During orientation, nurses concentrate on completing checklists and tasks. Many studies have been completed to ask the question, “Can you teach caring behaviors?” Our institution has developed simulation to teach the softer side of nursing and model caring for our new employees.

There is much debate as to whether you can teach caring attitudes to nurses. In the past, the art and science of nursing were learned through hands-on practice. With higher patient acuity, the demand for cost containment and the need for an accelerated knowledge base, traditional formats for orientation, and continuing education have had to evolve and change (Winslow, Dunn, & Rowlands, 2005). New employees and many younger, technically savvy nurses have a desire to learn in a safe and controlled situation. This need for hands-on learning has led to the increased use of simulation. Billings and
Nutrition to Improve Outcomes

What YOU Told Us

At the 2014 AMSN Convention in Orlando, FL, we hosted a Town Hall on the integration of nutritional care to optimize patient outcomes. It was immediately apparent that medical-surgical nurses understand the value of nutrition in healing wounds, reducing infections, preventing falls, limiting pressure ulcers, and contributing to an expedited recovery. It was also evident that many of us are encountering the same common barriers to comprehensive nutrition care. However, most impressively, it was clear that many medical-surgical nurses are working diligently to implement new strategies to tackle malnutrition in the hospitalized patient.

Using an audience response system, we communicated with approximately 200 attendees about the current status of nutritional initiatives in their practice settings. Several nurses approached the microphone to share their successful initiatives in greater detail. The dialogue among medical-surgical nurses about the complexities and successes of nutritional care was phenomenal.

Through the audience response system, we confirmed that the majority (91.8%) of nurses (N=157) have robust processes in place to readily screen all patients for nutritional concerns upon admission, but only 25.6% (N=35) have clear methods of identifying and referring at-risk patients who develop nutritional issues during their hospital stay (see Figure 1).

We also heard that although 89.2% (N=148) have processes in place to easily obtain nutrition referrals for all patients who are identified as at-risk during the screening process, only 14.4% (N=29) could identify a clearly documented nutrition plan (see Figure 2).

We were impressed to learn that more than half (56.5%, N=74) of those who responded work to consistently incorporate nutrition into their patients’ plan of care. In fact, approximately 61% (N=119) are striving to regularly include nutrition as a key element in the patient’s clinical status in discharge-planning rounds or team huddles. We were also excited to hear that 63.4% (N=121) of those who participated have a method of embedding nutrition in the discharge process.

As we look at The Alliance for Nutrition Care Model (Tappenden et al., 2013), we recognize that we have opportunities to collaborate with you to foster innovations that remove barriers...
Quality Matters

Patient and Family Engagement: A Global Initiative

Entities outside of nursing are driving the initiative to measure the quality/safety of the patient experience. Some of the drivers are regulatory in nature such as the Centers for Medicare & Medicaid Services (CMS) and the Agency for Healthcare Research and Quality (AHRQ). The CMS Partnership for Patients program (PPP) is a consortium of over 8,000 hospitals, representative health care organizations, state governments, employers, and unions. Partnership for Patients is “focused on making hospital care safer, more reliable, and less costly” (CMS, n.d.). Other organizations include not-for-profit groups whose mission comprises the development of crucial relationships between patients and their families and health care professionals. Included in the goals of these relationships is to assure the delivery of safe care, provision of high quality care, reduction of the cost of care, and enhancement in the transition of care from provider (or providing organization) to the next level of care.

As nurses, we often wonder whether or not our best efforts to provide safe, high quality care are lost in the conundrum of patient satisfaction scores, performance improvement, and quality measurement. With our organizations, we are dedicated to the provision of the best care to our patients. We are committed to the process of improvement and to that end, we are obligated to ask ourselves (from an organizational standpoint) if our efforts actually result in better patient outcomes. The August 18, 2014, issue of The New England Journal of Medicine identified a single 2013 report by CMS that declared that the Partnership for Patients, at an estimated cost of $1 billion, showed early elective deliveries in the CMS’ hospital engagement networks’ [HENS] were down by 48% and nationally, readmissions were decreased to 17.8% from pre-PPP (19%) (Pronovost & Jha, 2014). The article identified flaws in the CMS report associated with lack of measurement validity as well as inconsistencies in performance measurement.

Initiatives for improved engagement implemented by the World Health Organization (WHO) have been in process globally for a decade. WHO acknowledges that measuring the impact of patient engagement is difficult to quantify. Consequently, WHO is gathering qualitative data (basically participant perception of impact) on expected improvements as a result of their Patients for Patient Safety initiative (WHO, 2015). WHO is currently seeking objective measures to determine the value of patient engagement.

The capacity to measure performance using specific, evidence-supported criteria is the foundation for assuring validity. Patient satisfaction scores and treatment outcomes are two health care tools for measurement of care quality and safety. Obviously both of these measurement tools have their limitations. Development of measurement tools that are credible is essential to maintenance of an equitable distribution of limited health care resources. Without such tools, the rewarding of organizations financially based on flawed measurements corrupts the foundation of Pay for Performance.

References

Additional Reading

Marguerite Windle, MSN, RN, CMSRN, is Director of Education, Kindred Hospital Philadelphia, Havertown, PA. She is the AMSN Coordinator for the National Quality Forum (NQF) and the Nursing Alliance for Quality Care (NAQC).
The Effects of Nurse Staffing on Quality of Care

Crystal J. Martin

Nurse staffing levels have an effect on a variety of areas within nursing. One of the most profound is the effect on patient quality of care, which refers to the values and expectations of the consumer, i.e. the patient (Stanton, 2004). According to Stanton (2004), hospitals with low staffing tend to have higher incidence of poor patient outcomes. Poor nurse staffing affects not only the patient, but the employee as well. Insufficient staffing increases nurse workload and job dissatisfaction, and it decreases total patient care overall (Stanton, 2004). "Job dissatisfaction is four times higher for nurses than the average rate for all U.S. workers, and one in five nurses report they intend to quit their job within a year. Inadequate nurse staffing leads not only to adverse patient outcomes, but increased nurse burnout" (Garnett, 2008, p. 1196).

When nurse staffing is inadequate, the ability to practice ethically is questionable. The ethical principle in discussion is nonmaleficence, which requires nurses to act in such a manner to avoid causing harm to patients and is closely related to the principle of beneficence. Beneficence means that a nurse is required to act in a way that benefits the patient (Burkhardt & Nathaniel, 2002). When combined, these principles serve as the backbone for the way a nurse practices. These acts are not only morally demanded of nurses, but also legally demanded by the profession. Without laws and legislation to support these ethical principles in every way, especially in matters such as inadequate nurse staffing, patient safety and quality of care are at risk.

Nurse Understaffing: Who It Affects

Inadequate nurse staffing affects patients, their loved ones, future and current nursing staff, and the hospitals in which they are employed. Time worked, overtime, and the total hours worked per week have significant effects on errors. The longer the work hours, the more likely errors will be made (Garnett, 2008). “A high nurse-to-patient ratio is directly responsible for nurses’ job-related burnout and job dissatisfaction. Health care facilities can avoid preventable patient mortality and low nurse retention rates by investing in RN staffing” (Garnett, 2008, p. 1196).

Hospital Nursing Staff

Adequate nurse staffing saves lives. “Lower registered nurse-to-patient ratios are shown to reduce mortality rate by more than 50%” (Sofer, 2005, p. 20). Poor nurse staffing and higher rates of adverse patient outcomes are directly related (Garnett, 2008). Although this has been proven in various studies, little has changed in regard to nurse staffing. Not only have higher nurse-to-patient ratios been shown to increase nurse burnout, it can have serious effects on the health and well being of the nurse. An unrealistic workload may result in chronic fatigue, poor sleep patterns, absenteeism, and job dissatisfaction (Garnett, 2008). Mandating nurse ratios could help alleviate these issues and many others. "Supporters of mandated ratios believe it will help to maintain a stable workforce by not overtaxing RNs with unsafe patient assignments, thereby increasing the
longevity of nursing careers” (Upenieks, Akhavan, Kottlerman, Esser, & Ngo, 2007, p. 244).

Patients and Their Loved Ones

Patient satisfaction is a key indicator of quality patient care (Stanton, 2004). According to Stanton (2004), poor patient outcomes such as pneumonia, shock, cardiac arrest, and urinary tract infections are directly related to low nurse staffing. In hospitals with higher RN staffing, there are lower rates of adverse outcomes, thereby improving quality of care and in turn increasing patient satisfaction (Stanton, 2004).

Hospitals

“Hospital nurse staffing is of major concern because of the effects it can have on patient safety and quality of care” (Stanton, 2004, p. 3). During a 20-year period from 1980 to 2000, patient length of stay decreased from 7.5 days to 4.9 days (Stanton, 2004). With this came another change—the change in the number of nurses necessary to care for the acutely and critically ill. Poor staffing places undue burdens on nursing staff and can put patients in harm’s way. For hospitals, this is a substantial financial cost that needs consideration. Adverse outcomes are associated with higher costs. According to Stanton (2004), pneumonia and pressure ulcers alone cost hospitals more than $9 billion a year. While hospitals believe short staffing is making the bottom line better, it is possibly creating a much greater budgetary problem.

Nonmaleficence

Nonmaleficence involves avoiding harm to a patient (Burkhardt & Nathaniel, 2002). In order to adhere to this principle, nurses need a solid foundation. Short staffing and the nursing shortage both affect the way in which this principle can be carried out. In line with the Hippocratic tradition, the principle of nonmaleficence is first do no harm, and it is placed above all others (Burkhardt & Nathaniel, 2002). “It is obvious that we must not commit acts that cause deliberate harm and we must avoid doing harm as a consequence of doing good” (Burkhardt & Nathaniel, 2002, p. 50). Unfortunately, an unmanageable workload, more acutely ill patients, and nurse fatigue can cause abandonment of this principle. As staffing becomes more and more inadequate, the principle of nonmaleficence becomes harder to cling to. For a nurse to believe all ethical principles are important and vital, the hospital has to prove both the patient and the nurse are of utmost importance and can do so by supporting safer staffing policies throughout the organization.

Strategies for Improvement

What Needs to Change and Why

Although many organizations within the health care system are aware of the nursing shortage and hospital registered nurse understaffing, little is being done to improve the current system. The fact that there is a shortage of qualified nurses in the United States is not a new problem. There have been laws and legislation passed to encourage nursing growth, including the Nurse Reinvestment Act in 2002, the Registered Nurse Safe Staffing Act of 2007 and 2010, and mandated nurse ratios at the state level (Stanton, 2004). The change needs to be made on a national level to increase both the number of nurses able to practice and the nurse-to-patient ratio. Greater numbers of nurses at the bedside help increase patient satisfaction, improve quality of care, and increase nurse morale, satisfaction, and retention (Stanton, 2004).

Some organizations claim to have already made changes to increase nurse staffing, but when the staffing of RNs increased, the unlicensed staff dropped dramatically (Upenieks et al., 2007). This was done to balance the budget without acknowledging the necessity of ancillary staff (Upenieks et al., 2007). For a change of this magnitude to be successful, all organizations must be held accountable and understand exactly what needs to be accomplished. For example, increasing nurse staffing does not mean changing RN duties to include housekeeping and transport. It does not mean eliminating ancillary staff; it simply means increasing the number of nurses caring for patients is adequate for the patient acuity (Stanton, 2004). Increasing nurse staffing will increase satisfaction for patients, nurses, and the organization overall.

How Nurse Staffing May be Accomplished

“Hospitals that increase their nurse staffing ratios either across all units or within individual units have reason to be concerned about the impact of such steps on their finances” (Stanton, 2004, p. 6). Although this is a valid concern, hospitals need not worry. Several studies have shown that increasing the number of RNs does not significantly decrease a hospital’s profit (Sofer, 2005). While increasing the number of nurses caring for patients does cause a slight change in operating expenses, it has the benefit of decreasing the amount spent on adverse patient outcomes (Stanton, 2004).

The State of California has been the leader in the revolution of nurse staffing ratio mandates. In 1999, California passed the first legislation, Assembly Bill 394 (AB 394), in the United States to establish mandated nurse staffing ratios for RNs and LPNs working in hospitals (Seago, 2002). It is the responsibility of the California Department of Human Services to “establish minimum, specific, and numerical licensed nurse-to-patient ratios by licensed nurse classification and by hospital unit. It also directs hospitals to continue using a patient classification system (PCS) and to staff above the minimums recommended by the PCS” (Seago, 2002, p. 51). This bill has a direct impact on the demand for nurses, adequacy of the nursing supply, and the quality of care provided to patients, but it is also seen as a way to protect the nurse and patient. One drawback of the bill is that it may worsen the already difficult issues that recruiters have recruiting and retaining nursing personnel (Seago, 2002).

To be successful nationwide depends on the accountability provided by the state or federal government. New legislation may be passed, but without holding organizations responsible for their actions, it’s only a piece of paper. In June 2010, the Senate and House of Representatives passed the Registered Nurse Safe Staffing Act of
2010 to hold hospitals accountable for the “development of valid, reliable, unit-by-unit nurse staffing plans (driven by direct care nurses)” (The American Nurses Association, 2010, p. 2). The introduction of this bill allowed nurses to voice their concerns to their legislators about unsafe staffing and the risks it imposes on their career (The American Nurses Association, 2010).

The Registered Nurse Safe Staffing Act contains implications believed to be vital in the sustainability of accountability. The Act asserts that safe staffing plans must be in place and they must: “be based on patient numbers and the intensity of care they need, take into account the level of education, training, and experience of the RNs providing care, ensure that RNs are not forced to work in units in which they are not trained and must consider other factors affecting the delivery of care, including unit geography and available technology. The bill would also protect RNs and others who may file a complaint about staffing, allows for the refusal of an assignment, and established procedures for receiving and investigating complaints.” (The American Nurses Association, 2010, p. 2)

These safeguards and regulations are needed for mandated nurse-to-patient ratios.

Conclusion

Safe nurse staffing improves outcomes for nurses, patients, and organizations. The effect of increased nurses to patients has shown to have a marked change in patient outcomes in California (Seago, 2002). If changes similar to those outlined in the new Registered Nurse Safe Staffing Act are followed, positive outcomes may become a national norm, and the ethical principle of nonmaleficence would no longer be left out of the American nurse’s skillset. Ethical principles are vital to the practice of health care professionals. Safe staffing acts and the principle of nonmaleficence will only complement each other and allow the nurse to practice in the way that is best for the patient.

References


Crystal J. Martin, BSN, RN, was a Medical-Surgical Nurse Supervisor, OU Medical System, Edmond, OK, at the time this article was written.

Note: AMSN has a Position Statement on this topic, entitled “Staffing Standards for Patient Care.” Position Statements are available online at www.amsn.org under the Practice Resources tab.

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Healthy Practice Environments

Current Trends in Stress Management

Stress in nursing has been present and studied throughout time. Today’s nursing and health care literature is filled with references to healthy practice environment, healthy nurse, and workplace stress (Burke, 2013; Carpenter, 2013; Oyeleye, Hanson, O’Connor, & Dunn, 2013; Spencer, 2013). Nurses often put the care and comfort of others before their own. Healthy nurses are needed to be able to properly care for patients and to role model the behaviors we want our patients to display. Understanding and managing stress is crucial to healthy nurses and nursing practice environments. Stress is a significant cause for high turnover rates and decreased nursing performance (Huibing, Chow, & Poon 2013), as well as mental and physical problems (Marine, Ruotsalainen, Serra, & Verbeek, 2006).

Current trends to help reduce nurse stress include work-directed and person-directed interventions, such as meditation, respite rooms, and psychological debriefings. Lifestyle changes, reflection, peer support, clinical supervision, and time-management are other strategies nurses can use to manage work-related stress. Another approach to managing stress is from a holistic (mind, body, spirit) perspective (Misterek, 2009). Reducing stress using holistic techniques requires that nurses engage in self-care activities, such as meditation, healthy eating, exercise, and getting adequate rest. Misterek (2009) stated that nurses must take care of themselves in order to provide care for others.

Staff nurses, nurse leaders, and graduate nursing students working on our unit participated in informal interviews to discuss stress management techniques. The participating nurses were asked how they manage stress at work. A variety of healthy and unhealthy coping answers were reported. Activities used outside of work to decrease stress included: exercise, sleeping, drinking alcohol, and taking time off work. During work hours, stress relievers included: making patient rounds, taking a break away from the unit, taking a smoke break, and asking for help from a co-worker to complete a task. Differences in stress-reducing strategies were also noted among personality types. For example, nurses who claimed to be outgoing described making rounds and talking to patients as good ways to reduce stress. Nurses who described themselves as shy or quiet reported reading or taking a break away from the unit as good stress-reduction techniques.

The American Nurses Association published a news release in 2013, encouraging nurses to focus on self-care so they can be their healthiest – physically, mentally, emotionally, and spiritually – in order to provide the highest quality of care and serve as role models, advocates, and educators for their patients. There is a significant amount of literature on the effects of stress on nursing, but further investigation is required to determine effective means for managing stress at work. In summary, healthy nurses are better able to provide holistic care for patients and foster healthy work environments.

References


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Sustaining the Human Experience in a High Tech Environment: EMR Implementation

Utilizing standardized terminology within the electronic medical record (EMR) is critical for nurses to communicate their contact on patient care. The widespread requirement for quality, efficiency, and cost containment has made it imperative to express nursing knowledge in a meaningful way to be shared across the care continuum. Utilizing an electronic record gives each health care provider the ability to review the patient’s care across the continuum, avoiding the possibility of duplication of services. This will assist in improving treatment efficiencies and reducing costs per procedure or treatment. The documentation of care using an electronic medical record demonstrates the impact of nursing on patient care and validates the significance of nursing practice. Valuable time is spent with the patient while utilizing the EMR as a functional tool. Patient interactions are enhanced as the EMR assists in involving the patients and their significant others in the treatment plan.

In this digital age, more and more information—which previously had been paper-based—is digitized and stored in a central location for ease of access. The idea of an electronic medical record (EMR) started several years ago. Handwritten records are subject to human errors due to misspelling, illegibility, and differing terminologies. The standardization of patient health records through EMRs can assist efficient care that enhances quality and ensures ongoing communication across the care continuum. Additionally, with the implementation of the EMR, billions of dollars could be saved annually.

Several years ago, Catholic Health Services identified the need to move to an automated system of clinical documentation to support provider order entry, which would be seamlessly integrated through the continuum of care. The system was proposed to achieve favorable outcomes such as:

- Increased patient safety
- Improved patient satisfaction
- Greater clinical efficiency
- Enhanced physician satisfaction
- Enhanced staff satisfaction
- Automated management reporting

Our highly technical electronic medical record and relationship-based care model are synchronistic. The utilization of technology to communicate, support decisions, and enhance quality is at all times patient-centered by involving the patients and their families in all care decisions. During the implementation phase of the EMR, senior nursing leadership established a plan that enhanced the human touch of a highly technical project. While being educated on the EMR, nurses were given strategies that would enhance the patient experience (see Table 1). Recognizing the potential impact the EMR can have on patient satisfaction, clinical nurses are acutely aware of the importance of educating patients in the process of electronic documentation.

**Implementation of an Electronic Medical Record**

Prior to implementation and in a variety of forums, the clinical staff was reminded to keep the patient at the forefront and the electronic record as the vehicle for information sharing. Patients were informed and educated on the various devices that enter their room, in addition to any alarms they may hear. Clinical escorts were assigned to each physician to ensure seamless delivery of care during the early weeks of implementation. Each nursing unit was supported with superusers who assisted nurses in becoming proficient with the EMR while delivering care that was focused on the patient, not the equipment nor the technology.

It is clear that technology can enhance patient safety and efficiency, but at what expense to the patient? At St. Francis Hospital, The Heart Center® in Roslyn, New York, the clinical nurses utilize the EMR in a manner that facilitates the patient’s involvement in care. This was illustrated by streamlining the assessment documentation process in our effort to minimize the repetition of questions and by ensuring the computer is placed between the patient and the clinical nurse. In this manner, the patient is able to tell a story rather than answer a series of questions. The dialog is meaningful and enhances the relationship between the clinical nurse and the patient. Being sensitive to the patient’s hospital experience through the utilization of our EMR requires the clinical nurse to support the dignity, individualization, and respect that is demonstrated at St. Francis Hospital, The Heart Center®. A well-designed electronic medical record can increase the quality of patient care by providing nurses with easily accessible information and allowing them to spend less time documenting and more time with patients, providing excellent care.

**Strategies to Assist in Improving the Implementation of an EMR**

Strategies utilized during the implementation phase included clinical nurse involvement in policymaking, development of order sets, care planning, and education to their col-

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**Table 1. Strategies for EMR Implementation**

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<th>Strategy</th>
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<tr>
<td>Start early on, and plan for educational opportunities.</td>
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<tr>
<td>Plan for a culture change by involving frontline staff in committee workshops.</td>
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<tr>
<td>Utilize “superusers” before, during, and after EMR implementation.</td>
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<tr>
<td>Implement leadership walk rounds to provide support and guidance.</td>
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www.amsn.org
The implementation of an electronic medical record is truly epic. Time, determination, resources, and most importantly a caring staff that is driven by excellence are the ingredients for success. Maintaining the human touch is vital to not only excellence in patient care, but also a gratifying experience for the nurse.

**Suggested Readings**


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Plan for the unexpected, such as:

- Plan for a higher than expected census.
- Have additional computers on hand for timely replacement, if needed.
- Provide additional clinical and technical support for weekends and nights.
- Have additional nursing superuser support for the medical staff.

Lessons learned from our experience of implementing the electronic medical record are many. Successful strategies include:

- **Start early.** Allow ample time to teach the professional staff the “nuts and bolts” of the equipment.
- **Prepare for a culture change.** Develop committees and task forces with nurses at the forefront to provide clinical expertise in knowing what is best for the patients and their nursing practice.
- **Involve nurses in the selection of the product by hosting vendor show and tell meetings.**
- **Develop an electronic playground** for the clinical staff to practice what was taught in the classroom setting.
- **Utilize superusers around the clock** to assist with hands-on education prior to and during the implementation.
- **Enlist the assistance of a consulting firm** to act as teachers, coaches, and a support system during the go live phase for additional support to the medical and nursing staff.
- **Conduct leadership walk-rounds** to provide support and guidance.
- **Provide ongoing dialog post-implementation** for clarification and troubleshooting.
- **Celebrate successes publically and frequently.**
- **Reinforce with staff** that policies and procedures are similar whether you are working with an electronic medical record or conventional medical record.
- **Encourage practice in the simulation lab.**
- **Support and educate.**
continued from page 1

Halstead (2009) explained simulation as a reflection of actual life events, which may be presented using computer software, role-play, case studies, or games that represent real-life situations, while learners actively apply lesson content. Deeply embedded in our institution’s mission and values is the attitude of compassion and caring. Our institution has an affiliation with the Watson Caring Science Institute. Watson (2008) noted that caring begets more caring. Nurses, when cared for and about, can move caring into their own lives and transform their nursing into a caring practice.

Assessment

The education team at our academic medical center – including staff development instructors, the simulation coordinator, a chaplain, and a research associate – believe that caring is a fundamental principle in which patient care is to be delivered. Watson (2008) explained, “Caring is considered one central feature within the meta-paradigm of nursing knowledge and practice” (p. 19).

The nurses hired at our academic medical center come from a variety of backgrounds, academic settings, and experiences. We believe that encouraging conversation about caring attitudes early on in the development of our nurses was vital to enhance the caring-healing environment and to create a culture of caring within our institution.

Plan

The Departments of Nursing Education and Research created several programs to develop new nurses and provide support for them as they learn the socialization of the professional nurse. One of these programs is the Nurse Residency Program – Journeys. This program is a yearlong mentorship for the newly licensed registered nurses. Because our new nurses come from community hospitals and smaller community settings, the transition to a larger academic medical center can be challenging. Our orientation period is full of web-based modules, policies, and hands-on skills that new hires must learn to be successful.

A gap was identified by our leadership team through feedback provided by preceptors and communication from new employees that identified the difficulty with the transition of performing the task of nursing versus the art of nursing, which includes caring and compassion. Due to this obtained information, a simulation was developed to provide an opportunity to practice caring. The education team made a commitment to bring all nurses – novice or expert – back to a classroom setting after 60-90 days of practical experience on the unit, a period of time that provided them an opportunity to acclimate to our culture and learn policies and procedures.

The education team introduced a simulation day, which began as a four-hour experience. The day evolved into a full six hours, using our Virtual Hospital to teach the art of nursing and help new nurses experience the “softer” side of nursing. The management and education teams mutually agreed upon a time period for the staff to return. We found that providing newly hired nurses with time to assimilate the knowledge learned in orientation has allowed them to be more open and receptive to the new experience of simulation. In addition, this provides us with an opportunity to further explain or clarify any orientation information that the nurses may have misunderstood. It is also imperative to move the knowledge gained in orientation into practice. The simulation experience closes the loop of orientation for most of our nurses as we partner together to co-create a learning experience that is practical and caring.

The simulation day is divided into five segments. The leaders are staff development instructors (SDIs) who are experts in simulation and knowledgeable of the hospital’s policies and procedures. The new nurses have developed a relationship with the SDIs throughout the orientation period because we wanted to create an environment where nurses felt safe to communicate or experiment with new behaviors while still being guided. During this day, we discuss the culture of safety, role-play, and participate in change-of-conditional scenarios. The scenarios – in which the RNs role-play as patients and family members, demonstrating best practices such as bedside reporting, purposeful rounding, and goal-setting with patients – were designed by SDIs with feedback from our preceptors. This gave the new nurses the opportunity to gain insight from a patient or family perspective on the art of caring. The scenarios involved best practices such as bedside reporting, purposeful rounding, and goal-setting with patients. The change in a patient’s condition included communication and a review of resources that the new employee needs to be comfortable in accessing in the event of an emergency. Lastly, we incorporated self-care ideas and techniques and talk about ways of relating with patients, family, co-workers, and the interdisciplinary team.

Interventions

The simulation is based on an actual patient scenario. The SDIs are able to encourage students to look holistically at the patient and see the family and physician as part of the care circle. The nurses are encouraged to display empathy, respect, and awareness of the nurse-patient relationship. Each nurse has a role to play, including being the observer for the scenario. The “patient” and “family” are provided a script as to what or how they are to act. The nurses genuinely enjoy this section as they often re-tell an experience they have had, whether positive or negative, and it is displayed in their interaction within the scenario. During the change of condition scenario, the SDIs provide task trainers to fully replicate what the nurse experiences on the unit. During the debriefing section, receiving feedback from staff development instructors and peers often acknowledges “strengths” that a nurse may not be aware of having.

Role-playing is powerful in helping nurses explore their attitudes and behaviors (Fowler, 2012). To make a more caring environment, we need good role models who demonstrate caring behaviors, and we must expose nurses to caring in simulation that can be transferred to the unit level.
Many theorists propose that nursing, grounded in caring, conscience, commitment, and comportment. These are the values that we strongly support in our professional nurses. These behaviors sum up caring in the deepest, truest way. Caring in nursing is not a pipe dream. When caring is taught in a proactive path through modeling and simulation, it enhances the whole team. Both the patient and nurse can use the art of caring to heal and thrive.

Gonzalez and colleagues (2010) believe that educators and preceptors must care to teach caring because it is vitally important to provide a safe environment so the nurses can freely learn. In the study completed by Blum, Hickman, Parcells, and Locsin (2010), simulation technology effected an increase in caring behaviors, but these behaviors increased even more when instruction used modeling and debriefing of caring behaviors within the simulated scenarios.

Nurses provided meaningful feedback about the experience and have stated that they would definitely apply the information learned to care of their patients. Most report that it helped increase their self-awareness and provided time to explore their own attitudes and beliefs.

Reassessment

In conclusion, our experience has supported the premise that you can teach caring attitudes and behaviors. Nurses seem to need and desire a re-connection to the softer side (also known as the art) of nursing. The nurses seemed to enjoy participating in activities that opened the heart and expanded their personal journey in caring. This program supports the novice nurse and helps them move forward out of the “task learning and completing mentality” to a broader caring and valuing of team, patients, and the profession. In addition, it also supports experienced nurses who deeply value the re-connection of caring over the tasks’ identified value.

There are many other benefits to our patients and families that we are beginning to realize, including initiating a culture of safety at our facility. We strongly believe that caring adds to the environment of safety. According to James (2013), the portion of adverse events that are deemed preventable tends to be about 50-60%; however, experts have recently postulated that virtually all identified adverse events are preventable with the Global Trigger Tool. Many times, adverse events can be directly linked to unmet nursing care needs. These events are not limited to medication errors, falls, and nosocomial infections. If, as an institution, we only work toward creating and training scientific nurses without an understanding of caring, we lose the tremendous potential of human-to-human healing.

There are other benefits, such as nurses who are now more resilient. We cannot give what we ourselves don’t possess. The self-care culture ensures the team takes breaks, receives support, and offers each other encouragement, which is pivotal to creating a caring environment.

Today, nurses need to approach patients holistically. Many theorists propose that nursing, grounded in caring, decreases the severity and number of adverse events. Nelson and Watson (2012) listed the six Cs that have been developed for patient care: competent, compassion, confidence, conscience, commitment, and comportment. These are the values that we strongly support in our professional nurses. These behaviors sum up caring in the deepest, truest way. Caring in nursing is not a pipe dream. When caring is taught in a proactive path through modeling and simulation, it enhances the whole team. Both the patient and nurse can use the art of caring to heal and thrive.

References


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The next issue of MedSurg Matters! will focus on military topics. This special themed issue will include articles on post-traumatic stress disorder, advances in the Joining Forces initiative, careers of military nurses, the ROTC program, and personal experiences of members who have served. You won’t want to miss the May/June issue! Look for the physical copy in the center of your MEDSURG Nursing journal, or keep an eye on your email inbox to download the digital edition.
Biofilm as the Cause of Non-Healing Wounds

Jennifer Hurlow, RN, GNP, CWOCN, is a leading wound clinician and researcher examining the idea that bacteria in biofilm are a cause for chronically inflamed, non-healing wounds. In a recent interview with MedSurg Matters!, Hurlow reported that J.W. Costerton first published his data on bacteria in biofilm back in 1978; however, 37 years later, many providers remain unacquainted with this concept.

Bacterial biofilms are complex microbial communities living in a three-dimensional extracellular polysaccharide (EPS) matrix embedded in a thick, slimy blanket of sugars and proteins. This biofilm slime can be felt on the inside of a flower vase or seen as tooth plaque. This EPS matrix acts as a barrier, protecting microorganisms from cellular and chemical attack. When in this slimy bacterial community, bacteria are protected from natural immunity and are up to 5,000 times more tolerant to antibiotics than bacteria existing in the planktonic (free-floating) state (Watters, Everett, Haley, Clinton, & Rumbaugh, 2013).

Hurlow is concerned that patients are experiencing delayed healing, extended lengths of hospital stay, increased expense, and complications such as sepsis and loss of limb related to unidentified biofilms. According to Hurlow, nurses can better help their patients if they begin to learn about biofilms and consider their existence in patients with non-healing or deteriorating wounds. Early identification and treatment of a biofilm could lead to significantly improved, more cost-effective patient outcomes.

A bacterial biofilm is polymicrobial, but typically contains one predominant organism. Bacteria attach and form the protective films on both biological (patient anatomy) and/or non-biological (implants, wires, sutures, tubes, teeth, rocks, vases, etc.) surfaces (Metcalf, Bowler, & Hurlow, 2014). After attachment to a surface, the bacteria become embedded in self-producing extracellular polymeric substances, which protect them from host immune defenses as well as antimicrobial therapies such as antibiotics (Elgharably et al., 2013). Patients developing biofilms may present with some of the classic signs and symptoms of inflammation or infection, but may be unresponsive to standard antibiotic therapies. They can also present with vague or negative wound cultures, making the diagnosis elusive and difficult to identify. Biofilms can develop on almost any patient-related surface – skin, muscle, adipose tissue, sutures, wires, prosthetics, and catheters – and prevent normal healing and increase risk for infection. The presence of biofilms can be especially challenging in otherwise compromised patients such as those with co-morbid diseases, autoimmune disorders, obesity, diabetes, and in the elderly. One study found that insulin-treated diabetics had a higher propensity to develop pseudomonas aeruginosa wound biofilms (Watters et al., 2013), which may explain why diabetic wounds are often so difficult to treat.

Biofilms are complex matrixes that adhere to each other, form very tight bonds, and thrive where bacteria congregate. The tight and complex matrix of the biofilm shields them from typical eradication interventions (Black & Costerton, 2010). The pathogens thought to contribute to biofilm development are the gram positive bacteria most often being the staphylococci strains. Bacteria biofilm is thought to be a contributing factor to development of bacterial antibiotic resistance, such as Methicillin-resistant Staphylococcus aureus (MRSA).

Biofilms often present as a gel-like substance covering the wound and need to be distinguished from slough, fibrin, and devitalized host tissue. A glistening, transparent covering over the wound; opaque, loosely-attached patches; viscous or slimy substances; blue-green discoloration; and a significantly sweet odor (pseudomonas is a potent biofilm producer) are other signs and symptoms of possible biofilm presence (Metcalf et al., 2014). Hurlow provided examples of wounds with biofilm that were treated with currently available products and procedures (see Figures 1 & 2). Interestingly, large
biofilms were found under the dressing in Figure 1, which highlights the importance of optimal wound moisture management and of closely monitoring dressing efficacy in the clinical setting.

This challenging parasitic phenomenon requires rapid diagnosis and interventions. Current therapies include:

1. **Careful wound inspection with consideration for distinction between devitalized host tissue**, which must be cut to remove from underlying viable tissue, and a tightly attached film (as in Figure 2). Keep in mind that enzymatic debriders (proteolytic enzymes) will not disrupt the predominantly sugar matrix of a biofilm.

2. **Sharp debridement** is currently the best way to disrupt biofilm and expose the more vulnerable planktonic bacteria, which then are more susceptible to kill with the use of a topical antimicrobial dressing. **Overly aggressive sharp debridement** will disrupt biofilm to expose planktonic bacteria, but can also create openings in viable tissue that will allow introduction of biofilm into deeper, more vulnerable tissue. New biofilm colonies can reform within 5-48 hours post-debridement, requiring astute nursing assessment.

3. Careful consideration of the distinction between local inflammation and actual infection: **Systemic antibiotics** are typically only required for systemic infections caused by invasion of bacteria INTO the host tissue. Overuse of systemic antibiotics is another risk factor for bacterial resistance. Current literature is supportive of the idea that early biofilm formation is a sign of critical colonization, a cause for inflammation, and a precursor to actual infection. Appropriate topical management can be adequate treatment for critical colonization and prevent the need for systemic treatment.

4. **FDA approved antiseptic wound cleansers** are appropriate considerations for use with wounds suspected of harboring wound biofilm.

5. **Supportive care such as good nutrition, hydration, and skin care.**

6. There are some technological advances to look out for in the future such as silver-impregnated wound dressings that are capable of disrupting biofilm in order to expose bacteria to the killing effect of ionic silver, as well as technology that maintains optimal moisture balance and eliminates dead space where bacteria and biofilm develop.

Medical-surgical nurses need to become educated on biofilm’s impact in wounds. Additionally, they need to advocate for their patients by educating other health care team members on biofilm development so that patients with persistently non-healing wounds can be treated accordingly. Great strides have been made in recent years in meeting the challenges of biofilm, but as medical professionals, we need to enact a paradigm shift in how we think about infection when it comes to addressing biofilm. Even with new measures in protocol and education, the ultimate solution to stopping chronic bacterial biofilm-related infections is the advent of new devices and products that can disrupt biofilm and kill microorganisms within it.

For more information on biofilm, contact Jennifer Hurlow at jenny.hurlow@gmail.com.

**References**


rriers to optimal nutrition care (see Figure 3). In fact, many of the new care strategies that you shared at the Town Hall are well suited to help elevate the nutritional status of our patients. Methods such as implementing snack carts that roam through the unit on a regular basis with healthy food options and nutritional supplements may facilitate a reduction in nutritional decline during the hospitalization. Also including registered dieticians in daily rounds might promote a clearer understanding of the nutrition care plan. Furthermore, focusing nursing efforts on discharge nutrition teaching, minimizing NPO times, and building patient partnerships at mealtimes will create meaningful changes in nutritional care, thus improving patient outcomes.

Although you also told us that consistent rounding with the registered dieticians and continually assessing for malnutrition throughout the hospitalization are complex initiatives, we trust in your commitment to quality care and know that you will capitalize on every opportunity and will share your successes with one another. We appreciate the fruitful dialogue that occurred at the Town Hall and look forward to working with you to improve the nutritional care of all of our patients.

**Reference**

**Beth Quatrara, DNP, RN, CMSRN, ACNS-BC,** is a Clinical Nurse Specialist – Advanced Practice Nurse 3, and Director of PNSO Nursing Research Program and Clinical Assistant Professor, University of Virginia Health System, Charlottesville, VA. She is the “Nutrition to Improve Outcomes” Column Editor and the AMSN Clinical Representative to the Alliance to Advance Patient Nutrition.

### Figure 2.
**Referrals and Plans**

**Do you have processes in place to easily obtain nutrition referrals for all patients who are identified as at-risk during the screening process?**

- **89.2%**

**Is the nutrition plan for your patient clearly documented?**

- **14.4%**

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**Only 1/3 of veterans get specialized care in a military or VA system. What happens to the rest?**

Military members have unique needs, with many suffering from post-traumatic stress disorder (PTSD) or traumatic brain injury (TBI).

AMSN has partnered with **Joining Forces**, a sweeping national initiative, to provide better care to these brave individuals and their families.

### What can you do?

Visit [amsn.org/joiningforces](http://amsn.org/joiningforces) to:
- Receive a primer on PTSD, TBI, and more
- Learn how to care for this population
- Access health care resources for veterans
- Get mobile apps and hotline numbers
Figure 3. 
The Alliance’s Approach to Interdisciplinary Nutrition Care

Abbreviations: AND = Academy of Nutrition and Dietetics; A.S.P.E.N. = American Society for Parenteral and Enteral Nutrition; EHR = electronic health record; ONS = oral nutrition supplement; PCP = primary care physician


Download the Nutritional Care Town Hall Session

AMSN is pleased to offer complimentary access to the 2014 AMSN Town Hall session, so anyone can see the presentation and hear all the success stories shared. Login to the AMSN Online Library (www.amsn.org/library) and search for “Integrating Nutritional Care to Optimize Patient Outcomes: Med-Surg Nurses at the Forefront,” or browse the 2014 AMSN Convention package (available in the left-side menu) for Session 301.

AMSN is a founding member of the Alliance to Advance Patient Nutrition. For more information and resources you can use, visit www.malnutrition.com.

If you have any questions or comments regarding the “Nutrition to Improve Outcomes” column, or if you are interested in writing, please contact Column Editor Beth Quatrara at bad3e@hsccmail.mcc.virginia.edu.
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