 1:1 nurse-patient ratio when indicated.

The Neonatal Intensive Care Unit mean unplanned extubation rate for 2007 is 1.20/100 ventilator days. Interventions to decrease unplanned extubations include trialing new ways to secure endotrachael tubes and having two caregivers participate in repositioning intubated babies.
Patient Satisfaction

Quality Data Management (QDM) is a national vendor with whom we contract to conduct our patient satisfaction surveys. The following graphs show how we compare against the scores of all hospitals in the QDM database for selected indicators over the past two years.

**Percent; Overall Rating of Inpatient Pediatric Care**

![Graph showing percent overall rating of inpatient pediatric care for 2006 (N = 292) and 2007 (N = 593)]

**Percent of Patients Who Received and Understood Discharge Instructions**

![Graph showing percent of patients who received and understood discharge instructions for 2006 (N = 307) and 2007 (N = 543)]
Ventilator-Acquired Pneumonia in the Medical Intensive Care Unit

A continued downward trend in the number of cases of ventilator-acquired pneumonia was found in the Medical Intensive Care Unit. Rates based on 1,000 ventilator days showed a drop in rates over time:

- 3.23/1,000 ventilator days in 2005
- 3.10/1,000 ventilator days in 2006
- 1.68/1,000 ventilator days in 2007

To progress to zero incidence of ventilator-acquired pneumonia (VAP) in the Medical Intensive Care Unit, use of chlorhexidine swabs for oral care has been added to the protocol that already includes a 30-degree elevation of the patient’s head, when permissible, and frequent oral care.
Critical Care/Surgical Intensive Care Unit

Unit-Acquired Pressure Ulcers in the Surgical Intensive Care Unit

Patients in the Surgical Intensive Care Unit are at high risk for skin breakdown for many reasons, including weakened immune system, complex surgery, poor nutrition, excessive skin moisture, confusion, decreased activity and advanced age. Skin care initiatives implemented in 2007 decreased the incidence of skin impairment.

Initiatives:

- Upgraded therapeutic bed surfaces
- Collaborative weekly skin care rounds
- Nurse attendance in quarterly skin care classes
- Hosting monthly skin care in-services
- Routine discussion of skin care issues during shift report
- Skin care plan implementation through shared governance activities
- Revision of skin care documentation
- Reviewing skin care issues at monthly staff meetings
- Purposeful audits of admission sheets completion with regards to skin care
- Developed motto: “Every Nurse is a Skin Care Nurse”

2003

Year Cleveland Clinic was first designated a Magnet Hospital
Triage (Initial Assessment) Process Improvement Plan

A triage process improvement plan was initiated in January 2007. Prior to this, patients were triaged in the triage area and sent to an available exam room. Now, patients are sent directly into an exam room, when available, and triage and registration are performed at the bedside.

We developed a “Triage Plus” area to facilitate patient flow when the department is at full capacity. Triage guidelines are followed and lab work and tests are initiated.

In 2007, 52,576 patients arrived in the Emergency Department for treatment. Changes we made have resulted in a decrease in the number of people who leave prior to assessment and care (left figure). Additionally, the plan decreased the time from arrival to assessment by a healthcare provider (physician or nurse; right figure).
**Length of Stay in the Hospital Transfer Unit Triage (Initial Assessment) Process Improvement Plan**

On September 2006, the Hospital Transfer Unit opened to provide additional beds for short-term use, facilitate patient access and serve as an intake area where tertiary referrals could be triaged to intensive care or regular units.

To manage length of stay in the Hospital Transfer Unit, a throughput initiative was started in September 2007. A Surgical Intensive Care Unit physician rounds daily with a RN unit leader and discusses the patient plan of care, possible disposition, current length of stay and special care issues. The throughput nurse uses this information to prioritize transfer of patients to the appropriate unit.

This initiative resulted in a marked reduction in the Hospital Transfer Unit length of stay (graph).

**Length of Stay Hours, 2007**

- **Intensive Care Patients**
- **Non Intensive Care Patients**
- **Program Initiated**

1,648

Number of people coming to the Emergency Department with non-cardiac chest pain as the admitting diagnosis; representing 3% of total volume in 2007.
Strategies to Promote Sleep after Open Heart Surgery

In 2006, Cleveland Clinic introduced a patient admission kit with personal items thought to be needed during a hospital stay, including items thought to decrease exposure to noise and promote sleep at night:

- Guided Imagery Tapes
- Earplugs
- Eye Shields

In 2007, 149 patients participated in nursing research to evaluate the use of sleep strategies after open heart surgery during recovery on a step down/telemetry floor.

We found that patients did not routinely utilize sleep-promoting items provided in the admission kit; they preferred pain control (Figure).

New and innovative ways to promote sleep after open heart surgery are needed.

![Percent of Patients using Strategies to Promote Sleep](chart)
**Noise Factors that Limit Nighttime Sleep**

High noise levels are a common concern on nursing floors, especially at night when patients are trying to sleep.

Lack of sleep due to noise may decrease patient satisfaction with the hospital experience and limit overall recovery.

Learning the predictors of nighttime noise is the first step in developing interventions, as sound may be perceived as bothersome based on personal characteristics or external factors (nurses, equipment, etc.).

In 2007, 149 postoperative surgical patients completed surveys of noise factors that impaired nighttime sleep. The top three noise factors (Figure) were modifiable factors that healthcare personnel can impact through noise reduction interventions.
Utilization of the Discharge Lounge Personnel to Aid in Discharge Home of Cardiac Step-Down and Telemetry Unit Patients

By utilizing the Discharge Lounge and/or Discharge Lounge personnel to transfer a patient from floor to home, beds are freed up for incoming patients from the Emergency Department, other hospitals, outpatient clinics and Intensive Care Units, improving hospital throughput.

In 2007, unit managers identified opportunities to improve utilization of Discharge Lounge facilities and personnel and implemented action plans, resulting in a 180 percent increase in the volume of patients utilizing the discharge lounge or personnel in transfers per week (Figure), compared to 2006.

Number of open heart surgeries, cardiac catheterizations and interventional cardiac procedures respectively, performed by the Heart and Vascular Institute team in 2007

<table>
<thead>
<tr>
<th>Procedure Type</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Heart Surgeries</td>
<td>3,439</td>
</tr>
<tr>
<td>Cardiac Catheterizations</td>
<td>9,078</td>
</tr>
<tr>
<td>Interventional Cardiac Procedures</td>
<td>2,262</td>
</tr>
</tbody>
</table>
Changing the Model of Care on the Transplant Special Care Unit to Improve Patient Satisfaction

In second quarter of 2006, a team model of cCare was introduced on the Transplant Special Care Unit. The revised team of a registered nurse, licensed practical nurse and patient care nursing assistant provides more caregivers at the bedside to meet patient needs compared to the old model of an RN and patient care nursing assistant.

By January 2007, a full complement of LPNs was available.

The new model was associated with an increase in patient satisfaction (Figure), specifically in:

- Overall quality of care
- Nursing staff exhibiting courtesy and respect

Percent Patient Satisfaction

<table>
<thead>
<tr>
<th>Year</th>
<th>Overall Quality of Care</th>
<th>Nursing Staff Treated You withCourtesy and Respect</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>2005</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>2006</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>2007</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Number of heart and lung transplants completed in 2007, respectively
**Constipation Prevention in Geriatric Patients**

Constipation is a common and painful condition affecting many hospitalized geriatric patients. Nursing care directed at detection, prevention and treatment of this condition can impact an older person’s hospital experience.

Beginning in 2006, Internal Medicine Unit staff developed a comprehensive constipation program aimed at improved documentation and staff awareness.

Chart audits were conducted and an educational poster was created for nursing staff to increase awareness of the program.

- In 2007, we found an increase in use of stool softeners and a decrease in constipation.
Patient Education Documentation Improvement in Internal Medicine

Patient education is a vital component of nursing practice.

A busy internal medicine unit was able to improve and sustain consistent patient education documentation within 48 hours of admission by:

- One-on-one staff training on how to document patient education in the electronic medical record
- Reorganization of and increased awareness surrounding available educational materials
- Positive reinforcement and/or remediation

Percent Compliance with Documentation in 48 Hours
Peripherally Inserted Central Catheter Team

Cleveland Clinic's nurse-based Peripherally Inserted Central Catheter Team places the majority of peripherally inserted central catheters.

The procedure is completed at the bedside.

The tip of the catheter should be placed in the caval-atrial junction of the subclavian vein for optimal catheter functioning and prevention of complications.

Each patient is custom-measured to optimize target placement of the catheter tip.

Team members examined the accuracy of tip placement after insertion to assess their performance. Their goal is to maximize the number of catheters with tips at target position.

Results: Peripherally Inserted Central Catheter Tip Position

- Target tip position increased from 64% in 2006 to 75% in 2007.
- Tip location in the internal jugular vein was reduced by more than 50% in 2007, compared with 2006.
**Utilization of the Discharge Lounge**

The Discharge Lounge creates a comfortable and convenient place for hospitalized patients who have been discharged and are awaiting transportation home.

Discharge Lounge staff assist patients with:
- Scheduling follow-up appointments
- Filling prescriptions
- Reviewing home-going instructions
- Arranging for transportation

In 2007, the Discharge Lounge use was expanded to include:
- Outpatients waiting between appointments
- Pre-admission patients coming from our hospital lobby

Use of the Discharge Lounge by hospital patients awaiting discharge home is an important aspect of hospital efficiency, since the lounge serves to meet patient needs prior to discharge and improves turnaround time for getting a new patient into the vacated bed.

Understanding and appreciating the value of the Discharge Lounge by the inpatient nursing units is essential.

In August 2007, efforts were made to increase staff awareness of the capabilities of the lounge and to promote its use.

- Increased awareness led to a 103% increase in average monthly utilization of the discharge lounge by hospital patients awaiting discharge home.
Family Updates from Personnel
Timely family communication regarding a patient’s status after surgery may relieve family members’ anxiety. Improved communication fosters improved family satisfaction.

In 2007, the number of family members receiving an update within 2 hours of the patient's arrival to Post Anesthesia Care Unit increased compared to 2006.

Overall Quality of Care
Patients undergoing an outpatient surgical procedure and discharged home from the Same Day Surgery Unit receive a post discharge phone call within 48 hours to determine the overall quality of nursing care received during surgery and recovery.

In 2007, a majority of patients rated the “Overall Nursing Care and Service” in Same Day Surgery as excellent.
Post Anesthesia Care Unit Role in Throughput and Collaboration

In 2006, the Post Anesthesia Care Unit experienced a high volume of boarders (non-surgical patients using the bed space and nursing care services) primarily due to the full capacity of hospital in-patient beds.

To address this concern, a multidisciplinary team developed a plan to improve the placement of our postoperative patients, as well as patients being hospitalized from our Emergency Department, direct admissions and transfers from other institutions.

Nursing also worked with the Surgery Institute to regulate our Same Day Surgery admits.

A noticeable improvement occurred by February 2007 and was sustained throughout 2007.

This collaborative effort directly improved patient, family and nurse satisfaction.

Number of Patients Boarding in the Post Anesthesia Care Unit

- Boarders 2006
- Boarders 2007

34,400
Number of surgical cases performed in the operating rooms of Cleveland Clinic’s main campus; 28% were outpatient surgeries.
Patient Experience

**Outpatient**

We ask our patients about their experiences and satisfaction with the services provided by our staff. Although our patients are already indicating we are providing excellent care, we are committed to continuous improvement.

**Overall Rating of Care**

*0 worst - 10 best scale*

*QDM=Quality Data Management, a national patient experience survey vendor*

**Overall Rating of Nursing Staff**

*0 worst - 10 best scale*
Overall Rating of Pediatric Outpatient Care
0 worst - 10 best scale

![Mean Score Chart](chart1.png)

Pediatric Outpatient
Problems with Post Visit Instructions

![Mean Score Chart](chart2.png)
Inpatient - Cleveland Clinic

With the support of the Center for Medicare and Medicaid Services (CMS) and its partner organizations, the first national standard patient experience survey was implemented in late 2006. Adult medical, surgical, and obstetrics and gynecology patients treated at acute care hospitals across the country are included in the survey. Results collected for initial public reporting, published on www.hospitalcompare.gov in March 2008, are shown here.

Overall Rating of Care
0 worst - 10 best scale
October 2006 - June 2007

Would Recommend Facility
October 2006 - June 2007
Innovations

Nursing Wellness

Nursing Wellness reaches out to nurses on the main campus and regional sites. The focus is to add wellness to everything we do. Here are some of the programs and efforts that were created in 2007 through Nursing Institute wellness activities:

• Refresh Center: The center was created for nursing employees to rest for about 20 minutes before leaving work after a night shift. The Center offers a shake awake alarm; access to caffeinated beverages; ear plugs; and a comforting, warm washcloth/towel.

• Refresh Breaks: These provide “time out” for employees to receive a 10-minute Reiki session at no charge.

• Sanctuary Spaces: quiet, private spaces with a massage chair give nurses the opportunity to relax and recharge during their shift without leaving their units.

• Wellness Orientation: New employees to the Nursing Institute are introduced to personal wellness and self care during nursing orientation.

• Energized, the theme of the wellness modules for 2007 and 2008, involved the creation of the “Green Apple Corp” to increase awareness of staff around positive wellness behaviors such as healthy eating, drinking enough water, asking for help or taking a time out.

The Red Carpet Program, Attracting and Engaging Nurses Every Step of the Way

• A welcome program for the more than 1,000 student nurses who affiliate with Cleveland Clinic each year.

• Students are greeted at their initial visit by a liaison from Nursing Education, who welcomes them and gives them a comprehensive Red Carpet Packet that includes a welcome letter from the Chief Nursing Officer, a DVD introduction to the Nursing Institute, student clinical rotation evaluation forms, information on student shift opportunities, helpful hints if applying for a job online and more.
Career Coaching for Nurses

Career Coaches, a retention program, utilizes experienced Cleveland Clinic nurses to address nursing issues.

- The coaches hear issues of nurses and identify and address their needs quickly and, if requested, privately.

- They survey new nurses at 3 months, 6 months, 12 months and 18 months of employment to learn what is working to facilitate retention after hire.

- A Senior Nurse Retention Council was formed to address the unique career needs of experienced nurses.

Cleveland Clinic Employees Become Nurses

A U.S. Department of Labor grant aimed at alleviating healthcare worker shortages and creating career opportunities for incumbent employees was awarded to Cleveland Clinic and Cuyahoga Community College.

This partnership provided employees of the Cleveland Clinic Health System the opportunity to attend an on-site nursing program at their place of employment. An unprecedented piece in this collaboration was the use of Cleveland Clinic nurses as clinical adjunct faculty. This sharing of the educational process served to ameliorate the burden that finding additional nursing faculty placed on the community college.

Student evaluations of the clinical experiences were extremely positive. Not only did our employees recognize our nurses as clinical scholars, they also stated they felt a sense of pride and belonging to the Cleveland Clinic nursing community.
**Deans' Roundtable Faculty Initiative**

The shortage of nursing school faculty consistently surfaces as the leading problem facing schools of nursing. The Deans' Roundtable Faculty Initiative was formed to address the faculty shortage aggressively. It is a collaborative effort between Cleveland Clinic and participating schools of nursing.

Key deliverables of this initiative:

- identify, recruit and support area nurses interested in serving as faculty
- offer faculty development programs for nursing faculty in Northeast Ohio
- strengthen relationships between service and education in Northeast Ohio

Faculty Allocation Tool: a website that matches potential faculty with available teaching opportunities. Nurses independently manage their profiles and faculty work commitments.

The website:

- is open to all eligible nurses.
- includes the continuum of teaching venues (i.e., clinical, classroom, skills lab, preceptor, research).
- allows all participating schools to recruit potential faculty.
Boot Camp for New Faculty
This is an introductory course for new faculty, standardized across all participating schools. Boot Camp is offered twice each academic year. It is taught by faculty from participating Schools of Nursing.

Annual Faculty Development Programs: Schools of Nursing and Cleveland Clinic collaboratively sponsor an annual faculty development program, sharing expenses and minimizing cost to attendees.
A Family Affair in the Neonatal Intensive Care Unit

Families of critically ill infants want to spend as much time as possible at the baby’s bedside. Many families travel long distances to visit, so Neonatal Intensive Care Unit (ICU) nurses created a new opportunity for family instruction.

“Video on Demand” is an online resource that allows family members in the Neonatal ICU to view educational videos right from their baby’s bedside computer. Nurses can download educational videos important for family members’ education.

Using disposable earphones decreases excess ambient noise in the Neonatal ICU. In addition, this educational venue provides nurses the ability for immediate follow-up regarding family member understanding of instructions and facilitates questions by family members about their baby’s progress and care.

Family-Centered Rounds

Communication is a critical element in safe patient care.

A multidisciplinary team in the Pediatric Institute & Children’s Hospital that includes nurses, pediatric residents, hospital medicine staff and unit secretaries collaborated to improve patient safety through use of Family-Centered Rounds.

Measurable outcomes of Family-Centered Rounds include:
• improved patient/family satisfaction
• improved length of stay and timeliness of discharge
• reduced medication prescribing errors
• improved effectiveness of communication among caregivers
• timely medication reconciliation
• active involvement of patients and their families in the patient’s plan of care
Journal Articles


**Erwin-Toth P.** Skin changes from radiation therapy. *J Wound Ostomy Continence Nurs*. 2007 Sep;34(5):546.


Fonarow GC, Abraham WT, **Albert NM, Stough WG, Gheorghiade M, Greenberg BH, O’Connor CM, Sun JL, Yancy C, Young JB.** Carvedilol use at discharge in patients hospitalized for heart failure is associated with improved survival: An analysis from Organized Program to Initiate Lifesaving Treatment in Hospitalized Patients with Heart Failure (OPTIMIZE-HF). *Am Heart J*. 2007 Jan;153(1):82.e1-82.e11.


Fonarow GC, Abraham WT, **Albert NM, Stough WG, Gheorghiade M, Greenberg BH, O’Connor CM, Sun JL, Yancy CW, Young JB.** Prospective evaluation of beta-blocker use at the time of hospital discharge as a heart failure performance measure: results from OPTIMIZE-HF. *J Card Fail*. 2007 Nov;13(9):722-731.


Mitchell RL. Migraine headaches come to camp. CompassPoint. 2007 Sep;17(3):11-14.


Tabone G, Shainoff J. Finally -- the perfect resource for triage nurses! AAACN Viewpoint. 2007 Jan-Feb;29(1):12.


**Book Chapters**


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866.293.7866

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Cleveland, OH 44195

RN and LPN Nurse Recruitment
Cleveland Clinic Administrative Campus
Building 3
3050 Science Park Drive
Beachwood, OH 44122
Cleveland Clinic Overview

Cleveland Clinic, founded in 1921, is a nonprofit multispecialty academic medical center that integrates clinical and hospital care with research and education. Today, 1,800 Cleveland Clinic physicians and scientists practice in 120 medical specialties and subspecialties, annually recording more than 3 million patient visits and more than 70,000 surgeries.

In 2007, Cleveland Clinic restructured its practice, bundling all clinical specialties into integrated practice units called institutes. An institute combines all the specialties surrounding a specific organ or disease system under a single roof. Each institute has a single leader and focuses the energies of multiple professionals onto the patient. From access and communication to point-of-care service, institutes will improve the patient experience at Cleveland Clinic.

Cleveland Clinic's main campus, with 37 buildings on 140 acres in Cleveland, Ohio, includes a 1,000-bed hospital, outpatient clinic, specialty institutes and supporting labs and facilities. Cleveland Clinic also operates 14 family health centers; eight community hospitals; a 150-bed hospital and clinic in Weston, Fla.; and health and wellness centers in Palm Beach, Fla., and Toronto, Canada. Cleveland Clinic Abu Dhabi (United Arab Emirates), a multispecialty care hospital and clinic, is scheduled to open in 2011.

At the Cleveland Clinic Lerner Research Institute, hundreds of principal investigators, project scientists, research associates and postdoctoral fellows are involved in laboratory-based research. Total annual research expenditures exceed $150 million from federal agencies, non-federal societies and associations, and endowment funds. In an effort to bring research from bench to bedside, Cleveland Clinic physicians are involved in more than 2,400 clinical studies at any given time.

In September 2004, Cleveland Clinic Lerner College of Medicine of Case Western Reserve University opened and will graduate its first 32 students as physician-scientists in 2009.

Cleveland Clinic is consistently ranked among the top hospitals in America by U.S. News & World Report, and our heart and heart surgery program has been ranked No. 1 since 1995.

For more information about Cleveland Clinic, visit clevelandclinic.org.

Online Services

eCleveland Clinic

eCleveland Clinic uses state-of-the-art digital information systems to offer several services, including remote second medical opinions to patients around the world; personalized medical record access for patients; patient treatment progress for referring physicians (see below); and imaging interpretations by our subspecialty trained radiologists. For more information, please visit eclevelandclinic.org.

DrConnect

Online Access to Your Patient’s Treatment Progress

Whether you are referring from near or far, DrConnect can streamline communication from Cleveland Clinic physicians to your office. This online tool offers you secure access to your patient’s treatment progress at Cleveland Clinic. With one-click convenience, you can track your patient’s care using the secure DrConnect website. To establish a DrConnect account, visit eclevelandclinic.org or email drconnect@ccf.org.

MyConsult

MyConsult Remote Second Medical Opinion is a secure online service providing specialist consultations and remote second opinions for more than 600 life-threatening and life-altering diagnoses. The MyConsult service is particularly valuable for people who wish to avoid the time and expense of travel. For more information, visit eclevelandclinic.org/myconsult, email eclevelandclinic@ccf.org or call 800.223.2273, ext 43223.

For more information about Cleveland Clinic, visit clevelandclinic.org.
Cleveland Clinic

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Cleveland Clinic is a nonprofit multispecialty academic medical center. Founded in 1921, it is dedicated to providing quality specialized care and includes an outpatient clinic, a hospital with more than 1,000 staffed beds, an education institute and a research institute.

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