Feature Story

Innovation in Quality Nursing Care

Cleveland Clinic Nursing Translates Leading Innovation into Clinical Practice - p. 01

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“Innovation distinguishes between a leader and a follower.” ~ Steve Jobs

When Steve Jobs introduced the Macintosh computer, the iPod and the iPhone, he was trying to give people what they needed – not just a better version of what they had. Jobs understood that innovation is what leaders do, while followers just make improvements on what already is.

This same attribute is what sets The Stanley Shalom Zielony Institute for Nursing Excellence apart from its peers – the leadership our nurses demonstrate in innovation and creativity that gives patients what they need – better care and outcomes.

The institute’s leadership is dedicated to supporting these efforts. Our ACNO of Clinical Practice and Research, Deborah Small, RN, BSN, MSN, has reached out across the Cleveland Clinic health system to implement the Nursing Institute Shared Practice Council. This council provides a forum for identification and dissemination of evidenced-based practice standards and improved patient care.

Nancy Albert, PhD, CCNS, CCRN, NE-BC, FAHA, FCCM, and her team in the Department of Nursing Research and Innovation have successfully guided nurses through the research and publication process. As a result, our evidence-based practice innovations have become recognized and adopted by nursing institutions nationwide.

In this issue of Notable Nursing, we look at nurse-driven innovation and creativity that have a direct impact on patient care, experience and outcomes.

I’m proud of the lead our nurses take in identifying areas of care that can be improved, conducting research that results in new evidence-based practices, and implementing practical solutions to daily challenges.

Their efforts, inquisitiveness and foresight continually advance the quality of care and the patient experience at Cleveland Clinic – and distinguish our nurses as leaders.

I hope you enjoy reading about our efforts.

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Executive Chief Nursing Officer
Stanley Shalom Zielony Chair for Nursing Advancement
Chair, The Stanley Shalom Zielony Institute for Nursing Excellence

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Cleveland Clinic’s Nursing Institute has been renamed The Stanley Shalom Zielony Institute for Nursing Excellence in recognition of Mr. Stanley Zielony’s generous gifts to advance nursing education, informatics, research and clinical practice at Cleveland Clinic.

Nurses from all of Cleveland Clinic’s system hospitals and family health centers compose the Stanley Shalom Zielony Institute for Nursing Excellence. For a listing of all locations, visit clevelandclinic.org.
As a tertiary referral center that cares for some of the most complex patients in the country, Cleveland Clinic has a long history of innovation. Today, with nursing care performance scores and hospital comparisons readily available to all healthcare consumers, applying innovative thinking to improving direct patient care at the bedside has never been more important.

In this era of transparency and healthcare reform, nurses across the Cleveland Clinic health system are meeting these challenges head-on by doing what they have always done—applying their clinical and technological knowledge to develop creative new ways to ensure that they consistently deliver world-class care to every patient.

Highlighted here are some of the most effective innovative ideas that have been put into clinical practice throughout the health system with the dual goal of providing the highest quality nursing care and increasing and sustaining quality care measure scores.
Cleveland Clinic was one of the early adopters of the electronic medical record (EMR), beginning a systemwide transition in 2002. Now, standardization of nursing documentation in the EMR is helping Cleveland Clinic become one of the first major health systems in the country to achieve clinical integration.

After four months of planning and a two-and-a-half month rollout earlier this year, standardized nursing documentation screens were implemented on all inpatient nursing units in eight of the Cleveland Clinic health system’s regional hospitals and main campus hospital. As a result, “all inpatient nurses now have the same level of functionality, making nurses the first clinicians to achieve this integration milestone,” says Marianela Zytkowski, RN-BC, DNP, MS, BSN, Director of Nursing Informatics.

Standardizing nursing documentation supports Cleveland Clinic’s goals of delivering the highest quality care and putting patients first at every hospital in the system, stresses Michelle Ditzig, RN, BSN, Nursing Informatics Liaison. “Standardization makes reports easier for nurses to produce, and facilitates greater accuracy and efficiency in reports produced,” she explains. “It saves nursing time and means a better product for the patient.”

Nursing Informatics created four work groups that developed customized screens for med-surg, pediatrics, intensive care, and behavioral health nursing. The screens capture useful clinical information and meet legal and regulatory standards.

The results satisfy six of Medicare’s “meaningful use” criteria for the EMR that must be met by 2015, Dr. Zytkowski says. In the near-term, “screens also are expected to enhance communication and documentation, making nursing practice seamless across the entire health system,” she adds.

All nursing documentation screens are research-based. “We wanted documentation to reflect delivery of care that meets the highest clinical standards according to the latest research,” explains Chris Wrobel, RN, BA, Nursing Informatics Liaison. “The availability of information enables all of us to provide a higher level of care for our patients.”

The screens will be updated as research serves up new standards of care. “This will be an ongoing project,” Wrobel says. “I believe we are just at the beginning of what will develop in the field of nursing informatics during the next several years.”

MARIAZELA ZYTKOWSKI, RN-BC, DNP, MS, BSN, is Director of Nursing Informatics for the Cleveland Clinic health system.

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Email comments to notablenursing@ccf.org.
PAIN Champions at Cleveland Clinic hospitals are registered nurses who serve as a resource to their nursing staff colleagues and to residents with the goal of optimizing pain management for patients.

Pain Champions completed an intensive eight-hour class presented by faculty members from the Zielony Institute and Anesthesia Institute. This initiative has been supported for the past 18 months by leadership including the main campus Chief Nursing Officer, clinical directors and the Anesthesia Institute Chairman.

“Nurses learn from a multidisciplinary team about pain perceptions and conventional and unconventional treatments for pain,” program coordinator Maureen Palmer, RN, BSN, MBA, CRRN, NEA-BC, explains.

The curriculum introduces nurses to pain management resources and alternative modalities such as music therapy and massage therapy offered through the Cleveland Clinic Wellness Institute. “The class is designed to expand nurse’s knowledge of patient pain perception, what contributes to it, and how to negotiate pain management expectations with patients,” Palmer adds.

After completing the class, nurses are ready to serve as pain management resource personnel on inpatient units. As pain champions, they are prepared to answer questions about pain management from nursing colleagues, contact a physician about a patient’s pain management prescription or educate residents about alternative methods for managing pain.

If a Pain Champion perceives the need to make a change in a patient’s pain management prescription, the attending physician is paged and a request is made. The physician writes the new order in Cleveland Clinic’s electronic medical record, and the change is implemented almost immediately. Overnight and on weekends, change orders are managed through the acute pain service so that patients can experience effective pain relief without delay, Palmer adds.

Esther Bernhoffer, RN, BSN, was an attendee at the inaugural Pain Champion Class. “I was very interested in pain and our unit pain satisfaction scores needed improvement,” Bernhoffer says. “There is minimal nursing education in pain management in traditional nursing programs. This class is a very important ‘fill’ for that gap. Nurses on our units are now becoming increasingly more aware of pain management as an important component of healing.”

Between January 2009 and May 2010, the Pain Champion program was associated with a 14-point increase in response to the question “Was my pain managed the way I wanted it to be?” of the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS).

But improving HCAHPS scores is secondary to the main goal, Palmer stresses. “We go by the philosophy that every nurse is a Pain Champion nurse,” she says. “Our goal is to ensure our mission of “patients first” and deliver optimum patient experiences.”

MAUREEN PALMER, RN, BSN, MBA, CRRN, NEA-BC, is Senior Director, Medical Surgical Nursing and Director of Nursing for the Digestive Disease Institute.

ESTHER BERNHOFER, RN, BSN, is a Pain Resource Nurse and 2010 Vice-Chair of the Nursing Research and Evidence-Based Practice Council.

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We are all familiar with the old adage “Give me a fish, I eat for a day; teach me to fish, I eat for a lifetime.” This sage advice underscores the key to effective diabetes management — an educated patient.

At Cleveland Clinic’s Huron Hospital, certified diabetes educators in the Lennon Diabetes Center apply an interactive, hands-on teaching strategy that helps outpatients be successful in managing their diabetes. Using a personal quality improvement approach, the award-winning program focuses on self-efficacy, explains Program Coordinator Sue Cotey, RN, CDE. “We help patients make behavioral and lifestyle changes through a four-step process that includes planning, goal-setting, checking and action.”

In a series of three weekly classes, patients learn how to graph their blood sugar, keep a diet and exercise journal — which is shared with the class in week 2 — make a plan, and act to achieve their goals.

Group dynamics are as important to the class’ success as the teaching format, Cotey says. “The class becomes a mini-support group with lots of idea sharing.”

Class graduates are invited to participate in ongoing support groups and receive a three-month telephone follow up. After a year, patients return for a one-hour consult.

When the Lennon Diabetes Center changed to this interactive teaching format in 2002, the class completion rate soared from 60 percent to the high 90’s, where it has remained for the past eight years.

“Outpatient diabetes self management programs [DSME] are integral to helping patients solve everyday dilemmas,” says Mary Beth Modic, RN, MSN, CNS, CDE, Clinical Nurse Specialist in diabetes at Cleveland Clinic’s main campus. Equally important is the education patients receive in the hospital.

“Many providers think that diabetes education provided by the bedside nurse is inappropriate because patients are too ill to learn. But this belief is inaccurate because hospitalization may be the impetus for patients to realize the importance of glucose control. Additionally, many patients are diagnosed with diabetes while in the hospital for another condition. Diabetes survival skill education in the hospital includes the following themes: health promotion (foot care, substance use, follow-up care, and exercise), nutrition, and medications. It will be the newly diagnosed patient’s first introduction to managing their diabetes,” says Modic.

A diabetes management mentor program has been established at Cleveland Clinic to enhance diabetes skills and knowledge of bedside nurses and refine their teaching skills. Another critical component of this program is that the diabetes management mentors do not just answer colleagues’ questions, but promote critical thinking and problem solving. The mentors meet monthly and are provided with educational tools to use with staff that foster thoughtful decision making, frame clinical problems, and identify educational resources.
“Being a Diabetes Manager mentor allows me to work side by side with my colleagues and listen to their questions,” says Elizabeth Barr, RN. “This helps me to assess educational needs. Being a mentor also enables me to teach a diabetic person before their discharge, which is a priority for me. Working with staff and patients on a daily basis encourages a team approach to discharge planning.”

This program has been in existence for about one year at the main campus. “The requirements to become a Diabetes Management Mentor are quite rigorous,” says Modic. Mentors must have attended a four-hour overview of diabetes management as well as successfully completed a 16-hour comprehensive diabetes course. In addition, they must complete precourse work and simulate a patient teaching interaction on an assigned diabetes survival skill. Their teaching is evaluated for accuracy of content, creativity, and use of effective teaching techniques.

The goal of this program is to empower staff nurses with confidence and the ability to teach patients effectively and role model behaviors that staff nurses wish to emulate.

“Teaching is more than transmitting knowledge. It’s engaging the learner to think and behave differently, question deliberately, and make informed choices,” says Modic. This is true if you are the patient or the nurse. This program educates both.

ELIZABETH BARR, RN, is a Diabetes Manager Mentor on Cleveland Clinic’s main campus.

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Communication

Nurses at Cleveland Clinic Euclid Hospital are proving that ingenuity can be more important than technology in delivering high-quality patient care.

By using two simple communications tools—white boards and patient daily planners—nursing has improved patient satisfaction and boosted the hospital’s HCAHPS scores in the nursing communication and “would recommend categories.”

“We observed that there was sufficient variation in how nurses communicated with patients to make a difference in our ability to maintain high scores on nursing communications,” explains Jayne McCarthy-Lynch, Director, Patients First at Euclid Hospital.

Through patient focus groups, nursing evaluated the use of white boards as a tool to resolve communication issues. The result was a next-generation white board that takes the conventional tool to a new level of effectiveness.

The redesigned boards feature distinct, preprinted fields for every member of the healthcare team to complete; checkboxes for glasses, dentures, hearing aids and feeding assistance; a pain scale; the patient’s desired bedtime; and more information related to the patient’s safety, comfort and care. Team members are expected to complete their sections as soon as possible after admission.

“It’s a tool to help us act as a unit and have a total team approach,” McCarthy-Lynch says. “And the more we keep our patients informed, the greater their confidence and trust.”

Simultaneous with the white boards, nursing introduced a daily planner that lists the patient’s scheduled tests, diet and activity for the day. Nursing generates the planners from data in the electronic medical record and distributes them to each patient every day.

“The idea originated from our patient satisfaction team as a way to inform patients and their families about the daily care plan and to let them be involved in their care,” explains Jeanine Nemecek, RN, BSN, Nurse Manager, Orthopedics.

The planner frequently sparks conversation between the patient and family and family and nurse, which benefits the patient, she says. The planner also enhances patient safety by improving awareness of patient medication orders, reducing the risk of error.

“We believe that when communication levels are high, overall patient satisfaction and ‘would recommend’ scores will be improved,” Nemecek concludes.

**JAYNE MCCA AcYTHY-lynCH** is the Director of Patients First at Euclid Hospital.

**JEANINE NEMECEK**, RN, BSN, is a Nurse Manager for Orthopedics at Euclid Hospital.

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Cleveland Clinic at Home in partnership with the Cleveland Clinic Sydell and Arnold Miller Family Heart & Vascular Institute, integrates distance health monitoring with home-based cardiac rehabilitation. The program is offered to adult patients, living in their own homes (or with a caregiver) who have decreased mobility, multiple morbidities and limited access to follow-up care.

“The program is designed to decrease 30-day readmission rates in this high-risk population and allow them to complete their post-acute recovery in the comfort of their own homes,” explains Cindy Vunovich, RN, BSN, MSM, Administrator of Home Health and Hospice, Cleveland Clinic at Home. In a three-month pilot, Heart Care at Home reduced readmission rates for post-MI and HF patients to 20 percent, 8 percent below the national average.

At discharge, participants are equipped with a transmitter and wireless devices for recording weight, blood pressure, heart rate and blood oxygen saturation. Patients are responsible for recording and transmitting their information daily to the Heart Care at Home nurse, who is a cardiovascular-trained nurse working at Cleveland Clinic’s home care office. The nurse partners with a hospital-based nurse practitioner and a cardiologist to manage patients and optimize the plan of care.

“If a patient exceeds his or her established parameters, the nurse intervenes by a phone call and consultation with the patient’s physician, if needed,” Vunovich says. The Heart Care at Home nurse also delivers patient education on specific topics such as medications and side effects or diet and lifestyle changes via a two-way transmitter, she adds.

Daily monitoring and recording of vital signs reinforces the importance and impact of following medication and diet regimens. In many instances, medication management is a tremendous challenge for patients. Telehealth nurses instruct patients and families in medication schedules and actions. Additionally, dietitians educate patients on how to read food labels and teach food modification techniques that meet the patient’s dietary recommendations. Providing patients with the tools they need to track their progress reinforces the patient’s self confidence, which ultimately results in better outcomes and quality of life for patients.

The comprehensive cardiac rehabilitation program includes home visits by a physical therapist, a dietitian and, for some patients, a home health nurse. The desired length of service is limited to between 30 and 40 days post-discharge.

Garnering both clinical success and high patient satisfaction ratings, Heart Care at Home will be expanded from the current 100 patients to 250 during the next 18 months.

CINDY VUNOVICH, RN, BSN, MSM, is the Administrator of Home Health and Hospice.

Email comments to notablenursing@ccf.org.
As the electronic medical record (EMR) moves into mainstream clinical practice across the United States, learning how to effectively use it has become an essential element in nursing practice. To prepare tomorrow’s nurses to be effective practitioners and leaders, Cleveland Clinic, one of the first major health systems in the country to implement the EMR, is pioneering EMR education for nursing students.
In July 2010, the Zielony Institute, in conjunction with the Center for Online Medical Education and Training (COMET) learning management system team, launched the third of four online courses developed for student nurses on the use of the EMR. The courses are offered exclusively through the institute’s Student Nurse Portal (SNP), which is available from any computer with Internet access 24 hours a day, 7 days a week.

The SNP was developed to support nursing programs in the area of nursing informatics at colleges and universities that are members of the Deans’ Roundtable, a consortium of deans and directors from Northeast Ohio schools of nursing and nurse leaders of the Cleveland Clinic health system and other healthcare centers. Educators from member institutions worked together to develop the SNP curriculum, making it a partnership between academia and healthcare delivery service recommended by the Technology Informatics Guiding Educational Reform Initiative (TIGER) during their 2007 summit (TIGER, 2007).

“Our goal was to make each of the courses as relevant to clinical practice as possible, bearing in mind that students who receive all or part of their clinical education at Cleveland Clinic do not necessarily seek employment here,” explains Anna Mary Bowers, RN, MSN, Director, Nursing Education Technology and Simulation at Cleveland Clinic. “To meet this need, the first three courses present information using a generic EMR, so what students learn is applicable to any system.”

Students who participate in clinical rotations at any Cleveland Clinic facility are required to complete the online courses prior to their first clinical experience. The first two modules introduce the EMR concept and explain its application as a clinical information repository and a communication tool. Building on this basic knowledge, the third module teaches students how to enter data in the EMR, retrieve results, and locate documents needed to provide optimal patient care. Examples are provided of online documents; such as the history and physical, medication administration records, allergies, and nursing admission information screens.

The text and exercises in the newest module reinforce the importance of timely nursing documentation in the EMR at the point-of-care so that information is immediately available to any member of the interdisciplinary team, Bowers says. “We want student nurses to understand that the information they provide is vital to the delivery of quality care by the entire healthcare team. Ultimately, timely documentation promotes achievement of our mission of patients first,” she notes.

With the aim of helping students develop critical thinking skills, the third course is designed to help them take the first steps on the data-to-wisdom continuum. “We emphasize that data is just numbers until it is given a label and shared among the healthcare team for patient care,” Bowers explains. “Data entered into the EMR becomes information about the patient. Information accumulated by caring for patients with similar diagnoses results in the development of a body of nursing knowledge. Data can be extracted, analyzed and used to advance nursing science and improve clinical decision making. Over time, EMR data can be used to develop critical thinking or wisdom.”

The third course requires 45-60 minutes to complete. The student must verify completion of the course by taking a quiz at the end. To encourage students to refresh their knowledge as needed by reviewing the material, they can access all of the courses online as often as they wish after completing each module.

The fourth course planned for the portal will be a tutorial focused specifically on the use of the EPIC system, Cleveland Clinic’s EMR. This course will be available only to those students specifically doing their clinical rotation at a Cleveland Clinic facility. Eventually, the portal will be open to Cleveland Clinic staff nurses across the enterprise so they can increase their understanding of the EMR, Bowers says.

Anna Mary Bowers, RN, MSN, is the Director of Nursing Education, Technology and Simulation.

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No one understands patients quite like nurses. Nurses care for patients 24/7 and manage all their needs. Yet when it comes to research, nurses lag behind physicians.

“Many clinical nurses think research doesn’t apply to them,” says Nancy Albert, PhD, CCNS, CCRN, NE-BC, FAHA, FCCM, Director of the Department of Nursing Research and Innovation. “They think it’s only conducted at universities by academic nurses.”

With so many areas of nursing that need further study, Cleveland Clinic actively encourages nursing research through both the Department of Nursing Research and Innovation and the Nursing Research and Evidence-Based Practice Council. The council was established five years ago to help “engage more staff nurses in understanding and participating in nursing research and evidence-based practice,” says Dr. Albert. This year, for the first time, council members are leading and conducting two research studies (in addition to studies approved by the Institutional Review Board that are currently under way by non-council members).

“Research priorities are so vast because we deal with the whole person as well as health promotion,” says Monica Weber, RN, MSN, CNS-BC, CIC, Patient Safety Officer/Magnet Program Manager and 2010 Council Chair. “Before initiating our Council-led research, we looked for topic themes that spanned a wide range of disciplines and would expand our body of nursing knowledge.”

One study deals with an area of major concern for nurses: patients with pre-existing chronic pain who are hospitalized with an acute condition. While the assessment and management of acute pain has improved dramatically over the past decade, pre-existing chronic pain is often overlooked. “Few patients present with one condition. A patient who comes in for surgery may have arthritis or back pain,” says Esther Bernhofer, RN, BSN, Pain Resource Nurse at Cleveland Clinic, a co-investigator for the study and Council Vice-Chair. “When we looked through the literature, there was nothing about how bedside nurses dealt with patients who have chronic and acute pain.”

Bernhofer and her co-investigators are interviewing 27 nurses about their experience assessing and managing patients with chronic pain. Their study advisor is Sandra L. Siedlecki, PhD, RN, CNS, Senior Nurse Researcher in the Department of Nursing Research and Innovation. “Nursing has a big void in looking at interventions for chronic pain. We want to find out what nurses are currently doing so we can develop some interventions to change the process,” says Dr. Siedlecki.

Nurse retention is the focus of the second study, which is investigating whether hardiness of newly hired nurses and their primary preceptors affects nursing turnover, a major issue for most major hospitals. So far, researchers have collected survey data from 212 preceptors and 68 new nurses. “We’re interested in whether level of hardiness is associated with new nurse retention over time (six months and one year), if hardiness in nurse preceptors leads to an increase in level of hardiness in newly hired nurses, and if new nurse hardiness affects satisfaction with orientation and preceptorship mentorship. We do not know how important hardiness is as a concept in retention, based on current literature available. If hardiness isn’t the factor to look at, we’ll move on to something else,” says Dr. Albert, the study advisor.

“It’s important to understand the most important factors in retaining nurses. We may do additional in-depth studies of personality or environment factors and determine how they contribute to retention,” says Sherry Petryszyn, RN, BA, CNOR, Assistant Perioperative Education Coordinator and study PI.

As these studies are completed and disseminated, council members hope that more nurses will be inspired to pursue their research ideas. “We want council members to promote nursing research and show nurses they can do it and that we have resources available to assist them,” says Weber.
Nursing Research on Patient Falls

Luann Capone, RN, MSN, GNP-BC, Nursing Director for the Medicine Institute — along with Nancy Albert, PhD, CCNS, CCRN, NE-BC, FAHA, FCCM; James F. Bena, MS; and Shannon M. Morrison, MS — has been conducting a series of studies looking at characteristics of hospitalized cancer patients who fall.

In the first phase, published in the Journal of Nursing Care Quality (December 2009), researchers looked at cancer patients who fell, and compared them to published literature on hospitalized medical-surgical patients who fell. During the study period of one year, there were 158 patients with a cancer diagnosis as the primary reason for admission who had a “fall event,” defined as “any descent to the floor witnessed or not witnessed by hospital staff.”

According to Capone, findings suggested that hospitalized cancer patients who fell were similar to the general adult medical-surgical fall population. There were some interesting findings. It appears that hospitalized cancer patients who fell were less confused and slightly younger, and their fall risk appeared to be associated with elimination needs. Additionally, about half of them (45.9 percent) received at least one blood product during their stay.

Translating research into practice

This study indicates that the current fall prevention methods that focus on assistance with elimination, timely response to patient call lights, frequent rounding, and timely availability of bedside commodes in hospital rooms should be effective to reduce falls in hospitalized cancer patients. Results also suggest that a cancer-specific fall prevention method would be to use the blood product administration event as a trigger for the nurse to remind and encourage patients to call and wait for help.

Next steps

In the second phase of study, Capone learned specific predictors of falls in patients with cancer. In this phase of research, cancer patients from the first phase of study were compared with randomly selected and matched cancer patients who did not fall during their hospitalization. “New knowledge learned from this study is helping us create a risk score that predicts patients at higher risk for a fall event.”

In the third phase of this study, researchers will determine if there are differences in patients who fell and had a serious injury and patients who fell but did not have a serious injury. We will be able to determine how many of those with serious injuries had cancer and if there were any significant patient or environmental differences between groups.

The bottom line, says Capone, “is that everyone who comes to the hospital is at risk for falls. We need to target our interventions by better evaluating why someone is at risk. If we can isolate the specific reasons for fall risk, then we can focus on appropriate interventions to reduce fall risk. Our study is an initial attempt to explore the major risk factors for hospitalized cancer patients.”

The work is ongoing.

LUANN CAPONE, RN, MSN, GNP-BC, is the Nursing Director for the Cleveland Clinic Medicine Institute.

Email comments to notablenursing@ccf.org.
Researching Children’s Perceptions of Nursing Uniforms

Walk into any children’s hospital and you’re likely to see bright colors. “There’s a public perception that color and kids go together,” says Jane Burke, RN, BSN, MBA, CPN, Clinical Nursing Director, Cleveland Clinic Children’s Hospital. There is also a perception in the medical community that children are afraid of white uniforms. But do these perceptions match reality? Two Cleveland Clinic studies looked into this issue.

In 2006, Nancy M. Albert PhD, CCNS, CCRN, NE-BC, FAHA, FCCM, investigated whether the colors of a nurse’s uniform affected perceptions of nurse professionalism in adults and children. While children did not associate a nurse’s uniform with nurse professionalism, they overwhelmingly chose a bright colored print uniform as their favorite. Preference ranking for white was below the bold print top, but the lowest-rated choice was the uniform worn by Cleveland Clinic Children’s Hospital nurses — small yellow handprint (the hospital logo) on a white background with blue and green accents.

Adults, on the other hand, especially those older than 44, chose a white uniform as the most professional. Findings from the 2006 study validated the decision made in 2005 to have Cleveland Clinic nurses who care for adult patients wear white uniforms; the handprint design was adopted to add color to pediatric nurses’ uniform.

To further explore children’s responses to uniform color, and the handprint design in particular, Albert and Burke conducted a second study from 2007-2009, which focused on emotions associated with uniform color, rather than nurse professionalism traits. Study participants included 233 children, aged 7 to 17. More than half of the participants were outpatients and 60 percent were girls.

The participants’ baseline emotional state was evaluated using the State Anxiety Inventory for Children (SAIC): How-I-Feel Questionnaire, which includes 20 feelings, ranging from calm and happy to nervous and scared. Most children (65 percent) reported no anxiety symptoms but 34 percent had mild anxiety at the time the research was completed.

Children were shown photos of a nurse in the same pose wearing six different uniform colors in the same style: white top/pant, royal blue top/pant, two bold print top/white pant sets (one pink and the other yellow) and two small print top/white pant sets (one a small flower print and the other the Cleveland Clinic handprint design). Using the mean uniform emotion scale developed for the study, participants were asked which uniform they associated with 20 emotions. They were then asked to name which uniform color they would prefer to see nurses’ wear.

The results were clear: the three bright-colored uniforms (solid blue and yellow and pink bold prints) were associated with most positive emotions, such as happy and relaxed. No one uniform color was associated with negative emotions; in fact, overwhelmingly, participants chose the “does not matter” option for uniform choice depicting negative emotions. Thus, our hypothesis that a white uniform would be associated with negative emotions was not validated.

Regarding preference, the results were similar to the first study. Most children (81 percent) chose the bold prints and royal blue pantset. True to their gender, more boys preferred blue and girls pink. The least preferred uniforms were the handprint style, white top/pant and the small flower print design. “Based on this study, we clearly need to change the uniform. There’s a lot of interest in choosing a bright and cheerful uniform. We want to make the entire hospital experience the best it can be,” said Burke.

JANE BURKE, RN, BSN, MBA, CPN, is the Clinical Nursing Director at Cleveland Clinic Children’s Hospital.

NANCY ALBERT, PhD, CCNS, CCRN, NE-BC, FAHA, FCCM, is Director of Nursing Research and Innovation.

Email comments to notablenursing@ccf.org.
Say “blood management” to most nurses, and they probably think of hanging blood and blood products. However, according to the recently launched Blood Management Home Page on the Cleveland Clinic Intranet, “Blood management is the appropriate provision ... use ... and strategies to avoid the need for a blood transfusion.”

To help nurses and other clinicians learn more, Cleveland Clinic is hosting a series of programs to observe Blood Management Week, which runs from November 7-11 this year. According to Deborah Tolich, RN, MSN, Regional Director for Blood Management Programs, there will be a number of programs and activities for nurses and other clinicians to learn more about blood management. The activities will be capped off with the annual Blood Management Summit on November 13. For more information on the summit, visit clevelandclinicmeded.com.

The Blood Management Summit programs will feature a number of speakers on important topics, including: anemia, preoperative therapies, intraoperative blood-loss management, program development, appropriate blood acquisition and storage, and more.

“Nurses will find a great deal of information to increase their awareness of blood management,” Tolich says. For example, “when we hang blood, we are not always doing [for the patient] what we think we are doing. Transfusions cause a decrease in immune function thereby increasing the risk of infection. Additionally, storage causes changes in the cells that can cause micro-circulatory occlusion. Blood transfusion therapy can actually increase hospital length of stay, not decrease it.”

Tolich explains that a lab value, such as hemoglobin and hematocrit, is just one factor used to determine whether blood should be administered. “You have to look at the whole clinical picture,” she says. Nursing assessment of how the patient is tolerating anemia is valuable to physicians in determining transfusion need. When speaking to a physician instead of just relaying lab values quantifying that information with vital signs, activity level, and intake/output places the nurse in a position of collaboration. Blood management interventions that nurses can employ are reducing the number of laboratory draws by batching and combining lab orders, and delivering interventions (IV iron and red cell growth factors) per physician orders as a means to enhance hemoglobin levels.

While Tolich is the Regional Director for blood management programs, Mick Benitez-Santana is the Director for Cleveland Clinic’s main campus, and there are individual programs (each with their own nurse coordinator) located at Fairview, Lakewood, Lutheran, and Hillcrest hospitals.

DEBORAH TOLICH, RN, MSN, is the Regional Director for Blood Management Programs.

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When it comes to working overseas, nurses who have been trained or have experience working in Western nations including the United States, Canada, Great Britain and Australia are highly valued for the level of expertise in nursing care they bring with them, according to physicians and nurses working at the Sheikh Khalifa Medical City (SKMC) in the United Arab Emirates (UAE). *(Cleveland Clinic manages and operates SKMC, a network of healthcare facilities in Abu Dhabi. For more on SKMC, see sidebar.)*

“Nurses with Western experience, especially those from the United States, are held in extremely high regard by physicians. Physicians from all over the world who serve at SKMC know that Western nurses have received outstanding training,” says Robert Lorenz, MD, an otolaryngologist who practices at SKMC and is also Chief of Staff of Cleveland Clinic Abu Dhabi (CCAD), slated to open in 2012. Cleveland Clinic is developing CCAD in partnership with Mubadala Healthcare and will manage the 360-bed physician-led medical facility. *(For more on CCAD, see sidebar.)*

“Nursing here is seen as a very important part of the multidisciplinary healthcare team,” she says. “There are more than 65 nationalities represented among our staff and patients, and everyone works together. Although Arabic is the language of the country, English is the predominant language for business and is widely spoken.”

Regarding her move to the UAE, Ray says, “This is a very beautiful, cosmopolitan area with year-round sunshine, palm trees and beaches,” says Ray. “Abu Dhabi is an interesting mix of modern technology and high-rise buildings amid the traditional architecture of the Middle East. It was easy for me to make the decision to move to the UAE.”

**Career Development Overseas**

Among the various departments and in the Emergency Department at SKMC, which serves about 100,000 patients a year, there are plenty of opportunities for nurses to develop and grow professionally, Ray says. Shared governance and professional clinical ladder programs are in place. In addition, SKMC has been working toward Magnet® recognition since 2006, with a goal of achieving designation as a Magnet hospital in 2011.
About 800 nurses will be hired to fill staffing needs at CCAD, as well as openings at SKMC, says Scott Simmons, Director of International Recruitment at Cleveland Clinic. Overseas nursing is an adventure, he adds, and people who would enjoy working in a multicultural community and learning about new environments will find the UAE stimulating. He adds that Cleveland Clinic is developing a cross-cultural training program to teach nurses about adapting to life in a Muslim culture.

Cindy Urbancic, RN, MBA, Executive Director of Cleveland Clinic International Operations, points out a few differences between working in the United States and working in the UAE. “The work week is different; it runs from Sunday to Thursday because Friday is the holy day. Plus, there are different holidays (than in the United States), like Ramadan.”

Working overseas enhances your nursing skills, says Michelle Machon, RN, MSN, Director for Acute and Critical Care at Cleveland Clinic Abu Dhabi. “You have the opportunity to share your workplace with co-workers from many different nationalities, which then gives you a great perspective on nursing the multi-cultural population that we have in Abu Dhabi.”

She adds that Abu Dhabi is a unique city that offers much to its inhabitants, including music festivals, annual triathlon events, the Formula One Grand Prix in November each year and will also offer so much more when Saadiyat Island opens in 2013 with the Louvre and Guggenheim museums.

About Sheikh Khalifa Medical City (SKMC)
SKMC is a 571-bed facility accredited by The Joint Commission International and has ICU, CCU, Pediatric ICU and step-down units, as well as general medical and surgical units. In addition, the Behavioral Science Pavilion has 125 beds; the Abu Dhabi Rehabilitation Center has 88 beds; and there are 13 outpatient specialty clinics, six family health clinics, three urgent care centers and eight OR suites (set to expand to 11 this year). A pediatric emergency department is currently under construction. In June 2009, SKMC was accredited by the Society of Chest Pain Centers as a cycle III Chest Pain Center — the only hospital so recognized outside the United States.

About Cleveland Clinic Abu Dhabi (CCAD)
Like its counterpart in the United States, CCAD will be led and staffed by physicians who are North American-trained and board-certified or the equivalent. CCAD will include a multispecialty tertiary care center and adjacent clinic. It will offer the most advanced tertiary/quaternary medical services in the region through a comprehensive range of specialties and subspecialties. The hospital will have the latest technologies in surgery, imaging, telemedicine and electronic medical records. An integrated clinic-hospital design will serve local and international patients.

Certifications Needed to Work in the UAE
The Health Authority of Abu Dhabi sets the requirements for healthcare workers from overseas. To meet position qualification requirements, nurses must have the required experience and provide certain documentation, including:
- High school graduation certificate
- Graduation diplomas from a three-year nursing or a BSN program
- Current nursing license
- Letters from previous employers
- Two years of nursing experience

In addition, it’s recommended that nurses who wish to work in a specialty area have copies of specialty certifications.
In this era of healthcare reform, nursing departments frequently struggle with the need to balance innovation and the highest quality care with the realities of cost efficiencies. At Cleveland Clinic, the Zielony Institute is partnering with Supply Chain to achieve shared clinical and financial goals — and proving that it is possible to combine leading-edge, quality clinical care with cost-effectiveness.

“We are sharing information on metrics, outcomes and research to successfully achieve a balance between quality and cost,” says Susan Stafford, RN, BSN, MPA, MBA, Associate Chief Nursing Officer for Nursing Informatics.

Partnering for change
The Zielony Institute has taken the lead on numerous projects to evaluate new or comparable products that have similar outcome potential. Nurses have the clinical knowledge and experience that drives the decision process while Supply Chain personnel bring the business expertise in contracts and negotiations to the table.

This collaboration allows nurses to adopt the latest technology to support delivery of excellent outcomes and still be consistent with Cleveland Clinic’s financial goals. “Patients benefit when we use better products. Nursing and Supply Chain partnership efforts are supporting patient outcomes,” Stafford says.

“The change process in a health system the size of Cleveland Clinic — more than 11,000 nurses working across the healthcare system — is complex,” she notes. For example, when it was identified there was a need to upgrade the large volume intravenous (IV) pump fleet to a current, more technologically advanced IV pump, staff nurses, physicians and leadership across the health system were included in the process.

From evaluation to bedside use
To start, Supply Chain personnel worked with stakeholders to identify the next-generation, most technologically advanced pumps on the market with features that could enhance patient safety and quality of care. IV pump evaluation sessions were conducted in which nurses and physicians were able to compare IV pumps. Supply Chain personnel performed cost analyses on different pumps and, combined with clinical input, a recommendation was made for selection and approval.

The Baxter Sigma Spectrum infusion pump was selected. Stafford notes that “we are leveraging state-of-the-art wireless technology, an extensive onboard master drug library and standardized processes that support positive patient outcomes.” Simultaneous with the Sigma pump conversion, Cleveland Clinic also converted to the Baxter needle-less IV tubing system that not only standardizes tubing across the health system but gives opportunities for cost savings.

The systemwide roll-out conversion of IV pumps and tubing required changes in nursing practice across the health system. Changes were communicated through nurse directors, nurse managers on inpatient units and ultimately to bedside nurses. Training on the new IV pumps and needle-less IV tubing is provided to all front line staff through on-site in-service training.

“Nurses at all levels support the change process at Cleveland Clinic by being open to learning about new products and how to apply them in nursing practice,” Stafford says.

“Openness to innovation is shared across the Zielony Institute. When nursing leadership and bedside staff embrace change for the benefit of patients, we can implement quality changes. Partnering with Supply Chain only makes sense.”

SUSAN STAFFORD, RN, BSN, MPA, MBA, is Associate Chief Nursing Officer for Nursing Informatics.

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Therapeutic Hypothermia for Cardiac Arrest

Many patients do not survive cardiac arrest and the majority of those who do suffer some degree of permanent brain damage resulting from global brain ischemia. In recent years, a new treatment — therapeutic hypothermia — has proved effective in preventing brain damage. Cooling patients to bring body temperature down to 32 to 34 degrees Celsius reduces the body’s need for oxygen and slows the release of chemicals that are activated when oxygen isn’t circulating because the heart has stopped beating. The cooling state is maintained for 12 to 24 hours. In one research study, 55 percent of patients who were cooled had a return of normal brain function with no neurological deficits post arrest compared with 39 percent of those who weren’t cooled.

Hospitals have been slow to implement hypothermia therapy despite a recommendation by the American Heart Association, but it is getting more attention from the medical community. Some cities — including Boston, New York, Seattle and Miami — require ambulances to take cardiac arrest patients to hospitals that offer hypothermia. In 2009, Cleveland Clinic Hillcrest Hospital began using hypothermia therapy with its cardiac arrest patients. “Our goal is to reduce tissue metabolism and protect the brain from lack of oxygen,” says Jo Ann B. Barrett RN, BSN, Nurse Manager at the Hillcrest Hospital Emergency Department.

The treatment is indicated in patients who are in a comatose state and are over 18 years old, have return of spontaneous circulation within 60 minutes and stable blood pressure of at least 90 mmHg systolic. Cooling can be carried out by internal or external methods. Hillcrest Hospital uses external cooling: the patient wears a thermosuit and is immersed in a body-shaped rubber pool attached to a machine that circulates ice water. Once the body is cooled, the low temperature is maintained with cooling blankets.

The most critical phase of the treatment is passive re-warming, which must be done slowly, with the temperature raised not more than 1 degree Celsius every three hours, to allow the brain to recover. “It’s a one-on-one nursing assignment and very labor intensive,” says Wendy Calta-Hanson, RN, MSN, NE-BC, Nurse Manager of the Coronary Care Unit at Hillcrest Hospital.

Proper training of nurses is critical to successful implementation of therapeutic hypothermia. Mary Ann Dyer, RN, MSN, CEN, CCRN, CCNS, who was an early advocate of the treatment as Clinical Nurse Specialist in the Emergency Department, attended a training course and has trained and offered assistance to nurses throughout Cleveland Clinic. She was involved in the care of all six Hillcrest Hospital patients who received treatment. One was a 64-year-old man who was admitted with poor neurological function and is now working and living a normal life. “We plan to keep working to get the right people involved in understanding and delivering this intervention at the right time. We want to improve outcomes for post cardiac arrest patients so their quality of life after hospitalization is the best it can be,” says Dyer, who is now Stroke Coordinator at the Primary Stroke Center.

JO ANN B. BARRETT, RN, BSN, is a Nurse Manager in the Emergency Department at Hillcrest Hospital.

WENDY CALTA-HANSON, RN, MSN, NE-BC, is the Nurse Manager of the Coronary Care Unit at Hillcrest Hospital.

MARY ANN DYER, RN, MSN, CEN, CCRN, CCNS, is a Stroke Coordinator at the Cleveland Clinic Primary Stroke Center.

Email comments to notablednursing@ccf.org.
Since 2002, Cleveland Clinic and its community hospitals have honored deserving nurses with the Hall of Fame Award. The award celebrates nurses who demonstrate special skills, dedication and compassion in delivering bedside patient care. Nurses are nominated by hospital employees, physicians and volunteers. Two nurses are chosen from each hospital, and all winners and their guests attend an award dinner and ceremony.

These 24 exceptional individuals exemplify the highest quality patient care. Each serves as a model of professionalism and demonstrates the honor and sense of purpose that are at the heart of nursing.

This year’s winners:
To add yourself or someone else to the mailing list, change your address or subscribe to the electronic form of this newsletter, visit clevelandclinic.org/nursing and click on Notable Nursing Newsletter.
When it was founded in 1961, Cleveland Clinic’s R.B. Turnbull, Jr., MD, School of WOC Nursing was the first of its kind in the world. Since then, it has graduated more than 1,500 of about 6,000 WOC nurse specialists practicing throughout the world.

In June 2010, Cleveland Clinic began offering its wound, ostomy, continence (WOC) educational program online with its first class of students. The program was the vision of Paula Erwin-Toth, RN, MSN, CWOCN, CNS, WOC, Nursing Education Program Director, and was made possible through a generous grant from Mrs. Ann Goldstein to support WOC Nursing Education. The Ann Goldstein Online WOC Nursing Education Program offers students the same range of curriculum and access to expert faculty as the live school program. Online WOC Nursing Education allows students to complete the program and become eligible for certification right from the comfort of their own homes with many opportunities to interact with classmates and faculty along the way. Each course includes a clinical component that may be completed with an approved local WOC nursing preceptor.

“The training prepares students to play a vital role in pre- and post-operative management of the person with an ostomy; to be instrumental in the prevention and treatment of pressure ulcers, fistula, and other skin disorders; and to be a specialist in the care of patients with urinary and fecal incontinence. Students will acquire the necessary skills to provide patients with effective psychological support, discharge planning, rehabilitation counseling and follow-up care,” says Linda Stricker, RN, MSN/ED, CWOCN, Assistant Director, WOC Nursing Education.

TO ENROLL in the upcoming fall 2010 class, applicants must be registered nurses and have earned a BSN and have a least one year of medical-surgical nursing experience.

VISIT clevelandclinic.org/OnlineWOC for further details on this program and information on registration.