Charged with Change

Nurses play critical role in transforming care through technology

Article inside titled “Stemming the Tide of the Nursing Shortage” by Susan Grant, R.N., MS, CNAA, BC, and Kristen Swanson, R.N., Ph.D., FAAN, University of Washington Medical Center, is from The Cerner Quarterly Vol. 2 No. 2 2006.
Healthcare must support nurses and provide them with the capacity to meet myriad challenges. By building nursing leadership skills and creating environments that are patient- and family-centered, a new generation of nurses will embrace their profession and change care.

Our nation faces a mounting crisis in caring. Since the early 1990s, a perfect storm began brewing—a fractured healthcare system, many patients, too few nurses. The coming crisis invites considerable public angst about the availability of nurses to care for patients today and in the future. Beyond the public, pundits’ and politicians’ focus on the scarcity of caregivers, those truly feeling the pressure are nurses. These healthcare professionals are dedicated to the safe, effective care of today’s patients and families, and are deeply concerned about what tomorrow’s generation of nurses will face.

Tough issues greet nurses at every turn, every shift. A 2005 Nursing Economics survey showed 79 percent of registered nurses and 68 percent of chief nursing officers believe the nursing shortage impacts the quality of care they provide to patients and their families. Determining how this storm began, and how to weather it, are the serious challenges before healthcare leaders.
In 2002’s Health Care’s Human Crisis: The American Nursing Shortage, Health Workforce Solution authors Kimball and O’Neil outline the social and economic factors contributing to the current demand for nurses and, ultimately, the lack of supply. Many factors limit the supply of nurses. Among them:

- An unappealing work environment rife with disorganization, understaffing and a lack of resources.
- The perceived unattractiveness of nursing as a career option, tied to beliefs that nurses exercise minimal autonomy in their work.
- Competing career options open to women that were previously considered men’s purview only.
- Ethnic, gender and income barriers that limit who feels welcome in the nursing field.

Additional drains include our nation’s aging nursing workforce; managed care cutbacks mean fewer positions and higher expectations for productivity; and lastly, a shortage of faculty to teach the next generation of nurses.

**A strong tidal pull**

Several socioeconomic and health-related factors increase the demand for nurses. More Americans are living longer with chronic diseases. Baby-boomers are aging. Families live farther apart, limiting kin care options. The communities in which Americans live encourage sedentary lifestyles and engagement in unhealthy excesses in food, tobacco and alcohol consumption.

The conditions under which many nurses work can corrode the values that drew them to the profession, according to a 2003 Institute of Medicine (IOM) report. Care systems that confuse low-cost, task-oriented staffing ratios with quality care risk sacrificing patient safety, nurses’ integrity and mental health, and family-centered caring at the altar of short-sighted frugality. In the early 1990s, much of the country lived through an era of hospital downsizing, a fiscal exercise that left a void in nursing leadership.

Real salaries for registered nurses have changed little in two decades. The actual average annual earnings of RNs employed full time in 2004 was $57,784 compared to $46,782 in 2000. When changes in the purchasing power of the dollar are taken into account using the consumer price index, full time employed RNs real earnings in 2004 were $26,366 or $3,000 more than their $23,369 real earnings in 2000.
This void came about through elimination of hospital-based advanced practice positions and the creation of a lingering institutional memory that rendered nurses reluctant to advance their careers by engaging in hospital-based leadership opportunities. A 2003 article in *The Journal of the American Medical Association (JAMA)* dissects the trifecta of patient mortality, nurse burnout and job dissatisfaction as it relates to the nursing shortage. The study provides evidence that the following compromise optimal care: minimal nurse staffing, lower education levels, intense workloads and unexpected crises. Recent studies link increased nurse burnout, decreased job satisfaction and commitment to patient dissatisfaction, increased mortality and failure to rescue (Vahey et al, 2004; Aiken et al, 2002, 2003; Holtom and O’Neill, 2004). Likewise, the risks of making errors increase when nurses are overworked, understaffed, undervalued and under supported (Rogers et al., 2004; Laschinger et al., 1999).

Adding to the sting of a worn out nursing workforce is a dearth of instructors. Earlier this year, *Nursing Economics* compared national nursing workforce data sets from 2002 and 2004. The work reported mixed findings, both encouraging and staggering. While there was a significant increase in the number of nursing school applicants, not enough faculty exist to teach them. There was also a bit of an upsurge in employment of nurses, yet most were older than 50, and many were foreign born. Although things have improved somewhat, Health Resources and Services Administration predicts a national shortage of 808,416 nurses for 2020—an eight-fold increase from the 2001 nursing shortage (HRSA, 2002).

The current shortage also deviates from the previous, more cyclical shortages in past generations. In a recent study, Peter Buerhaus, Valerie Potter Professor of Nursing and senior associate dean for research at Vanderbilt University, said, “Unlike past shortages, the coming RN shortage will be driven by fundamental, permanent shifts in the labor market that are unlikely to reverse in the next few years.” Buerhaus estimates that by 2020, there will be 20 percent fewer registered nurses than the healthcare industry will require. Previous nursing shortages, which have recurred on a five-to seven-year cycle, have been the result of economic changes and other causes.

**Nursing Applicants Turned Away**

An estimated 147,465 qualified applications were rejected by nursing programs nationwide in 2005 because of a shortage of qualified nursing instructors.

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Number of Applicants Rejected</th>
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<tbody>
<tr>
<td>Baccalaureate</td>
<td>33,279</td>
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<tr>
<td>Associate Degree</td>
<td>110,576</td>
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<tr>
<td>Diploma</td>
<td>3,611</td>
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Source: National League for Nursing
nursing shortages, which have recurred on a five- to seven-year cycle, have been the result of economic changes and other causes. The aging of nurses currently practicing, the corresponding age of nursing faculty, and the broader opportunities for women’s employment have produced a shortage of a different character.

Today’s challenge is best summarized by a 2006 Health Affairs’ article—“Addressing the Nurse Shortage to Improve the Quality of Patient Care:” “Fewer people are working in nursing, which has led to a shortage. Because of the shortage, nurses who remain in the hospital must care for more patients under increasingly difficult working conditions. Because of these strained working conditions, more nurses leave the hospital workforce, thereby worsening the shortage and making recruitment of new nurses more difficult.” Authors Susan Hassmiller and Maureen Cozine called for strategies that make hospitals a more appealing and functional workplace and disrupt this vicious cycle that harms the nursing profession.

**Putting the care back into healthcare**

In 2001, the IOM called for six essential enhancements in healthcare delivery. The institute specified the need to improve safety, efficiency, timeliness, effectiveness, equity and patient-centeredness. To that end, healthcare should focus on supporting nurses and providing them with the capacity to meet the challenges inherent in the healthcare system. By fostering their leadership skills and creating environments that are patient- and family-centered, a new generation of nurses will be emboldened to embrace their profession and revolutionize care.

At the University of Washington Medical Center (UWMC) in Seattle, nurses from specialty areas partner with patients and families who have experienced the UWMC system to improve care in their distinct areas. For example, nurses serve as co-chairs with a patient or family adviser in oncology, perinatal and neonatal

Between 1996 and 2000, the loss of RNs from the license pool was nearly 175,000 and the number of new entrants was about 310,000. After balancing projected losses against projected new entrants, the number of RNs is expected to grow 1.3 percent between 2008 and 2012, and then to decline by 1.9 percent between 2016 and 2020.
intensive care for these units’ patient and family advisory councils. Nurses partner with patients and families through these councils and other organization-wide committees to improve safety and communication in a variety of ways. These include development of education materials to define the role of patients and their families in care processes and treatment decisions.

More than 75 patient and family advisers at UWMC are involved in 15 organization-wide committees and initiatives to help improve safety and care. In the neonatal intensive care unit, parents, nurses and physicians partner to redesign how patient rounds are done in order to actively involve parents as critical members of the healthcare team. Involving parents in rounding not only fundamentally shifted the process, but it also transformed communication among parents, nurses and physicians as a team to positively impact the child’s outcome.

One’s role does not define leadership; rather it is the way one is accountable, responsible and responsive. In 2004’s *Relationship-Based Care: A Model for Transforming Practice*, authors Koloroutis, Manthey, Felgen, Person, Kinnaird, Wright and Dingman assert “leaders know the vision, act with purpose, remove barriers to quality care, and consistently make patients, families and staff their highest priorities.”

With that in mind, a new concept of patient- and family-centered care is “an approach to the planning, delivery, and evaluation of healthcare that is grounded in mutually beneficial partnerships among patients, families and healthcare practitioners” (Institute for Family-Centered Care, 2003).

The American Hospital Association toolkit, *Strategies for Leadership: Patient- and Family-Centered Care*, describes the benefits of patient- and family-centered care. It is a true partnership with patients and families, “not only involving them in decisions about their care, but also gaining the benefits of their help and insights.


Of the total licensed RN population in March 2004, 83.2 percent, or 2.4 million, were employed in nursing and 16.8 percent were not employed in nursing. This estimate of the number of employed nurses represents an increase of 219,647 RNs, or 10 percent, over the projected 2.2 million RNs employed in nursing in 2000.
to better planning and delivery of care. Patients can achieve better outcomes, and hospitals can improve care for all patients and improve staff satisfaction.”

Pat Sodomka, senior vice president for patient and family-centered care, at the Medical College of Georgia, reported in *Leadership for Family-Centered Care* that inpatient areas with patient and family-centered care experienced significant improvements. Not only did patient satisfaction improve from the 10th to the 85th percentile, but length of stay also decreased, and staff vacancy rates dropped from 7.5 percent to zero.  

**Empowering through smart communication, technology**

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) called last year for hospitals to foster a workplace that empowers and respects nursing staff. The same year, the American Association of Critical Care Nurses published a white paper titled “Silence Kills,” listing seven crucial concerns that the healthcare system must address. The red flags for concern include broken rules, mistakes, lack of support, incompetence, poor teamwork, disrespect and micromanagement. Dealing directly with these issues requires dialogue that addresses concerns as they come up. Being brave enough to stop an error as it unfolds takes more than guts and integrity; it requires an environment that mandates safety, non-punitive responses to errors and transparency. It calls for a culture of caring: caring enough to speak up, to save a colleague from making an unintentional error, and to put patient safety over personal or professional embarrassment.

Several studies link nurse satisfaction, physical and mental health, and job effectiveness to organizations that empower nursing leadership from the executive level to the point of care (Laschinger et al., 1997, 1999, 2004; Cummings et al., 2005). Empowered nurses lead with a courageous heart, critical mind and a sense of safety. They have an inner certainty that the organization expects them to divert mistakes, danger or threatening situations before they result in harm to another. At UWMC, charge nurses from all adult medical, surgical and intensive care inpatient units meet three times a day to make decisions on patient placement and staffing needs throughout the organization. The charge nurses collectively assume the traditional responsibility and accountability of a nursing supervisor who would typically make the patient assignments independently. The collective charge nurse model empowers nurses with firsthand knowledge at the point of care to make critical decisions about patient assignment and staffing. It also recognizes they are the best individuals to make those decisions. In this model, the charge nurses consider patient acuity, patient needs, nursing skill levels and workloads as they make decisions about patient care.
For this article, we define nursing as informed caring for the well-being of others, and caring as a nurturing way of relating to a valued other toward whom one feels a personal sense of commitment and responsibility. Swanson's Caring Theory consists of five relational processes: knowing, being with, doing for, enabling and maintaining belief in the other (Swanson, 1991, 1993).\(^{29,30}\) Nursing with care means using one's expertise, best evidence, personal integrity, social responsibility and professional accountability for the betterment of patients and their families.

While patients value caring behaviors, nurses consistently undervalue the importance patients place on their knowledge, clinical skills, availability, understanding and ability to provide a physically and emotionally healing environment, reports the Journal of Nursing Care Quality. A study of 362 patients and 90 registered nurses demonstrated that patient-perceived nurse caring, along with nurse and physician communication, were major predictors of patient satisfaction (Lynn and McMillen, 1999).\(^{26}\)

Qualitative studies suggest patients who receive adequate care are more confident, better understand their illness, heal faster, gain independence more rapidly and exhibit better coping skills. In addition, when nurses practice in a manner consistent with their core values of caring, they have increased confidence, exercise enhanced clinical judgment and skills, practice deeper empathy and realize a greater love of nursing (Swanson, 1999).\(^{31}\)

Nurse executives who value the work nurses perform and the workers themselves must create worksites that preserve the dignity, promote the safety, and foster the well-being of nurses, patients and families (Kimball, 2005).\(^{17}\) A 2004 article in The Health Care Manager asserts leaders in healthcare organizations who successfully retain a strong nursing workforce will be led by nurse executives and managers that are service oriented and customer-focused.\(^{32}\) Swearingen and Liberman stress retaining one's "customers"—patients, families or employees—requires valuing those served and using one's expertise, role-related power and material resources to the betterment of the other.

Organizations that embrace such a leadership model are strongly rooted in ethical and caring behaviors, promoting teamwork, partnerships and community

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Causes of Nursing Shortage

- Disorganized, understaffed and under-resourced work environments
- The perception that nurses exercise minimal autonomy in their work
- Competing career options and professions previously considered men's purview only
- Ethnic, gender and income barriers that limit who feels welcome in nursing
- An aging workforce
- Managed care cutbacks that lead to fewer positions and higher expectations for productivity
- A reduction of faculty to teach the next generation

Source: Health Care’s Human Crisis: The American Nursing Shortage
involvement. These organizations include employees, patients and their families in decision-making. A key element of quality enhancement is the belief improvements can be achieved by bettering internal processes, focusing on the customer’s needs and preventing quality problems from occurring (Detert, et al, 2000). Productive businesses from retail and manufacturing sectors, having eschewed top-down management models, recognize they will never reach their full potential unless their entire infrastructure serves, resources and empowers employees all the way to the point of care.

New technologies can play a role in transforming healthcare environments. Currently, nurses face increased demands on their time as patients become sicker and require more care, documentation requirements increase and inefficient systems fail to support the care nurses strive to deliver. Technology can be a valuable solution to the challenges in the work environment and potentially can better support nurses by minimizing paperwork, streamlining work processes, accessing information more readily and integrating communication methods among care team members, patients and families.

However, the American Organization of Nurse Executives’ statement on the IOM’s report on Nursing Staffing and Quality of Care (2003) urges caution to nurse leaders. “While technology can help meet some of today’s medical demands, it’s important to note that technology is not a silver bullet solution. At the heart of what needs to change are low tech, solutions-stronger communication and relationships between physicians, nurses and patients and families.”

A critical relationship and partnership that can improve communication among nurses, physicians, patients and families is the one between academia and practice. The gap between these settings can cause problems when new nurses are not fully prepared to practice in the real world. Many schools of nursing and practice settings offer exciting opportunities to address issues related to the nursing shortage. The University

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**Endowment Honors Commitment**

Since receiving the University of Washington Medical Center’s 2005 Professorship in Nursing Leadership, I have consulted with nurses at the medical center and throughout the nation on theoretical models and evidence that best support nursing practice. My work is largely focused on the integration of caring theory into practice and leadership.

I view UWMC’s development of the endowment as a true mark of distinction for the profession, as well as a statement that nurses in practice value the contributions of their peers in academia. The professorship is a mark that nursing allows each individual to excel in accordance with his or her own gifts. While my colleagues in practice sharpened their abilities as experts in care, I elected to take a path toward knowledge building and testing. To be so validated by nurses in practice for my work as a nurse theorist and scientist is a personal and professional high in my career.

I believe the relationship between nurses in practice and in education at the University of Washington honors each of our contributions to excellence in patient and family care. The endowed professorship celebrates nursing scholarship and validates the importance of developing and testing knowledge that promotes nursing practice.

—Kristen Swanson, R.N., Ph.D., FAAN
of Washington School of Nursing (UWSON) and UWMC partnered to fill the gap between academics and practice. UWMC created an endowment, the UWMC Professorship in Nursing Leadership, as well as a hospital-based nursing research program, and together with UWSON, jointly appointed Dr. Elizabeth Bridges to the research role. As such, Bridges is a member of the UWSON faculty and the UWMC nursing leadership group. Both the school and the hospital support her position.

Bridges’ primary role at the medical center is to assist and support nurses at the bedside to explore, study and investigate their practice as it pertains to patient outcomes. Since this joint role was established, all 11 of UWMC’s specialty-based professional practice councils have active nursing inquiries underway. In addition, ongoing research will involve exploring patient and family involvement in improving medication safety. The medical center would not have realized its goal of building a hospital-based nursing research program if it had not been for the partnership with the UWSON.

**Looking to the future**

A positive outlook for healthcare delivery, patient safety and nurse retention depends on the extent to which nurses are empowered to lead. A position of caring, with nurses at the forefront, actively engages patients and families in their care. It uses interpersonal and technical means to communicate nurses’ expertise and insights with those in their care, as well as peers and colleagues.

Furthermore, nurse empowerment and the restoration of a robust nursing industry, depends on the success of several factors. The extent to which society supports opportunities for a diverse pool of men and women to pursue nursing education is vital for a growing and varied profession. Organizations hiring and supporting nurse executives who fundamentally understand and advocate for excellence in nursing will foster the commitment of nurses to their organization and profession. By playing the role of relentless advocates, these same executives will sustain nurses’ commitment to the patient- and family-centered caring. Finally, by ensuring nurses are sufficiently resourced with time, supplies and knowledge to practice in accordance with their core values of caring, personal leadership and patient-family centered care, healthcare organizations have reason to believe the storm will subside.
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Susan Grant is the chief nursing officer and senior associate administrator for patient care services at the University of Washington Medical Center (UWMC) and assistant dean for clinical nursing practice at the University of Washington School of Nursing in Seattle. In her role at the medical center, Grant is accountable for the professional nursing practice, rehabilitation therapies, social work and respiratory care. At the school of nursing, Grant advises the dean and faculty on practice trends, preparation of new nurses, continuing education initiatives and changes in healthcare. Her expertise and leadership offer input to the school’s capacity to educate nurses with the necessary skill sets to make a difference in practice, teaching, research and leadership.

Grant also serves as the executive sponsor for the organization’s patient- and family-centered care initiative and co-executive sponsor for quality, patient safety and clinical information systems with UWMC’s medical director.

Grant’s work in healthcare in the last several years has focused on professional nursing practice and patient- and family-centered care. She is a member of the Institute for Family-Centered Care National Advisory Board. Grant is currently a Robert Wood Johnson Nurse Executive Fellow and also president-elect for the Northwest Organization of Nursing Executives.

Grant is a graduate of the University of South Carolina, where she earned her master of science degree in community mental health and psychiatric nursing. She earned her bachelor of science degree in nursing from the Medical College of Georgia.

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Kristen M. Swanson is chair of the Department of Family and Child Nursing at the University of Washington and the University of Washington Term Professor in Nursing Leadership. Swanson is a nurse scientist, teacher, administrator and consultant. She has developed a middle range theory of caring that is applied internationally in teaching, practice and research.

Swanson is a Robert Wood Johnson Nurse Executive Fellow and a fellow of the American Academy of Nursing. Her research focuses on caring and pregnancy loss, and includes inductive phenomenology, participatory action research and randomized clinical trials of caring-based interventions. She is currently principal investigator on a National Institutes of Health funded randomized investigation of the effects of several caring-based interventions on couples’ well-being after miscarriage.

Swanson received her bachelor’s degree in nursing from the University of Rhode Island; her master’s in adult health and illness nursing from the University of Pennsylvania; and her doctorate in psychosocial nursing from the University of Colorado. She completed a two-year individually awarded NSRA postdoctoral fellowship at the University of Washington with Dr. Kathryn Barnard.
REFERENCES