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Building a New Nursing Model

*Sharing decisions about
nursing practices*

Collaborative Governance of Patient Care

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From the Chief Nursing Officer

A New Model of Patient Care

BY CINDY DAY, RN, MS, VICE PRESIDENT FOR PATIENT CARE



The Department of Nursing at Stanford University Hospital and Clinics has a rich history of innovation and excellence in nursing practice, clinical care, and service. *Stanford Nurse* was created more than a decade ago as a way to recognize, celebrate, and share the innovations that are such an important part of our culture. After several years without a publication, we are pleased to bring you this issue of *Stanford Nurse*.

Two years ago, a convergence of circumstances brought our new nursing leadership the opportunity to make a fundamental change in how we give care—it was clear that we needed to put in place structures to involve caregivers at the bedside as well as managers in determining our practices. In these pages, you will become familiar with the work that has been done to build an interdisciplinary decision making model that allows nurses and all clinical disciplines to participate in decision making about practice and patient care at the bedside. You will read about the work that nursing staff have done to create a nursing philosophy and to revise the nursing care model. Other articles describe our participation in the California Nursing Outcomes Coalition and the way multidisciplinary teams are working to apply evidence-based practice to patient care.

Numerous other initiatives to strengthen clinical care and the workplace are also underway at Stanford and will be featured in upcoming editions of *Stanford Nurse*.

Providing the best nursing care in the nation is fundamental to the overall goal of Stanford Hospital and Clinics: to become the best academic medical center in the nation. In this and in subsequent issues of *Stanford Nurse* we are proud to share the achievements of our nurses and to examine the differences they make in the lives and experiences of our patients.

A handwritten signature in cursive script that reads "Cindy Day".

A Commitment to Nursing Excellence

BY MARTHA H. MARSH, PRESIDENT AND CEO, STANFORD HOSPITAL AND CLINICS

As we work toward our goal of becoming the best medical center in the nation, nursing excellence at Stanford Hospital and Clinics is a key component. We work hard to provide a rewarding and educational work environment for our nurses—one that helps each Stanford nurse deliver excellent service to our patients.

One of our primary strategies to enhance nursing excellence at Stanford is to re-establish our designation as a Magnet Nursing Hospital. Stanford was one of the first Magnet Nursing Hospitals and I believe that, together, we can reach this designation once again. The development of a shared governance model, described in this issue, is one key step. This designation would be representative not only of our quality of nursing, but also of the value we place on nursing care.

The journey to re-designation will bring everyone together to pursue a common goal and to maintain national recognition for excellence in nursing service. It can benefit every hospital because it fosters a work environment that publicly supports professional nursing.

This kind of work environment will increase patient satisfaction. Patient satisfaction is a component, as well as an outcome, of quality care. When patients are more satisfied with care, trust is enhanced. With increased trust comes increased likelihood of cooperation with treatment regimens and tolerance of uncomfortable or anxiety-provoking treatments. We want to reduce the stress in our patients' experience, not only so they can have a positive experience, but also because we know that reduced stress results in reduced complications, which, in turn, produces better quality of care and outcome.



Our hospital consistently earns national acclaim for clinical excellence and I'd like to see the nurses who contribute recognized for their achievements in nursing excellence and patient care. You provide compassionate, personal care in a highly complex and technically demanding environment. You demonstrate the kind of commitment to excellence that should be seen in every nursing model: taking care of the physical needs of our patients and demonstrating compassion and humanity when caring for patients' emotional needs as well.

Each of you is a valued employee. We want you to look forward to coming to work every day and be proud of the work you do. We will continue to meet, to discuss issues and to work with you on nursing excellence at Stanford.

Building a New Nursing Model

Patient Care Services and Nursing Philosophy

BY DEBRA GRANT, RN, MBA,
AND MARY LOU MURPHY, RN, MS

A new California law, effective January 1, 2004, mandated certain nurse-patient ratios at all times, including breaks and shift changes, on all nursing units. One answer was just to add nurses to meet the new ratios. In her proposal for implementing this law, however, Cindy Day, Vice President for Patient Care Services, saw the opportunity to really look at our current practice to see how we could make fundamental changes that would allow us to give patient care differently. We could build a new nurse model involving caregivers as well as managers in decisions about nursing practice.

With this vision as a goal, we began to devise a plan to build a new nurse model. We started by putting together a Task Force team made up of front-line nurses, managers, clinical nurse specialists, and educators. We wanted to build a team that would bring different perspectives to challenge old ways of thinking and collaborate to devise a new approach. Together, we would look at the research, examine our current practice, and put it together into a new shared-governance model for nursing care at Stanford.

Task Force: From Design to Implementation

The Task Force began to meet in August 2003. Starting with the basics, the group devoted its first full-day session to considering the mission and values of the Hospital and Clinics. We then translated them into a written statement of the beliefs that underlie our practice. We believe, for example,



that we can demonstrate compassionate care through our presence, personal touch, words, and behaviors. At this first session, we also agreed on design principles for the new nursing model and specified the measurable outcomes we expected from it. After this and subsequent sessions, team members took ideas back to their units for feedback, because we wanted all the staff to be involved in what their future practice would look like.

We then began to examine research and current practice, focusing first on the changes we would need to have in place when the new ratios went into effect. We saw these changes as very positive, because much evidence existed that increasing ratios would improve patient care. Key findings of this research were lower Medicare mortality, fewer adverse patient events, fewer re-admissions, fewer incidences of failure to rescue, and higher satisfaction of patients and nurses alike. In subsequent full-day sessions, therefore, the group determined the primary current roles and activities for RNs and Nursing Assistants (NAs). We then began to revise the RN and NA roles based on input from the staff. We developed a new role for the Resource RN, for example, and determined how this position would function without carrying a full patient load. We helped train staff on how to plan breaks and how to enhance teamwork using a buddy system. We also planned ways to improve staff nurses' skills in delegation, conflict resolution, leadership of the interdisciplinary team, mentoring, and feedback.

After a month of intense work, with momentum building, we began to roll the plan out in October to all the staff nurses. We wanted to start implementation well before January 2004 to allow nurses time to try different approaches to adapting to their new roles. We knew, for example, that the new nursing care delivery model would change how their teams would function together, their time management routines, and the organization of their day. Systems would need revision (such as giving report, charting, and making assignments), and staff would need to adjust to changes in job descriptions. Different units tried several different approaches until they found the way that worked best for them.

By January 1, 2004 all units were comfortable with their new roles and we successfully implemented the new ratios. Work on the new nursing care delivery model has just begun, however. Over the next two years, the Task Force will continue building on this framework to achieve the best patient care in the nation.

Debra Grant, RN, MBA, is Associate Director of Nursing and Nursing Operations and Mary Lou Murphy, RN, MS, was Director of Strategic Advancement.

Staff nurses share their task force experience

In the following paragraphs, two staff nurses report their experience as Task Force members and the ways they participated in building the new nurse model for the future of Stanford.

A Powerful Time for Change

Deborah Bone, RN

Participants on the Task Force include nurse managers and assistant nurse managers, clinical nurse specialists, nurse educators, and staff nurses representing most nursing units. Our facilitator helped us stay focused and encouraged us to empower ourselves as leaders and decision makers and to think in innovative ways. We established and maintained the principle of shared governance. Each of us brought our unit's concerns and hopes to the table for discussion, and we then shared the results on the units in a variety of ways. We encouraged feedback from the unit staff – essential as the nurses at Stanford created and designed their own new nursing model.

This is a powerful time for change, and we on the Task Force are instrumental in creating it. As part of the Task Force, I experienced a level of teamwork, problem solving, and communication that produced

a solid framework on which to build. The changes ahead will not be without their difficulties, but I have no doubt that we will thrive and prosper as individuals and an institution, as we translate our vision for the future into evidence-based practice changes that will enable us to deliver the best patient care in the nation.

Deborah Bone, RN, was a staff nurse on D/E ground when she joined the Task Force. She is now an Assistant Nurse Manager of the Ambulatory Treatment Unit.

Challenges Bring Professional Growth

Van Bellew, RN

When I was asked to be a part of the Task Force, I was excited at the thought of being involved in something "big" – something that would influence nursing care beyond my daily patient assignments. When the team started the process of analyzing current practice and what we'd like as nurses but would still be realistic,

I felt empowered with each session of work, despite the conflicts that arose as we developed the model.

The most interesting aspect of the Task Force was seeing how the other side thought: management vs. staff RNs, general floor vs. critical care. I appreciated the diversity of registered nurses (especially the mix of staff nurses, managers, educators, and clinical specialists) that made up the group, bringing different views and experiences. This diversity was much needed to develop a model that would encompass all fields of nursing at Stanford Hospital and Clinics. We experienced so much energy, enthusiasm, and genuine commitment from each individual as we worked that we wished all our colleagues could experience the process themselves. Change is always difficult, we realized, but it is also a growth opportunity for our professional practice.

When the time came in October 2003 to apply the model, we still encountered doubts and hesitations,

but nurses adapted to it more easily than they expected. Most of the nurses I asked found they enjoyed the direct patient care, and even preferred it. Nurses felt even more connected to their patients, being their first line of defense. Most patients, as well, have felt the change in their care and appreciate the increased time with their nurses.

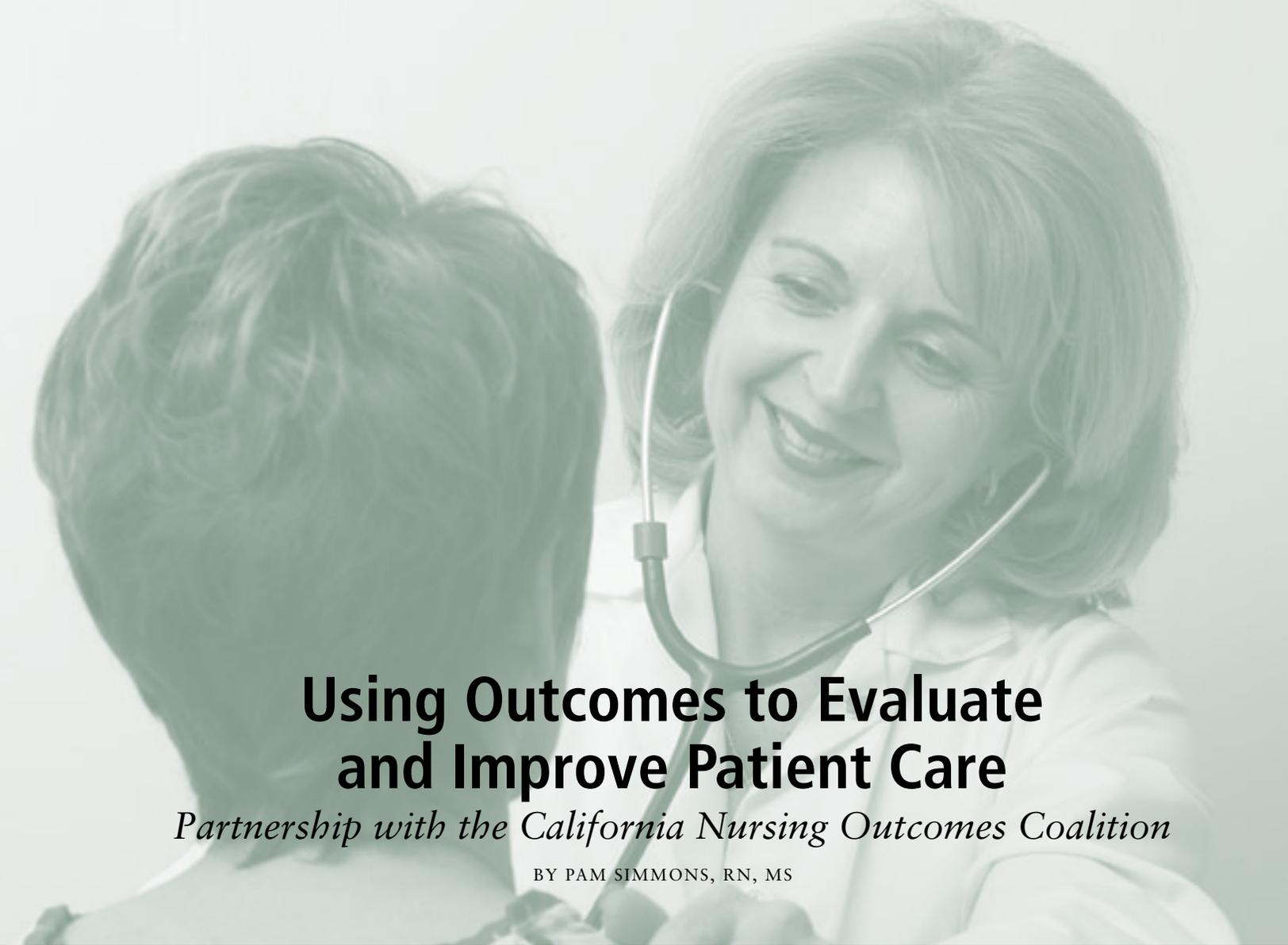
Some issues still arise as we encounter new situations with the nursing care delivery model. The model works better on some days than on others, depending on the staff scheduled and patient acuity. And those challenging days give nurses the opportunity to grow professionally by finding ways to meet the challenges within the model and still meet patient needs. I am no longer the expert – my colleagues are now all equally expert with the model and adapting it to give the best in patient care.

Van Bellew, RN, is a resource nurse on F3.

Patient Care Services and Nursing Philosophy

MISSION	VALUES	PHILOSOPHY
<p>To Care for the patient, each other, and about everything we do</p>	<p>Compassion: Kindness and caring for everyone</p>	<p>We believe compassionate care:</p> <ul style="list-style-type: none"> • serves as the foundation for every interaction we have with patients and their families • is demonstrated through our presence, personal touch, words and behaviors • is the societal responsibility and commitment of professional nurses as they care for persons with health concerns and illness
	<p>Respect: Consideration and appreciation of others</p>	<p>We believe respect for the patient:</p> <ul style="list-style-type: none"> • is portrayed by our holistic approach to patients and sensitivity for individual differences, needs, and concerns • guides behaviors which ensure patient confidentiality & privacy • is achieved when nurses understand and utilize various cultural beliefs (i.e. health beliefs) as they provide and manage age-sensitive patient care
	<p>Teamwork: Working together with the spirit of cooperation and active participation</p>	<p>We believe teamwork:</p> <ul style="list-style-type: none"> • is the basis for the partnership we develop with every patient and family and encourages their involvement in decisions affecting their care • is the principle underlying the communication, cooperation, and collaboration between empowered health professionals that unite and care for patients across the continuum • occurs when the nurse, as the leader of the interdisciplinary team, coordinates and collaborates with team members to assure excellence in patient care
<p>To Educate patients and families, other customers; and advance our own knowledge</p>	<p>Honesty: Truthfulness and sincerity in everything we do</p>	<p>We believe education:</p> <ul style="list-style-type: none"> • facilitates an honest and open exchange of information, which is the right of every patient • is essential for the patient, family and caregiver to become responsible and active participants in their care • is a fundamental component of the nurse’s role and necessitates maintaining the knowledge and skill for the populations served • means sharing knowledge with the patient, family, and caregiver so that they can participate in making informed choices regarding health practices • is essential to the development of nurses as they evolve from novice to experts • is part of the responsibility of all nurses as they coach and mentor colleagues
<p>To Discover new treatments and technologies, and new ways of improving care</p>	<p>Excellence: Commitment to doing our best at all times</p>	<p>We believe excellence:</p> <ul style="list-style-type: none"> • is the result of continuous discovery of best practice and evidence-based research • is the commitment we make to deliver superior quality care and achieve optimal patient outcomes • results when nurses base their practice on patient standards developed using evidence-based data • is the consequence of nurses continually improving their clinical practice by pursuing innovation, identifying issues, and conducting research to expand nursing knowledge

Black items are applicable to all caregivers; **green** items apply to nurses.



Using Outcomes to Evaluate and Improve Patient Care

Partnership with the California Nursing Outcomes Coalition

BY PAM SIMMONS, RN, MS

A company that makes automobiles knows from the start that the look, cost, and reliability of the cars are the criteria by which their product will be judged. It has never been that easy for hospitals.

The uniqueness of each patient, the complexity of the team of professionals providing care, and the multiple variables related to each patient's experience has made it difficult at best to understand and evaluate the care given during a patient's hospital stay. Nevertheless, as healthcare dollars shrink it has become increasingly critical that we understand and maximize the resources that truly make a difference for our patients. Toward that end we are looking at patient outcomes, the end product of the care we give, as a way to determine what works and to identify what needs to improve.

Stanford University Medical Center measures patient outcomes in many ways. Cutting edge medical research, routine reports about success or complication rates to regulatory groups such as the Office of Statewide Health Planning and Development (OSHPD), and careful tracking of high-risk procedures are just a few of the systems that provide measures of our success to Hospital Administration, and to those providing care.

Partnership with CalNOC

In January, 2003, Stanford Hospital and Clinics Patient Care Services began to partner with the California Nursing Outcomes Coalition (CalNOC). Since 1995 this innovative and visionary organization has led the way in identifying, measuring, and improving the patient outcomes that reflect the work done by nurses at the bedside. CalNOC engages hospitals in benchmarking with valid, reliable nurse-sensitive indicators, pilots new indicators, and disseminates evidence-based patient care improvement strategies. CalNOC participation gives hospitals the added value of providing

the best thinking and work of top-notch clinicians, nurse researchers, and data analysts without the costs of having those experts on site.

The value of participation in CalNOC is even greater today as it continues to move from data collection and analysis to research-based clinical studies which attempt to identify and test best practices. In 2003 selected Stanford patient care units participated in the CalNOC AHRQ funded “RO1” project examining links between adverse patient events and variables such as daily staffing levels, staff education, and unit activity, e.g., the flow of patients in and out of the unit.

Adverse events studied included pressure ulcers, patient falls, the use of restraints, and an extensive list of patient complications or problems which usually are reported on the standard incident reports. The data from the RO1 study has been collated and is now being analyzed. The statistical analysis from this and other studies are the building blocks we need to better understand and improve clinical care.

On a quarterly basis we submit our data on nursing unit staffing levels, the skill mix of the caregivers, patient census by unit, and the incidence/details of patient falls to CalNOC and receive updates which are invaluable for benchmarking.

Annually we survey and report the prevalence of pressure ulcers and the use of patient restraints. The return on this investment is the chance to accurately benchmark our staffing levels and patient outcomes with other large hospitals and with about 140 other hospitals in California. We no longer have to guess at whether the prevalence of pressure ulcers or restraint use is higher or lower in other hospitals like ours, or wonder if data from other institutions is in fact reliable and valid. We know the data is accurate and we can use it with confidence to identify opportunities for improvement.

Piloting new strategies

CalNOC is moving forward with exciting new projects that will further link the interests and expertise of health-care clinicians and academics. The first of these is focused on reducing patient falls. Falls are, unfortunately, a fairly common event in hospitals. Patients who are weak, frail, confused, on new medications, or simply in an unfamiliar environment frequently fall. Though most patients are not seriously injured when they fall, those that are can suffer serious complications or even death. CalNOC has developed a plan for piloting innovative direct care strategies focused on reducing patient falls. Their extensive database will give them comparison data while the involvement of many hospital-based participants will encourage creativity and practical approaches to best practices.

Patient outcomes, the end results of the care we give, are the key to measuring the effectiveness of the work we do. As legislators and healthcare administrators look for ways to cut healthcare costs, it is critically important that we have and understand the data to support the activities and patient care expertise that is proven to influence the patient’s recovery and health maintenance. Involvement in CalNOC allows us to be the masters of our own destiny.

Pam Simmons, RN, MS, is Quality Management Coordinator for Patient Care Services at Stanford.





Collaborative Governance of Patient Care

BY BERNADETTE BURNES, RN, MS

The new vision of nursing that began to emerge at Stanford in 2002 recognized the need to formalize interdisciplinary governance of patient care services, engaging both managers and staff at the bedside in leadership and decision making.

This Collaborative Professional Model, now completing its first year of development, is designed to ensure clinical quality and patient safety and at the same time empower staff in guiding their professional practice. It brings together the various disciplines involved in direct patient care to discuss their practices, ensure consistency, and enhance collaboration throughout Stanford Hospital and Clinics.

“In the past,” said Bernadette Burnes, RN, MS, who was charged with organizing the councils and setting them to work, “we relied on small committees, task

forces, or groups. They could determine practice standards, review quality issues or direct educational needs, but their activities seldom extended to the institution as a whole. This new model provides a consistent, integrated, and coordinated framework. It will allow us to achieve true professional collaboration – and the consistency in communication that will make it work – throughout the institution.”

In setting up this collaborative model, Patient Care Services (PCS) created four interdisciplinary councils, each of which meets on a monthly basis.

The Quality Council oversees and examines clinical outcomes of patient care and makes recommendations for improvement. To track and trend core measures of quality, the council developed a clinical outcomes dashboard. This close monitoring allows quality issues to be identified quickly and addressed with appropriate action.

The Research Council focuses on where research is needed to improve quality. It can also work with the Quality Council and Practice Council on projects requiring a research component. The Research Council is currently building an informative website through which patient care staff throughout the institution can learn about current activities and share ideas.

The Education Council ensures consistency of educational messages

throughout PCS and identifies where new educational efforts are needed. Guided by an overarching education plan, this council designs and directs education appropriate for various units and ensures that its objectives are met. As one of its first tasks, the council launched a massive educational initiative to prepare the institution for the JCAHO survey coming up.

The Practice Council makes sure that practice standards and guidelines are consistent throughout the hospital and clinics (“one level of care” in all areas) and promotes practice based on applying research findings to the bedside (“evidence-based practice”). If the council identifies clinical issues requiring evidence-based solutions, it turns to the Research Council for input and consultation.

Membership on the councils varies from 15 to 30. In their first year, the councils were made up of one-third staff nurses and other first-line care providers, with the other two-thirds drawn from management positions. In the next year, this ratio will go to half staff and half management. Next year, as well, it is hoped that direct care providers will serve as co-chairs of the various committees. Unlike nursing-only models in other institutions, Stanford's councils are interdisciplinary, involving all the professional disciplines that provide direct patient care, such as respiratory, radiology, labs, clinics, rehab, dietary, pharmacy, case management, and social work.

Linking all the councils is the Coordinating Council, which oversees the integrated work of all four councils, addresses unresolved issues, and resolves any barriers or problems identified at council meetings. Chaired by Cindy Day, Stanford's Vice President for Patient Care, the Coordinating Council includes the co-chairs of the four councils as well as the assigned executive sponsor. "The goal of setting up these councils," Burnes explained, "is to have forums where these four key issues are consistently addressed in a way that gives direct care providers a leadership role in shaping their practice at Stanford."

A Step to Magnet Status

Less than a year old, the collaborative councils are an important first step toward developing a true shared-governance model, in which staff nurses and other direct care providers have an ongoing leadership role.

This model, in turn, will help Stanford position itself for designation as a Magnet Nursing Hospital. "Magnet status gives an organization national recognition for clinical and nursing excellence, and therefore nurses want to work at magnet hospitals," Burnes said. In California, only three hospitals have achieved magnet status: Cedars Sinai, UC Davis, and UC Irvine.

Full development of the Collaborative Practice Model will take three to five years. Already at the end of this first year, however, benefits are obvious. This forum has generated a renewed enthusiasm for focusing on clinical excellence, as each patient care discipline sees that its contribution is recognized and valued. The council structure, and the collaborative model it is establishing, empower staff to directly control their own clinical practice and practice environment. "We feel like we are making a difference," said Terri Tayco, a staff nurse on the Quality Council. "Once again I can believe in nursing like I did when I graduated from

nursing school – I'm excited and bringing enthusiasm to the bedside."

Bernadette Burnes, RN, MS, Survey Readiness Coordinator in Patient Care Services, coordinated organization and implementation of the four interdisciplinary councils.

Following are some of the leaders and members of the councils talking about the challenges they faced and the changes they saw.

Joan Caldwell, RN, MS Co-Chair, Education Council



Historically at Stanford, the Clinical Nurse Specialist/Editor group has been independent and autonomous, in contrast to the Council's framework of sharing and collaboration. So the greatest challenge at the start was getting such a large and diverse group to work together. We then found an ongoing challenge – it seemed like everyone in the institution was looking for a mechanism to get education out to the staff. The response to the concept of a coordinating body for education was almost overwhelming.

Suzanne Cox, RN Staff Nurse, Research Council



It's clear that nurses providing patient care need to be involved in the process of making decisions about research policy. Several of my nursing colleagues on the Council have told me how much they have learned from our meetings. They are beginning to share their knowledge of hospital-wide issues with others, which helps to improve patient care.

Donalda Dunnett, RN Staff Nurse, Quality Council



The Quality Council serves as a clearing house for a lot of practice issues. It reviews audit information and makes plans to address the quality issues. As a staff nurse, I can give feedback to the Council on the prob-

lems the staff sees. When I go back to the unit, in turn, I can answer nurses' questions and explain the background for changes.

Julie A. Shinn, RN, CNS
Research Council



Nursing research has been a component of Patient Care Services at Stanford

for many years. Now, this Council has a clear vision of what needs to happen from a research perspective to make evidence-based practice a part of the nursing culture throughout Stanford. As we go along, we see many roles for the Council. First, we are in a position to identify the gaps in staff skills and knowledge that serve as obstacles to doing research. We can then help bridge these gaps and support research by means such as teaching grant-writing skills and identifying funding strategies.

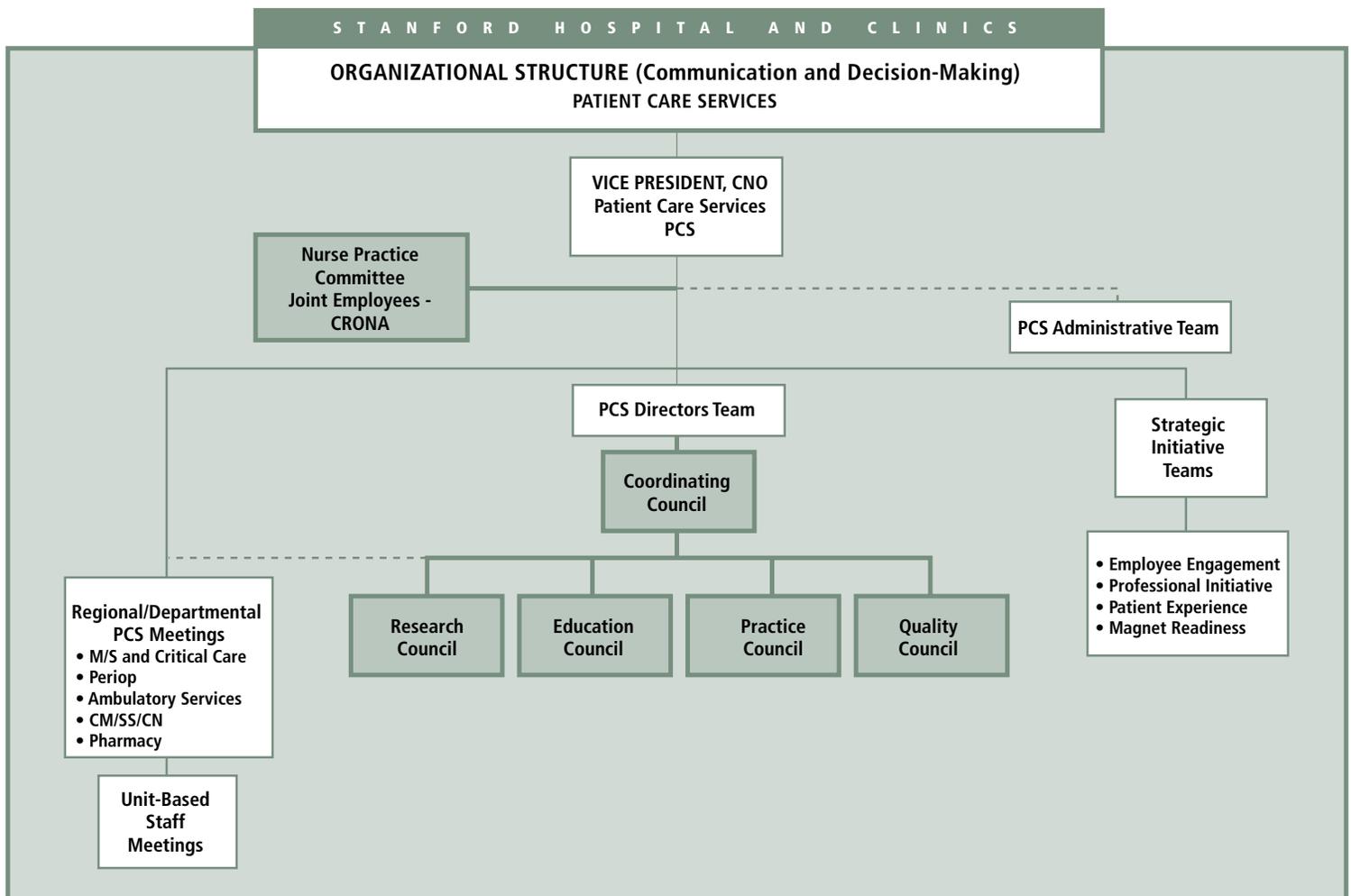
Leitha Sangermano, RN
Co-chair, Practice Council



Through this council, we are learning how to bring together all disciplines to formulate consistent practice standards for continuity and quality of care. Now that we have completed our review of policies and

procedures, we see how we can be used as a transfer point, discussing issues from the Quality and Research Councils and then setting standards and implementing them in clinical practice.

To learn more about the councils, please contact Nanette Trias at ntrias@stanfordmed.org, or 650.723.8569.





Implementing Evidence-Based Practice

BY JULIE A. SHINN, RN, MA, CCRN, FAAN
MARY E. LOUGH, RN, MS, CNS, CCRN
LAURA ZITELLA, RN, MS, NP, AONC

For years, nursing practice has been shaped by the seasoned nurse passing down techniques and procedures to novice nurses based on “the way we do things here.” It was often the case for nurses, physicians, and other health care professionals to practice in parallel without ever achieving effective collaboration when caring for the patient.

Today’s practice is based on multidisciplinary input as to what is current and what is based on research results. Many multidisciplinary teams have been formed at Stanford with representatives from physician groups, advanced practice nurses, respiratory care practitioners, pharmacists, dietitians

and many more with a purpose of analyzing and implementing best practice based on research. This article outlines a few of the changes that have been implemented at Stanford Hospital and Clinics based on initiatives put forth by clinicians working together.

Prevention of Ventilator Associated Pneumonia

CLINICAL PROBLEM

Patients in intensive care units (ICUs) who are mechanically ventilated for over 48 hours are at risk of developing nosocomial pneumonia because their normal orotracheal defense systems are bypassed by the endotracheal tube (ETT). Mortality can be as high as 50%.¹ Ventilator associated pneumonia (VAP) is such an important issue that the Centers for Disease Control (CDC) monitors the rate of VAP per 1,000 ventilator days in the ICU. At Stanford, the Cardiovascular Surgical ICU and the Medical – Surgical – Trauma ICU are monitored and both have rates well below the “acceptable” CDC threshold for VAPs. However, since any level of nosocomial infection is hard to justify as acceptable, a multidisciplinary ICU group has formed to review the current CDC guidelines and clinical research to determine where the standards

are met and where there might be opportunities to implement practice changes that might further decrease the rate of VAP.

EVIDENCE

- Keeping the head of the bed at 30 degrees or higher reduces the risk of aspiration of colonized secretions from the mouth of ventilated patients.¹
- Stress ulcer prophylaxis has been shown to reduce the acidity of stomach contents and to reduce the risk of infection if aspiration occurs.¹
- Monitoring and reducing sedation levels in long-term ventilated patients decreases the risk of aspiration.²
- Utilizing an intensive oral care procedure may reduce the risk of aspiration of colonized oral secretions.³

Glucose Control in Critically Ill Patients

CLINICAL PROBLEM

Hyperglycemia is common in critically ill patients who are catabolic following injury, surgery, or exacerbation of complex medical problems. The previous approach to controlling glucose has varied between services and patient diagnoses. Some patients were receiving subcutaneous insulin coverage, some were maintained on insulin drips but with a variety of targets, and in some nondiabetics there was no insulin coverage. Hyperglycemic critically ill patients treated with conventional therapies suffer increased overall mortality with an increased risk of sepsis, acute renal failure, and critical illness related neuropathy.⁴

EVIDENCE

- Hyperglycemic patients undergoing cardiac surgery have increased mortality, increased sternal wound infections, and more overall infection rates.^{5,6}
- Hyperglycemia on the first and second days post cardiac surgery was the single most important predictor of serious complications.⁵
- Hyperglycemia (Blood Glucose >110mg/dL) with or without prior diagnosis of diabetes increases in-hospital mortality and congestive heart failure with acute myocardial infarction.⁷
- ICU patients who were treated for hyperglycemia (Blood Glucose >110mg/dL) with insulin infusions had a reduction in hospital mortality of 34% in one large randomized trial.⁴

CLINICAL PRACTICE CHANGES

A multidisciplinary team reviewed the literature and developed a protocol and an order set that made it easy for physicians to order the insulin coverage. After 2 months of a trial period, it was clear that the protocol was too complicated and didn't bring the blood glucose down fast enough. The team has revised the protocol using four titration scales, each more aggressive than the previous one, which will allow staff to change to a new scale if the patient's blood glucose hasn't responded to the less aggressive scale. Insulin boluses were also incorporated into the scale to drop blood glucoses into the target range more quickly. The new scale will be implemented once approved by the Pharmacy and Therapeutics Committee.

ONGOING MONITORING

Monitoring will consist of tracking all patients who receive the protocol versus those who do not and evaluating patient outcomes for infection and other complications. The Infection Control Nurses and Quality Manager assigned to the team will be involved in assisting with data collection and tracking patient outcomes.

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CLINICAL PRACTICE CHANGES

Signs were placed at the head of the beds to remind staff to maintain the patient position at 30 degrees. If patients are not able to be put in a position of flexion, nurses are encouraged to put patients in reverse trendelenberg to decrease the risk of aspiration. Ventilated patients were routinely placed on hydrogen ion blockers so the goal of stress ulcer prophylaxis and decreased gastric pH is being met. A concentrated, multidisciplinary effort has been made to decrease levels of sedation using a motor activity assessment scale that staff document every hour with vital signs. Sedation levels have been decreased while maintaining appropriate levels of comfort. These practice changes have possibly contributed to decreased VAP rates. The CDC prevention guidelines do not address oral hygiene but several nursing articles emphasize the fact that the same bacteria that colonize the mouth of intubated patients also cause VAP. A protocol of intensive oral care was evaluated over a 3 month period. VAP rates declined

slightly but there were too few patients to determine statistical significance. A standardized intensive mouth care protocol every 4 hours is under development in the ICUs.

ONGOING MONITORING

VAP rates are monitored by infection control nurses who produce quarterly reports of VAP for each ICU. As we accumulate a year's worth of data, we will learn what impact practice changes have had on our VAP rates.

1. Collard HR and Saint S. Prevention of ventilator associated pneumonia. www.ahcpr.gov/clinic/ptsafety/chap17

2. Jacobi J, Fraser GL, Coursin DB. Clinical practice guidelines for the sustained use of sedatives and analgesics in the critically ill adult. *Crit Care Med.* 30(1):119-141, 2002.

3. Munro C and Grap MJ. Oral care in the intensive care unit: State of the science. *Am J Crit Care.* 13(1):25-33,2004.

Central Venous Catheter Site Care

CLINICAL PROBLEM

Central venous catheters (CVCs) are indispensable in blood and marrow transplant (BMT) recipients when administering IV fluids, medications, chemotherapy, parenteral nutrition, and blood products. Use of intravascular devices is complicated by local and systemic infections that increase morbidity and mortality. The median rate of catheter-related bloodstream infections ranges from 2.4–7 episodes per 1,000 catheter days in the ICU setting.⁸ BMT recipients are at even greater risk of infection because of the use of immunosuppressive agents, presence of neutropenia, protracted duration of CVC indwelling time, and disruption of skin integrity from high-dose chemotherapy regimens.

The pathogenesis of catheter-related infections in short-term, nontunneled CVCs (in situ <10 days) is related to cutaneous colonization, the pathogenesis of catheter-related infections in long-term, nontunneled and tunneled catheters (in situ > 10 days) most often is attributed to hub colonization or intraluminal colonization.⁹ Therefore, strategies to prevent cutaneous colonization may effectively prevent catheter-related infections in short-term catheters but may be less effective for long-term catheters because hub and, occasionally, intraluminal colonization become the more predominant sources of catheter-related infections.

EVIDENCE

- Several studies suggest that transparent dressings (TD) may be used safely for as long as one week.
- No significant difference was found in the incidence of skin colonization when transparent dressings were changed every five days versus every 10 days for tunneled CVCs and every two days versus every five days for nontunneled CVCs in a prospective, randomized trial of 399 BMT recipients.¹⁰
- In a prospective, randomized study of 668 patients in a surgical

ICU, 10% povidone-iodine, 70% isopropyl alcohol, and 2% aqueous chlorhexidine skin disinfection were evaluated prior to CVC insertion and for site maintenance every other day. The chlorhexidine treatment group had a significantly decreased incidence of local catheter-related infection and infusion-related bacteremia.¹¹

CLINICAL PRACTICE CHANGE

Commercially prepared chlorhexidine swab (Chloraprep®, Medi-Flex, Overland Park, KS) is now the recommended skin disinfectant during a CVC dressing change.

A new transparent dressing (Sorbaview™ Window Dressing, Tri-State Hospital Supply Corporation/Centurion® Healthcare Products, Howell, MI) is the recommended dressing for CVCs. Transparent dressings on CVCs should be changed every week for ALL patients, including neutropenic patients. If the dressing becomes wet, soiled, or nonadherent, it should be changed immediately.

ONGOING MONITORING

- Staff and Patient Feedback
- Periodic VAD Committee Review

8. National Nosocomial Infections Surveillance (NNIS) System Report, data summary from January 1992–June 2001, issued August 2001. *American Journal of Infection Control.* 29: 404–421, 2001.

9. Crnich CJ and Maki DG. The promise of novel technology for the prevention of intravascular device-related bloodstream infection. I. Pathogenesis and short-term devices. *Clinical Infectious Diseases.* 34: 1232–1242, 2002.

10. Rasero L, Degl'Innocenti M, Mocali M, et al. Comparison of two different time interval protocols for central venous catheter dressing in bone marrow transplant patients: Results of a randomized, multicenter study. *The Italian Nurse Bone Marrow Transplant Group (GITMO). Haematologica.* 85: 275–279, 2000.

11. Maki DG, Ringer M, Alvarado CJ. Prospective randomized trial of povidone-iodine, alcohol, and chlorhexidine for the prevention of infection associated with central venous and arterial catheters. *Lancet.* 338:339–343, 1991.



Bringing It All Together

The new Stanford Cancer Center

BY JEANNE MCGRANE, RN, MSN, MBA

More than fifty cancer care providers and specialists, including nurses, physicians, and patients, took part in creating a blueprint for change in the delivery of cancer care at Stanford University Medical Center – culminating in the building of the new Stanford Cancer Center. Opened in March 2004, this new facility allows patients to stay in one location for cancer care, including physician and nurse visits, procedures and tests. The Center houses oncology sub-specialty clinics including GYN, Breast, Medical Oncology, Surgery, GI, Hematology, Bone Marrow Transplant, Urology, ENT, Neurosurgery, and Radiation Therapy. Close at hand are sophisticated diagnostic and treatment equipment, the infusion center, a clinical research trials office, pharmacy, boutique, health library, cafe, and other patient services, all located in a new building that features beautiful artwork, open space, and peaceful gardens.

The proximity of all oncology services allows the members of specialized teams to plan care on a patient-by-patient basis. In this new infrastructure, clinic nurse coordinators can fulfill their pivotal role in coordinating the oncology patient's care and overall experience at the Cancer Center. Nursing staff in the infusion center and other procedure areas have the facilities and equipment to provide patient-focused care – care that is both more comfortable and easier to access than in the past. Improved systems for communication, closer proximity to colleagues, and a common desire to provide the best care for cancer patients facilitate exciting new opportunities for nurses to grow professionally, sharing best practice, enhancing clinical experiences, and achieving personal satisfaction in an exciting new environment.

Jeanne McGrane, RN, MSN, MBA, is Director of Ambulatory Care, Stanford Hospital and Clinics.

Teaching the Best in Nursing Practice

2003 GONDA AWARD WINNER SUSAN MOORE, RN, MSN

The annual Thomas A. Gonda Award recognizes an employee who has made a significant contribution to the mission of Stanford Hospital and Clinics.

The 2003 Employee of the Year is Susan Moore, Nurse Educator. Nominated twice before for the Gonda Award, she received the Special Award in 1996. In presenting the award, Cindy Day, Chief Nursing Officer, noted that she is outstanding in all she does. "In addition to her skills and talents related to her role," Day said, "she is recognized for her program planning skills, ability to model change, her leadership in countless initiatives in patient care, and her willingness to say yes to whatever challenge is presented to her." In the following interview by *Stanford Nurse* editor Candice Speers, RN, MPA, Susan Moore talks about her changing role over the years and her involvement in the current restructuring of patient care delivery, as discussed elsewhere in this issue.



What is your vision in nursing, your passion?

Nursing, especially my chosen area of hospital-based nursing, is a career based on helping people who are sick feel the best they can, providing the needed support until they can resume their own care or experience a peaceful death. Although it requires scientific and technical know-how, the only way to be a "good" nurse is to deliver care with the same compassion and thoughtfulness as if you were caring for your own child or parent.

You came to Stanford in 1972 as a staff nurse in ICU; by 1973 you were an inservice instructor. Fortunately for Stanford, you have remained in the educator role ever since. What has kept you here? *My reasons for staying have changed over the years. I liked the structure of the care delivery system, the flexibility to pursue my MSN, later the opportunity to job share when my child was small, and always the stimulation of working on many challenging projects over the years. However, the true reason for staying has been the incredible people with whom I have worked. My*

supervisors have been wonderful leaders in their own right. My peers – both advanced practice nurses and managers – are bright and enthusiastic. And of course there is the staff – I have seen so many newly graduated nurses evolve into expert caregivers.

How have you changed your educational strategies to support nursing at Stanford?

When I first began teaching at Stanford, staff development was rather traditional: we could teach on the unit and most staff could attend the program at the same time. Over the years, due to staffing reductions and increased acuity, it became almost impossible to teach staff complex topics because their attention was on their patients. Self-paced instruction continues to be the mainstay of the educational processes now, supported by Computer Assisted Instruction programming.

Most recently, you have been involved in development of the new patient care delivery model.

This was the most professionally stimulating project I have been involved with recently. A group composed of staff, advanced practice nurses, and managers was convened to develop a model that would respond to the changed staffing patterns required by legislated staffing ratios. More importantly, this group had the opportunity to create a model that would support the institution's mission, values, and philosophy of care. The vision of this creative group will influence the practice of nursing at Stanford for many years.

You have provided leadership in countless initiatives in patient care; most recently you were co-chair of the Patient Care Services (PCS) interdisciplinary education council. What are the benefits of the council to yourself and to nursing care?

The PCS councils are the beginnings of a shared governance structure. Each council has a manager and one other person as co-chair, with an interdisciplinary membership. Not only the nursing areas but also others who provide patient care came together. Since the nursing areas and others who provide patient care often functioned so independently before, it was both interesting and challenging to bring everyone together and reach mutual agreement on standards of care. Eventually, the goal is to have the councils made up of at least 50% staff, so that it is the staff making the decisions on how to provide care.

What is the most personally rewarding aspect of your job?

Seeing that my teaching has been applied successfully to practice – where the nurse is giving better, more intelligent, and compassionate care – that's the best!

In Recognition of...

CONFERENCE PRESENTATIONS

Stanford Hospital and Clinics, Center for Education and Professional Development, Oncology Nursing Series, November 2003, Stanford, CA.

Michelle Gabriel, RN, OCN: "Sepsis in the Oncology Patient."

Theresa Latchford, RN, MS, AOCN: "Cardiac and Pulmonary Toxicities Related to Cancer Treatment."

Brooke Aghajani, RN: "Hypercalcemia of Malignancy."

Sandra Burgess, RN: "Tumor Lysis Syndrome."

Linda DuPuis-Rosen, RN: "Disseminated Intravascular Coagulation."

Nimfa Fajardo, RN: "GI, Mucosal Toxicities Related to Chemotherapy."

Lynn Ellison, RN, BSN: "Renal and Bladder Toxicities Related to Chemotherapy."

D. Kathryn Tierney, RN, PhD(c): "Care of the Elderly Oncology and Transplant Patient." St. Joseph's Hospital, September 2003, Marshfield, WI.

"Care of the Patient Receiving Chemotherapy." Bay Area Tumor Institute, July 2003, Oakland, CA.

"Caring for Patients with Non-Hodgkin's Lymphoma: Current State of the Art." Oncology Nursing Society Annual Congress, April 2003, Denver, CO.

"The Elderly Hematopoietic Cell Transplant Recipient." American Society of Blood and Marrow Transplantation, February 2003, Keystone, CO.

Debra Thaler-DeMers, RN, OCN and Susan Leigh, RN: "They've Survived Cancer, Now What?" Center for Disease Control's 2003 Cancer Conference: Comprehensive Approaches to Cancer Control: The Public Health Role, September 2003, Atlanta, GA.

Debra Thaler-DeMers, RN, OCN: "Survivorship Challenges for Adult Survivors: an Overview." President's Cancer Panel: Living Beyond Cancer: Meeting the Challenges of Adult Survivors, November, 2003, Birmingham, AL.

"Intimacy Issues: A Practical Approach." US Oncology: Living Beyond Cancer, December 2003, Tucson, AZ.

Theresa Latchford, RN, MS: "Cytomegalovirus and Respiratory Syncytial Virus in the Immunocompromised Patient." Oncology Nursing Society Congress, May 2003, Denver, CO.

Janet Neff, RN, MS, MN: "Trauma Triumphs." Critical Care New Trauma Nurse Conference, January 2003, Stanford, CA.

Janie Perez, RN, PNP, MA and Joan Forte, RN, PNP, MA: "Developing Your Skills as the Parent of a Premature Infant." Research Day 2003, UCSF Stanford LPCH Center for Research & Innovation in Patient Care, October 2003, South San Francisco, CA.

Carol Thomson, RN, MSN, PNP: "Clinical Case Studies: Necrotizing Fasciitis: the Flesh Eating Bacteria." 16th Annual Stanford Trauma Symposium, August 2003, Stanford, CA.

POSTER PRESENTATIONS

Research Day 2003, UCSF Stanford LPCH Center for Research & Innovation in Patient Care, October 2003, South San Francisco, CA.

Pamela Schreiber, RN, MS: "Pain Assessment Documentation: Evaluation of Nursing Documentation and Outcomes of Nursing Interventions"

Eileen Garrison, RN, BSN; Cathy Hedges, RN, MS; Nancy Donaldson, RN, DNSc, FAAN: "Implementing Innovation: Maximizing Staff Adoption and Compliance."

Sasha Madison, MPH, CIC; Tammy Schaffner RN, BSN, CIC; Susan Poutanen MD, MPH;

Lucy Tompkins, MD, PhD: "Methicillin-Resistant Staphylococcus Aureus Outbreak Controlled by Reinforced Hand Antisepsis Policy."

BOOKS AND CHAPTERS

D. Kathryn Tierney, RN, PhD(c): "Sexuality after Hematopoietic Cell Transplantation" in Blume KG, Forman SJ & Appelbaum FR (eds), Thomas' Hematopoietic Cell Transplantation, 3rd edition, 2004. Blackwell Publishing.

Mary E. Lough, RN, MS, CNS, CCRN: Urden, LD, Stacy KM, & Lough ME: Priorities in Critical Care Nursing, 4th edition, 2004. Mosby.

APPOINTMENTS

Debra Thaler-DeMers, RN, OCN: Planning Committee, Center for Disease Control 2003 Cancer Conference: Comprehensive Approaches to Cancer Control: The Public Health Role, National Cancer Institute, Consumer Advocate for Research Related Activities (3 year appointment).

Debbi Johnson, BSN, RN, CIC: Appointed 5/03 to the City of Pacifica Safety and Disaster Preparedness Commission. Elected Vice Chair of Commission 1/04.

Katherine Dyble, RN, MA: Appointed to the AHA Central Coast and Valley Regional Faculty Task Force. This is the Quality Assurance group for the California Central Coast and Valley areas of the AHA.

DEGREE

Julia Tam, RN: Masters in Information Systems Management, USF

CERTIFICATES

Birgit Massion, RN, BSN, CGRN: Certified Gastroenterology Registered Nurse, October, 2003

Susan M. Moore, RN, MS, CMSRN: Certified Medical Surgical Nursing by the Academy of Medical-Surgical Nurses. The exam was offered nationally for the first time in May, 2003.

Jenny Llacer, RN, OCN: Oncology Nursing Certification

Diane Frosen, OCN: Oncology Nursing Certification

Judith Piepkorn, RN, OCN: Oncology Nursing Certification

Michelle Gabriel, RN, OCN: Oncology Nursing Certification

Nimfa Fajardo, RN, OCN: Oncology Nursing Certification

Linda DuPuis-Rosen, RN, OCN: Oncology Nursing Certification

JOURNAL ARTICLE

Latchford, Theresa et al. (2003). Respiratory Syncytial Virus in Blood and Marrow Transplant Recipients. Clinical Journal of Oncology Nursing, 7 (4) P. 418 – 422.

Friends of Nursing Grants

Every year, Friends of Nursing awards grants for patient education and patient care research. In December 2003, Stanford nurses received the following grants.

PATIENT EDUCATION

Kathleen Saenz, RN, BSN, IBCLC; **Kathleen Boggs, BSN, IBCLC.** Breastfeeding Your Baby in the NICU: an education booklet for parents.

Patrice Callagy, RN; Ed Schrader, RN. Anatomical Models for Emergency Department Patient Education.

Debra Johnson, BSN, RN, CIC; Patricia Rutherford, BSN, RN, CIC. Hand Hygiene Saves Lives: Thank You for Washing.

RESEARCH

Laura Pexton, MS, FNP; Colleen Wynee, RN. Incidence and Impact of Constipation in Children with Urologic Syndrome.

IN MEMORY

Betty Cretekos, RN. Elizabeth "Betty" Easton Cretekos was one of the original members of Friends of Nursing, formed in 1981 to support nursing education and research, promote patient education, and encourage nurses to help shape healthcare programs and policies. Betty volunteered her time to set up and run the holiday See's Candy sales, which became the most significant source of funding for Friends of Nursing. Forced by health reasons to retire from nursing in 1989, Betty continued to oversee sales, selling candy even when she needed to use continual oxygen. Only weeks after her last sales event, Easter 2003, Betty died peacefully at home on May 20, 2003. In tribute to Betty Cretekos, Friends of Nursing has established a scholarship to allow nurses to attend national professional meetings.

Questions Lead to Nurse Recruitment

BY CINDY DEPORTE RN, BSN
AND MARTHA B. STEVENSON, RN, BSN

Nurses of all ages and stages of their careers call Nurse Recruitment every day about opportunities at Stanford and Lucile Packard Children's Hospital...

"I'm a new grad RN and I'm looking for training opportunities. Can you tell me what you offer?"

"I've been out of nursing for ten years and I need advice on how to re-enter the hospital. Can you help me?"

"I saw your open positions on the website and I would love to speak to you about a few possibilities."

The answers to all these questions depend, of course, on each individual situation. Whatever the caller's needs, for training, information about opportunities, or advice on moving into new areas of nursing, the Nurse Recruiters are ready with individualized guidance. Job counseling – placing the right person in the right job—makes up at least a third of the recruiters' work.

And the recruiters work as much with nurses within the hospital as they do with those investigating opportunities here...

"I'm a Med/Surg nurse. I love my job but I'm ready to grow professionally. Can I talk to you about moving into a new area?"

"I'm going back to school for my master's degree. I want to keep working full time but I'm looking for a position with some flexibility to fit my schedule."

"I'm the Nurse Manager in the Emergency Department. Can I get your feedback on a new position we're creating?"

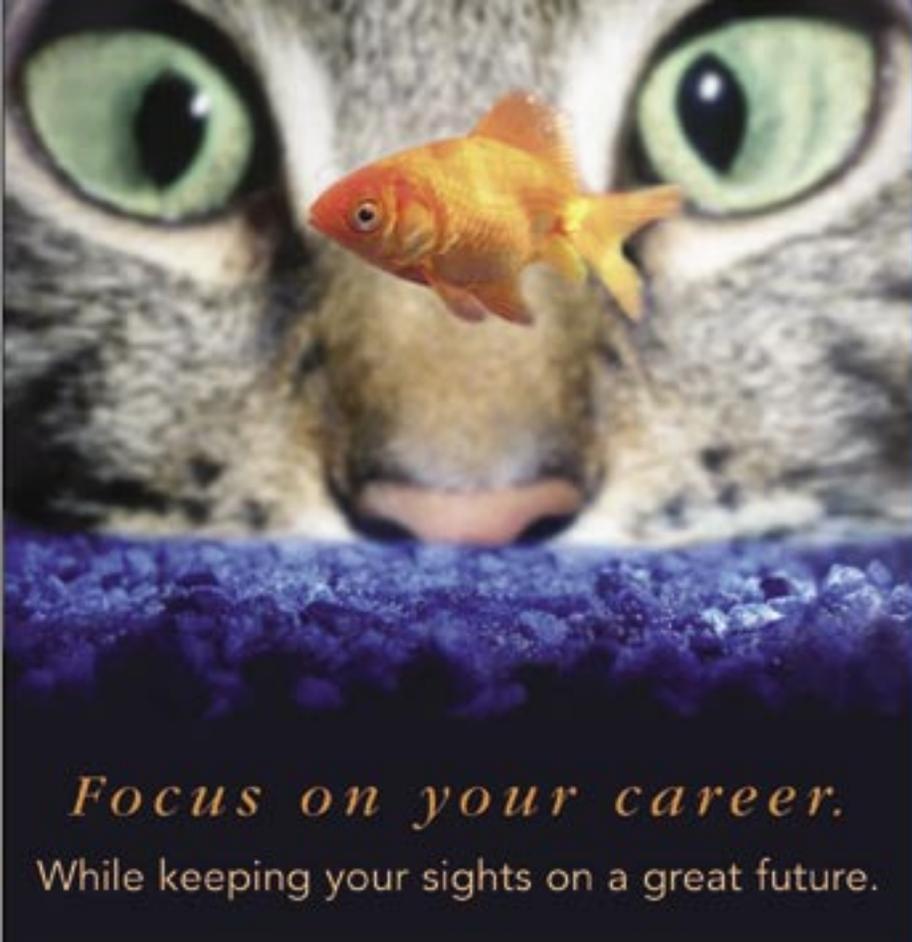
All these questions – and the resources to answer them – are all in a day's work for the nurse recruiters, who make accessibility and flexibility the cornerstones of both hospitals' recruitment and retention strategy. But answering questions, of course, is not all the two nurse recruiters do. They attend regional and national career fairs and college job fairs throughout the state, and meet with nursing students in the hospital for their clinical rotations. Both Stanford and Lucile Packard



Children's Hospital offer RN training programs for new graduates and experienced nurses wishing to transfer regions. In addition, the nurse recruiters serve on workforce-planning committees and work with Marketing to promote new positions.

Openings for staff nurses, managers, and advanced practice nurses are posted and updated daily on the hospitals' websites: www.stanfordhospital.com or www.lpch.org

Cindy DePorte RN, BSN and Martha B. Stevenson, RN, BSN are RN Recruiters for Stanford Hospital and Clinics and Lucile Packard Children's Hospital at Stanford.



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While keeping your sights on a great future.

Look to us for your Nursing career.

Training programs are also available.

Contact your nurse recruiter at:

For Adult Critical Care, Pediatric Med/Surg
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email: mstevenson@stanfordmed.org

For Adult Med/Surg, Pediatric
Cardiovascular ICU, Maternal Health and
Neonatal Services Training Programs, please
email: cdeporte@stanfordmed.org

For more information, please visit our websites,
EOE



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