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NURSE NAVIGATORS: GUIDES TO QUALITY

It can be a vicious cycle: nurses who become dissatisfied with healthcare's work environment sometimes leave their profession because they find it impossible to deliver care that meets their own standards of quality. But as experienced nurses leave the bedside, quality suffers even more.

No one disputes this nation's nursing shortage or the shortfalls of quality in healthcare. Nationally, nursing is one of the top professions undergoing attrition due to baby boom retirements. Fewer nurses are entering the profession at a time when more are needed. Locally, the turnover rate in nursing and allied professions hovers stubbornly around five percent. Policy makers everywhere are scrambling for ways to retain and attract nurses.

The Nurse Navigator Fellowship, which made quality its cornerstone, was designed in part to address retention issues by combining some key elements needed for job satisfaction – the right vision, the right people, the right methods. Pittsburgh's Jewish Healthcare Foundation launched the first Nurse Navigator Fellowships a year ago in partnership with the Robert Wood Johnson Foundation.

The program's premise was simple: when given the tools, scientific data-gathering skills, and permission to improve care at the bedside, nurses feel greater satisfaction

from their work, and patients receive measurably better care. Nurses win. Patients win.

The Nurse Navigator program was launched partly in response to findings from a survey JHF conducted after its 2003 Magnet Summit. The Foundation held the summit to help acquaint nursing administrators with the American Nurses Credentialing Center's Magnet Program, which was conceived to help hospitals improve recruitment and retention. The survey revealed that 15 of 38 hospitals in the region were pursuing Magnet status, with eight more considering it. Most hospitals believed that Magnet status could aid retention and recruitment. However, hospitals foresaw a major obstacle: Magnet criteria called for nurses to pursue research. The Nurse Navigator program not only entailed quality improvement projects, but also showed how daily bedside nursing benefits from credible – and teachable – measurement techniques.

Fellowship Program Structure

Teamwork among JHF and its supporting organizations helped the Nurse Navigator Program succeed: Health Careers Futures (HCF) selected the participants and organized the work while the Pittsburgh Regional Health Initiative (PRHI) supplied training in Perfecting Patient CareSM (PPC) – its

"The only criticism we encountered was that these nurses wanted more of everything – more training, more time, more information. It's the kind of criticism we love."

Karen Wolk Feinstein, PhD
JHF President and CEO

A LOOK AT THE NUMBERS

The Nursing Staff Shortage

The nursing shortage that marked the beginning of this decade is expected to grow worse because the workforce is aging and the pool of younger replacement workers is smaller. At the same time, demand for nursing is forecast to increase as the population ages. In recent years, professional dissatisfaction has compounded effects of the demographic shift. Nursing grants have focused on improving working environments and retention. Expanded training capacity and minority recruitment also could help ease anticipated shortages.

Number of Registered Nurses (estimated and projected)		Supply	Demand	Shortage
2000	PA	104,392	109,815	5%
	USA	1.89 million	2.00 million	5.5%
2005	PA	104,368	115,201	9%
	USA	2.01 million	2.16 million	6.9%
2010	PA	103,426	120,492	14%
	USA	2.07 million	2.34 million	11.5%
2015	PA	99,517	127,301	22%
	USA	2.06 million	2.56 million	19.5%
2020	PA	94,759	135,140	30%
	USA	2.0 million	2.81 million	28.8%

Source: Robert Wood Johnson Foundation, adapted from "Projected Supply, Demand, and Shortages of Registered Nurses: 2000-2020," developed by the U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, National Center For Health Workforce Analysis

own adaptation of the Toyota Production System's quality engineering principles.

Each provided on-site coaches, including: Lexie Alton, MSN, RN, Director of Health Professions Advancement; Barbe Jennion, M.Ed., Education Coordinator; Mimi Priselac, MSN, RN, Learning Center Director; Jan Setzenfand, BSN, RN, Patient Care Educator; Fran Sheedy-Bost, M.Ed., PPC Project Leader; and Debra Thompson, MSN, RN, Chief Nursing Officer. Thompson directed the program.

Nine nurses were chosen from dozens of applicants, based on their proposed quality improvement projects and on their capacity for leading change. They completed the four-day PPC University and a specially designed curriculum on data collection. Thompson made regular rounds of the sites to mentor and teach the nurses and their teams how to apply PPC principles. The nurses also benefited from monthly meetings where they shared information on the triumphs and challenges of implementing change.

Host institutions gave the Nurse Navigators time for training and meetings; JHF provided \$10,000 stipends. Perhaps most important, the institutions agreed to put the nurses in the driver's seat of their improvement efforts.

"It was one of the most rewarding events of my career," said Kathy McPherson, RN, of Alle-Kiski Medical Center. "JHF thought enough of me to buy some of my time, and the hospital consented so that I could do some of the quality improvements I'd been dreaming of. They invested in me."

Projects yield important results

"The Nurse Navigator Program exceeded our expectations, which had been high to begin with," said JHF President Karen

Wolk Feinstein, PhD. "These projects were in such capable hands. Every one of them produced measurable improvements in patient care and nursing satisfaction. The only 'criticism' we encountered was that these nurses wanted more of everything – more training, more time, more information. It's the kind of criticism we love."

This special edition of Branches provides snapshots of the nine demonstration projects beginning on page 3.



PHILANTHROPY TARGETS NURSING

The current nursing shortage is different from those of the past: it doesn't just reflect cyclical demographic and economic changes; there is widespread professional dissatisfaction. Among other evidence, a report five years ago from the Robert Wood Johnson Foundation (RWJF) highlighted workplace unrest. Since then, in addition to recruitment, foundation grants in nursing have increasingly targeted changes in the work environment that might improve retention.

Certainly, that's been a major goal for RWJF, which has made nursing grants totaling more than \$140 million since 1972.

"We have paid a lot of attention to retention as we believe that it had a very direct connection to the quality of care patients receive," said RWJF's senior program officer, Susan Hassmiller, PhD, RN.

At one time, RWJF's initiatives emphasized development and training, fellowships and scholars programs, such as the Executive Nurse Fellows program. But, after its 2002 study, *Health Care's Human Crisis: the American Nursing Shortage*, RWJF refocused its investments on transforming the hospital work environment. The hope was to create workplaces in which employees are engaged and supported in their jobs and where better work processes contribute to cultural revitalization and enhanced patient care.

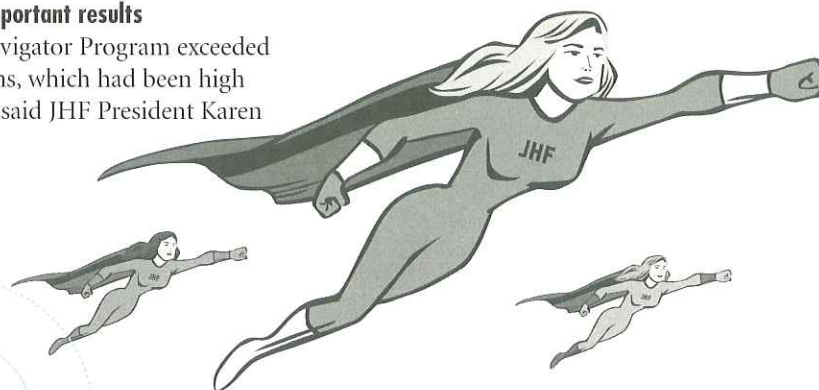
Consistent with its focus on retention, RWJF last year contributed \$100,000 to the Nurse Navigators Fellowship program.

"Hospital environments are chaotic and we wanted to give nurses the tools to bring order out of the chaos," said Mimi Priselac, a registered nurse and former

hospital president who now directs the Pittsburgh Regional Health Initiative's Learning Center and the four-day university that teaches PRHI's Perfecting Patient CareSM methods. The Toyota-based methods were used to train the Nurse Navigators in quality engineering.

Preliminary findings from the Nurse Navigator Fellowship suggest that improvements in work processes and patient care go hand-in-hand with improvements in the work environment.

RWJF now hopes to find ways to introduce quality improvement tools and systems thinking into nursing education. "Faculty and the curriculum they teach also need to be reinvigorated for the 21st Century," said Dr. Hassmiller. "This is what is needed in the new work environment."



9 IMPROVEMENT YEARS

For a full year, nine Nurse Navigators learned new ways to accelerate improvements in their units. All received an intensive, four-day course in Perfecting Patient CareSM (PPC), an engineering-based improvement system adapted for healthcare by the Pittsburgh Regional Health Initiative (PRHI). (All subsequent references to this training in the following vignettes will be abbreviated as PPC; a description of PPC appears on page 4.) Each Nurse Navigator chose a different project, and each made measurable improvements. Through these grants, the Pittsburgh area gained a total of nine “improvement years” of progress. Here are the highlights.

Systematizing Care in Crises

After years as an intensive care unit (ICU) nurse at Allegheny General, Maureen Saxon-Gioia transferred to obstetrics, where every case encompasses two patients – mother and child. She noticed that urgent responses didn’t go as smoothly with OB patients as they had in the ICU.

“Caring for sick pregnant patients requires focused care in an emergency,” she said. “We knew we could raise performance levels. We needed to find the road to change.”

Saxon-Gioia’s Nurse Navigator project involved helping the unit to use rapid response for OB emergencies and ICU-like practices for stabilizing sick moms. She coordinated her efforts with the Medical Emergency Team (MET), still serving on its committee.

Applying quality engineering principles of PPC, Saxon-Gioia educated staff about the benefits of standardized work and use of the MET. She conducted drills and mock exercises, timing team members, for example, on how long it took to get a defibrillator to the bedside or obtain emergency medicine from the pharmacy dispensing machine.

One surprising finding was that it took nearly three times longer to retrieve a vital medication from the dispensing

unit than it did to go to a room and get it off a shelf. Each room has since been stocked with its own supply. Many other seemingly small changes have reduced response times. As the entire hospital has grown more comfortable making earlier calls to the MET, patients’ cardiac arrest rates are down significantly throughout the hospital.

“I was especially gratified,” said Saxon-Gioia, “when after one presentation, the Vice President of Corporate Contracting for the health system expressed a genuine interest and desire to involve me, a frontline caregiver, in improving the Pyxis [pharmacy dispensing] system using PPC. Pyxis may become a better system because of a simple time trial we did.”

Improving Efficiency

The Alle-Kiski Emergency Department, where Kathy McPherson has worked for 24 years, needed a makeover. As remodeling began, McPherson saw a chance to make process improvements in the unit. She concentrated on eliminating bottlenecks, improving flow for nurses and patients.

“Originally, I wanted to re-do the whole ED,” said McPherson, “but I realized that was like aiming for world peace today. I decided to narrow my focus and streamline the processes I could. It turned out to be streamlining supplies.”

Like many of the Nurse Navigators, McPherson said that learning how to observe work was the most important skill she learned in PPC training. It allowed her to see with new eyes just where the problems were, and to know which changes were likely to be the right ones.

FELLOWSHIP PARTICIPANTS*

Kimberle A. Barker, BSN, RN
Clinical Coordinator, Surgical Services
Grove City Medical Center
Patient identification

Laura Mainarich, BSN, RN, CPN
RN Clinical Leader
Children’s Hospital of Pittsburgh
Standardization of patient hand-off process

Kathleen McPherson, BSN, RN
Clinical Nurse II, Emergency Department
Alle-Kiski Medical Center
Improving efficiency in the Emergency Department

Albert H. Minjock, MSN, RN, CCRN, FCCM
Nursing Administration, Unit Director
UPMC Shadyside
Nurse-driven, goal-directed therapy

Lynda Nester, BSN, RN
Nursing Quality Assurance Coordinator
Monongahela Valley Hospital
Fall prevention

Jacqueline M. O’Brien, MSN, RN
Infection Control Practitioner
UPMC St. Margaret
Preventing infection

Christopher Saunders, BSN, RN
Improvement Specialist
UPMC Presbyterian Shadyside
Reducing staff turnover

Maureen Saxon-Gioia, BSN, RN, CNRN
Staff Nurse
Allegheny General Hospital
Meeting the needs of the OB patient in medical crisis

Deneen Sobota, RN
Nursing Coordinator
Family Services of Western PA
Redesign patient evaluation process and reduce waiting times

** Titles and institutions identified above reflect those under which participants worked while completing their Nurse Navigator Fellowships*



PERFECTING PATIENT CARE™

9 IMPROVEMENT YEARS
CONTINUED

Perfecting Patient Care™ (PPC) is an adaptation of the Toyota Production System developed for health care. PRHI was a national forerunner in bringing these industrial quality engineering principles to clinical settings.

Like the Toyota model, which American industry adopted widely in the 1980s and 1990s to improve quality and regain competitive standing, PPC aims to eliminate waste, inefficiency and error in health care through a cycle of continuous improvement and standardization of work practices.

The similarities don't end there. The principles underlying work redesign are the same, no matter what the work. Just as manufacturing problems are more readily identified and solved on a factory floor than in an office or a boardroom, tangible improvements in healthcare are best made as close to the bedside as possible, at the point of care. Process improvement of any kind also requires an environment in which the discovery of problems is regarded as an opportunity for learning rather than an occasion for blame. In addition, it requires that problems be analyzed and solved in real-time, not days or weeks after the fact.

Under the PPC approach, each time problems or errors occur, clinicians trained in quality engineering principles identify possible causes and implement countermeasures. These rapid-cycle experiments yield incremental improvements in care. The experiments and the incremental changes continue, bringing about best practices. As best practices are standardized, waste and errors are eliminated, costs are lowered and care is perfected.

Like Toyota, PPC holds that pursuit of perfection is the only tenable goal. Anything less would set limits on achievement, rather than setting the stage for continuous improvement.

PPC may begin in a single unit or department. But once work redesign gets underway, problems often are traced to practices outside that unit, creating a ripple effect that extends improvements to other units. The quality improvements in one unit also often inspire emulators in others. Either way, the result is spreading quality.

For example, McPherson observed and mapped the way nurses actually started IVs, drew blood, and gave medication – processes repeated some 50 times a day in the ED. She watched nurses run to one cabinet for a syringe, to the pharmacy dispensing machine for meds, to an IV basket for supplies, and so on. A nurse moving without interruption needed 20 minutes to complete the routine.

Together, the nursing team eliminated the IV baskets and created blood draw “kits” for every room, ensuring that supplies and equipment are at hand every time medication is picked up. Completing the routine now takes 10 minutes, saving eight hours of nursing time – an entire shift – per day.

ED construction provided a great opportunity to reconfigure supply storage areas using a PPC practice known as 5S – shorthand for sort, straighten, shine, standardize and sustain. To the frustration of staff, too much of the wrong kind of inventory was stored, and shortages of needed supplies caused chaos and hoarding. Time and materials were wasted.

The 5S discipline involves making sure people have all – and only – the supplies they need, available immediately, in perfect condition. As construction proceeded, all inventory was subject to 5S.

In the end, more than \$2,000 in inventory was recovered for other uses, and several linen carts were redeployed elsewhere. Counter-intuitively, as inventory was reduced, supplies ran out less often.

“Maureen Saxon-Gioia and I were the two staff-level nurses among the Nurse Navigators,” said McPherson. “We’re not high in the nursing hierarchy. Being given the chance to improve quality has been personally and professionally rewarding.”

Preventing Infections

For decades, nurses and doctors have been trained to perform hand hygiene every time they leave a patient's room, when hands are visibly soiled, or after

changing a dressing. But escalating infection rates in the nation's hospitals – usually traced to inadequate clinician hand hygiene – led to updated guidelines: hand hygiene (either soap and water or alcohol hand rub) must be done on entry and exit from each patient's room. In and out.

“It's primal. Nobody wants to ask or be asked, ‘Did you wash your hands?’ People want to believe that they wash their hands appropriately,” says Jacqueline O'Brien, Infection Control Practitioner at UPMC St. Margaret. “The guidelines say ‘in and out,’ and it's a huge culture change to make that understood and make it happen.”

O'Brien's Nurse Navigator project centered on lowering the rates of hospital-acquired, antibiotic-resistant infections by improving hand hygiene and use of personal protective equipment (PPE), such as gowns, gloves, masks and caps, during encounters with patients in isolation. She selected a telemetry and surgical unit for the intervention.

The stakes couldn't be higher. In 2004, patients across Pennsylvania spent 205,000 additional days in the hospital due to hospital-acquired infections, with billings exceeding \$2 billion. Some 1,793 people died from them.

Using PPC methods, O'Brien observed the way things were done. She surveyed staff to determine attitudes toward hand washing and PPE, and to assess “any sacred cows that remained.”

The survey uncovered big differences in attitudes, depending on training, specialty, and prior workplaces, making the introduction of standardized practice difficult. Fully a third of workers were afraid that observing hand washing and PPE would delay emergency responses. O'Brien and her team started by ordering more comfortable gowns and making PPE supplies readily available.

But perhaps most significant was the elevation of the Patient Care Technician or Nurse's Assistant to emergency responder. During emergencies, PCTs or NAs help the care team like members of a racecar's pit crew. They run to rooms, prepare the PPE and help clinicians put it on. It saves time and raises compliance with isolation measures. Infection rates are down.

"An Institute of Medicine report in 2000 stated that 33 percent of hospital-acquired infections could be prevented with good infection control practices," said O'Brien. "I believe that number is far, far higher. We're aiming for zero infections."

Preventing Falls

Lynda Nester still remembers when her great-grandmother fell, and broke her hip, setting off the decline that led to her death several years later. Preventing falls is a passion with Nester because even today 25 percent of patients with hip fractures die within a year and only 25 percent fully recover.

Fortunately, her commitment is shared by top leadership at Monongahela Valley Hospital, where Chief Executive Officer Louis J. Panza, Jr. recently declared "zero falls" a hospital-wide goal. Enlisting everyone in the cause, from the CEO to the vendors of slippers and beds, is Nester's idea of teamwork, and the basis of her Nurse Navigator program on preventing falls.

"Falls traumatize patients and healthcare workers, too," said Nester.

Nester and her team evaluated various high- and low-tech options, from color-coded patient wrist bands and low beds, to alarms and slipper socks with more slip-resistant treads.

Vendors played a key role, along with non-clinical members of the care team. For example, bed alarm reps were asked to see if they could fix chronic false alarms, which gave staff little choice but to disconnect devices designed to keep patients safe. They pegged the problem to improper storage. With that information, the maintenance crew

created hangers to store the alarms properly and also make them easier to find. The devices are again in routine use.

Low beds are of particular value, said Nester, and buying enough of them meant a large investment on the part of the hospital. But instead of resistance, she found kindred spirits in the purchasing department who understood how devastating falls can be. The head of the department gave an impassioned plea for the low beds, and their number is continuing to increase.

Interdisciplinary communication of this kind propelled Nester's work. The teams now have standardized "5 Ps" for patients at risk of falling: protect (with alarms and low beds); pain (make sure it's managed); potty (offer toileting); position (ensure comfort); and provide (phone, water, education). Before leaving a room, staff members are trained to ask, "Is there anything else I can do for you?" and to assure patients, "I have the time." With that kind of prompt, patients are more likely to ask for help and less likely to try to get out of bed unassisted.

Standardized forms to identify patients' risks for falling are now discussed at every shift change. Nester realizes that's when many falls occur and is looking for ways to further streamline that process.

Falls at her hospital are down overall and five units have each celebrated a month with zero.

Reducing Waiting Times

It just didn't add up. Deneen Sobota knew that when patients came for their first appointments at Family Services of Western Pennsylvania, nurses routinely conducted thorough mental health evaluations. And yet physicians still seemed bogged down, clarifying answers and asking for more information.

"We were getting lots of good information in our evaluations," said Sobota. "But often, it wasn't the information the doctor needed."

At staff meetings, Sobota began to share what she was learning about process standardization in PPC training and how it might help improve the efficiency of

that crucial initial evaluation. Once reassured that their jobs were safe, staff welcomed opportunities to redesign work.

In mapping the way work had always been done, Sobota discovered that nurses jotted down answers to questions they thought the physician needed to know. That meant patients' initial interviews varied significantly. The lack of a standardized evaluation led to missed information. Consequently, appointments ran up to an hour behind, as physicians filled in gaps in the evaluations.

The team discovered that nurses working with children's doctors used a standardized set of intake questions. As a result, the kids' physicians generally had all the background information they needed during the first appointment. Nurses working on the adult care team researched and found a version of the pediatric intake tool they could use.

"The tool made it easier," said Sobota, "but once the nurses all got trained, they began making more refinements to it. Conducting efficient phone evaluations ahead of time increases the nurses' value as 'physician extenders' and reduces how long patients have to wait in the office."

Six evaluations can now be completed in the time it took to do four. Overtime has decreased. Patients' wait for the doctor is down 17 percent; the time they spend with the doctor is up by 7 percent, and their time with the nurse is up 10 percent.

Sobota will soon begin networking with counterparts from a PPC demonstration site at Children's Hospital's behavioral health unit, where a successful experiment to take all calls live has yielded vastly shorter waits for appointments. "I've got this new tool, PPC. It's like a stick, and I'm going to keep stirring," said Sobota.

Letting Nurses Start Treatment

In ICUs, where time is of the essence, a few minutes can mean the difference between recovery, permanent damage, and patient death. In a Nurse Navigator project titled "Nurse-driven, goal-directed therapy," UPMC Shadyside nurse Albert Minjock aimed to make every minute count when ICU patients' conditions took dangerous turns.

"It took three times longer to retrieve medication from the dispensing machine than to go to another room and get it off of a shelf."

Maureen Saxon-Gioia

Staff Nurse, Allegheny General Hospital



"When Nurse Assistants helped clinicians don protective equipment for emergencies, infection rates dropped."

Jacqueline O'Brien

Infection Control Practitioner
UPMC St. Margaret

UPMC St. Margaret

"Everyone from the CEO to suppliers has helped with reducing patient falls. Three units reported zero falls for one month."

Lynda Nester

Nursing Quality Assurance Coordinator
Monongahela Valley Hospital



"Six evaluations can now be done in the time it had taken to do four. Patients spend more time with doctors and nurses and overtime is down."

Deneen Sobota

Nursing Coordinator
Family Services of Western PA



"Giving nurses standardized care plans and the authority to implement them improved patient outcomes and saved more than \$1.4 million."

Albert Minjock

Nursing Administration, Unit Director
UPMC Shadyside

UPMC Shadyside

9 IMPROVEMENT YEARS
CONTINUED

In a timed trial, Minjock found it took an average of 33.8 minutes, once a patient's condition undergoes a critical change, for a nurse to recognize the crisis, page a physician, receive a return call, and start an intervention. That half hour didn't account for "languish time" spent seeking other assistance, supplies and so on. Research shows that the period of critical illness, when the most damage is done, usually lasts just an hour.

Minjock thought these situations could be dealt with more quickly if nurses had the authority to start treatment using standardized protocols. With critical therapies begun sooner, nurses would have better information to present to physicians responding to calls. He used PPC methods to support development and implementation of nurse-directed care.

"It's real-time problem solving at the point of care," said Minjock. "It's PPC applied clinically, and it works."

Creating flow charts and standardized protocols for commonly confronted conditions required teamwork, education, supplies and some start-up capital. The result: patients receive urgent care sooner. Also, in line with other research, certain practices that were found to be of little or no value are being eliminated.

"There is no evidence base for some of the things we do, like repeat CT scans after strokes, daily chest x-rays in intubated patients, or daily labs in patients without diagnosed metabolic disorders," said Minjock. "So we stopped."

Data on the first 100 patients with nurse-led intervention were better than expected. Length of stay in the ICU was reduced by more than three days. Ventilator usage decreased between 12 to 26 hours. In all, more than 292 ICU days were saved, reducing ICU bed costs alone by more than \$1.4 million.

The results have been noticed. "Nurses working on this project are being recruited to speak at physicians' grand rounds across the community," said Minjock.

Standardizing Handoffs

Shift change. Patient transfer. One clinician "hands-off" the patient to another. The information that accompanies a patient from place to place or situation to situation is crucial to the continuity and safety of care. In fact, lack of communication is cited as the root cause for 81 percent of medication errors and 75 percent of infections that take place in the hospital.

When the patients are children, the stakes are high indeed. That's why Laura Mainarich, a Nurse Navigator from Children's Hospital selected the patient care "hand-offs" between the recovery room and same-day surgery staff for her project.

Observing the way work was done was the key to discovering the first layer of improvements. The change-of-shift report, for example, took between two and four minutes. Without a standardized format for reporting, there was a risk of missing critical elements, such as medication information and isolation status. The observation revealed that during an eight hour shift, a nurse was likely to spend 20 minutes looking for additional information about a patient's condition.

Reducing "hunting and searching" by nurses, whether for equipment or information, is a key form of waste reduction. It also reduces nurses' frustration and improves the timeliness and safety of care. Mainarich worked with the staff to determine which critical pieces of information should be communicated among nursing staff. She is establishing a standardized report format that includes medication information and isolation status. As a result, every hand-off can be more thorough and clarifying questions fewer. The report will be tested and refined according to staff needs.

Mainarich foresees the day when patient hand-offs will be computerized, with standardized forms to complement current work processes and improve work flow. In the future, she hopes to see the newly standardized report format implemented in the recovery room as well. With a computerized system, she believes, needed information will be much more accessible to everyone on the care team.

Improving Identification Practices

"Why are you asking me whether I'm John Smith? I've known you since you were a kid!"

In a small town like Grove City, served by a 95-bed hospital, employees and patients are neighbors and friends. In a place where everyone knows everyone, the common safety practice of checking wrist bands to confirm patients' identities strikes some as absurd. It's not. Mistaken identity is a major problem in hospitals – one that regulators, insurance companies, and hospital boards want to see addressed.

Earlier in her career, Nurse Navigator Kimberle Barker had seen how it could happen on a fluke. A patient scheduled for cardiac catheterization at an institution where she once worked almost ended up with cataract surgery because he'd hastily picked up registration and consent forms that were waiting for someone with a similar name – Ward, not Wood. When Barker looked at his band and called him by name, they both realized there could have been a dreadful medical error.

It was the last thing she wanted to see happen again, so Barker chose patient identification as her project. She and others she trained observed work to see how breakdowns happen. It came down to ID bands. Not every patient had one. Outpatients weren't routinely given bands. One source of resistance was the patients themselves: in small-town America, "You know me," equals ID.

Knowing that communication would be critical to the effort, Barker gained support from hospital administration for banding all patients. The hospital's communications department encouraged stories and placed

announcements in local newspapers, letting residents know the reason for the new rule, preparing them for the day a neighbor who's the nurse on duty delivering medication might check that band and ask, "Are you John Smith?"

came up with answers that were both high-tech (training everyone on the electronic medical record system) and low-tech (making a routine for recharging wireless phones.)

"NEW KITS IN EVERY ER ROOM SAVED 8 HOURS OF NURSING TIME – AN ENTIRE SHIFT – EACH DAY." Kathleen McPherson, BSN, RN

Barker conducted 29 information sessions for the hospital's 300 employees. The sessions, introduced by the CEO or Vice President, were mandatory. Banding and active identification of all patients before medications and procedures began in late June. The latest observation showed compliance at 100 percent. Errors due to mistaken identity are way down.

"Having support from all areas of the hospital – from the Board to the CEO to Communications – led to broad acceptance by the staff and community," said Barker.

Reducing Nursing Staff Turnover

Ordinarily, nursing turnover in the UPMC Health System is lower than the national average – 3 percent compared with 5. But a distress call seemed to arise from the abdominal transplant unit: between 2004 and 2005, nursing turnover rose to an alarming 12 percent.

Christopher Saunders wanted to stop the exodus, so he selected nurse retention on the transplant unit as his project.

"The loss of intellectual capital is the worst part," said Saunders. "But the financial costs were staggering, too."

He found that it cost the transplant unit about \$40,000 to orient a new nurse. Total costs for nursing turnover reached \$880,000 from 2004 through 2005.

Using PPC-prescribed observations, Saunders identified process bottlenecks on the unit and other forms of waste. The solutions, he knew, would likely come from the frontline workers, so he went to them. Working together they

Not surprisingly, "Communication among nurses, physicians and lab improved dramatically," said Saunders.

Saunders also adapted a "distress call" system, which permits overwhelmed hospital units to post red flags to temporarily suspend admissions. He knew his unit couldn't actually call such a halt. But, by allowing each nurse to use the distress signal, Saunders thought the transplant unit staff could tackle problems one by one, before they affected the entire unit. After all, he reasoned: "One nurse has to become 'red' before the whole unit does."

The nurses on the unit further tweaked the system, posting red plastic balls atop sticks to indicate problems; yellow ones at first warning of overwork; or green, when their own work was going smoothly. Soon, nurses running on green sought out colleagues signaling red or yellow, offering immediate help.

A first principle of PPC is that workplaces must be safe for workers to voice problems before they can truly be safe for patients. Nurses thrived on the ability to signal overwork with impunity, and to find that their calls summoned help, not criticism. Teamwork, collegiality and mutual support flourished in the atmosphere. The color-coding system has spread to other units.

But have these interventions worked? Since Saunders' Nurse Navigator project began a year ago, turnover on the abdominal transplant unit has been zero.

FOUNDATIONS HELP TO TRANSFORM NURSING

Foundations are leading the way to better work environments, training improvements and stronger career ladders for nurses. The Robert Wood Johnson Foundation (RWJF) made a major national commitment through an initiative called *Transforming Care at the Bedside*; Pittsburgh's Jewish Healthcare Foundation (JHF) has focused on regional change. In addition:

Northwest Health Foundation last year teamed with RWJF to launch Partners in Nursing's Future (PINF), a \$10 million, five-year program designed to encourage local foundations to invest in new community strategies to stabilize the nursing workforce. Ten organizations in nine states received up to \$250,000 under the initiative and matched their grants with at least \$1 for every \$2 provided. Prior to the PINF program, NHF responded to Oregon's nursing shortage with *Investing in a Healthy Future: Strategies for Addressing the Nursing Shortage*, a \$2 million program to help build nursing education capacity. www.nwhf.org

Blue Cross Blue Shield Foundation of Michigan, a PINF grantee, teamed with Michigan State University to launch *Nursing for Life: the RN Career Transition*, a statewide, two-year program that could be a national model to ease the nursing shortage by transitioning nurses into home-based hospice care. www.bcbsm.com/foundation

Gordon and Betty Moore Foundation began the Betty Irene Moore Nursing Initiative in 2003 to alleviate regional shortages and strengthen training, including implementation of "best practice" programs. www.moore.org

John A. Hartford Foundation has invested more than \$40 million over eight years in programs related to geriatric nursing, including professional development for academic geriatric nurses in areas of research, scholarship and leadership. www.jhartfound.org

Palm Healthcare Foundation has made a 10-year, \$2 million commitment to a Nursing Education Initiative to address the education and professional development needs of the Palm Beach County's nursing students, faculty and practitioners. www.palmhealthcare.org

The **California Endowment** continues to expand its *Welcome Back Centers* initiative to integrate internationally trained health professionals into local healthcare systems. Since 2000, the Endowment has provided more than \$2.3 million to develop and implement the program in San Diego and more than \$3.5 million for the San Francisco center. www.calendow.org

The **W. K. Kellogg Foundation** helps increase racial and ethnic diversity in nursing through a \$2 million grant in support of the Leadership Enhancement and Development Project of the American Nurses Foundation. www.wkkf.org

RESOURCES

Toolkit

Health Careers Futures Toolkit
www.hcfutures.org/hctoolkit.asp

Download this easy-to-use information on career awareness, literacy, and job preparedness either in hard copy or electronically.

Classes

Pittsburgh Regional Health Initiative, Perfecting Patient CareSM University
www.prhi.org

PRHI is pleased to announce the 2007 schedule for its popular Perfecting Patient CareSM University. To date, over 1100 people have taken this course, in Southwestern Pennsylvania and across the country. In 2006, the curriculum underwent streamlining and continues to earn praise from participants.

Tuition for PPC University's regularly scheduled four-day sessions includes instruction, all background reading, workbooks and customized materials, and catered meals.

Pittsburgh 2007 Class Schedule

- March 19-22
- May 14-17
- July 16-19
- September 17-20
- November 12-15

Information and online registration at www.prhi.org or contact Registrar Barbara Jennion, bjennion@prhi.org or 412-586-6711.



The Jewish Healthcare Foundation (JHF) is a not-for-profit public charity that supports healthcare services, education, and research to encourage medical advancement and protect vulnerable populations.

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