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Weaving a culture of safety into the fabric of nursing

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Culture—the beliefs, behaviors, and values of people within an organization—can have debilitating effects on organizational strategy.[1,2] Every organization has its own distinct culture and may also contain subcultures that can vary by location and at the department level.[2] Despite efforts to improve patient safety, the implementation and sustainment of a culture of safety remains a high priority. Healthcare workers—from clinicians to leaders—play a significant role in creating that culture.

Preventable adverse events account for 210,000 to 440,000 deaths each year in hospitals.[3] The National Patient Safety Foundation continues to call for federal officials, healthcare professionals, regulators, and others to place a higher priority on patient safety science.[4] The American Nurses Association (ANA) declared 2016 its year of safety, focusing on a different safety topic each month and adopting the National Nurses Week theme, "Culture of Safety: It Starts With You."[5]

We describe how a 715-bed, two-hospital healthcare system in Southwest Florida has made great strides in patient outcomes by leveraging existing structures to integrate, strengthen, and sustain a staff-driven culture of safety.

Laying the foundation

The ANA defines a *culture of safety* as one in which a healthcare organization's leaders, managers, and workers are committed to core values and behaviors that emphasize safety over competing goals, and where openness and mutual respect are present when discussing safety concerns and solutions without shifting to individual blame.[6] A culture of safety at Naples Community Hospital (NCH) Healthcare System in Southwest Florida is driven by frontline nurse leaders with unconditional support from midlevel and executive leaders. Recognizing the impact that nurses have on improving the quality of care and safety of practice environments, NCH continuously explores opportunities to integrate a culture of safety into the fabric of nursing.

Laying the foundation for a culture of safety requires embedding safe practices and mindfulness into existing structures and processes. It needs to become a "way of life," not just another initiative. The fabric of nursing at NCH is vibrantly comprised of a professional practice model that serves as our framework for care delivery, a shared decision-making structure that empowers nurses to influence practice at all levels, a professional clinical ladder that supports growth and development, and a steadfast focus on professional certification and academic progression. The integration of safety concepts into each of these elements has led to improved patient outcomes and, consequently, the development of an annual nursing quality fair where these outcomes are shared locally and regionally.

Professional practice model

The current NCH nursing professional practice model was developed in 2014 by frontline clinical nurses during a worksite retreat. During the retreat, nurses were asked to describe the NCH nurses' values and how these values influenced patients and families. The nurses identified the elements of the professional practice model as quality and safety, innovation, shared decision making, teamwork, professional development, and collaboration. (See *Figure 1.*) The quality and safety element of the professional practice model is informed by evidence and practiced by nurses at all levels.

Nursing excellence champions serve as ambassadors for work related to the professional practice model and care delivery system, and are integral in educating peers on how the professional practice model influences patient safety and subsequent outcomes. Because the professional practice model guides nursing in the delivery of optimal outcomes, it also serves as the standard by which nursing peer review is conducted.

Shared decision making

Shared governance at NCH has evolved since the initial professional practice model's inception in 2010. The model made great strides in improving nursing practice and met the needs of the nursing department for the first 4 years of implementation. However, nurses identified that improvements were needed if a culture of safety was to be realized.

In 2014, a team of clinical nurses collaborated to redesign and introduce a new shared decision-making structure that empowered nurses at all levels to contribute to enhancing patient

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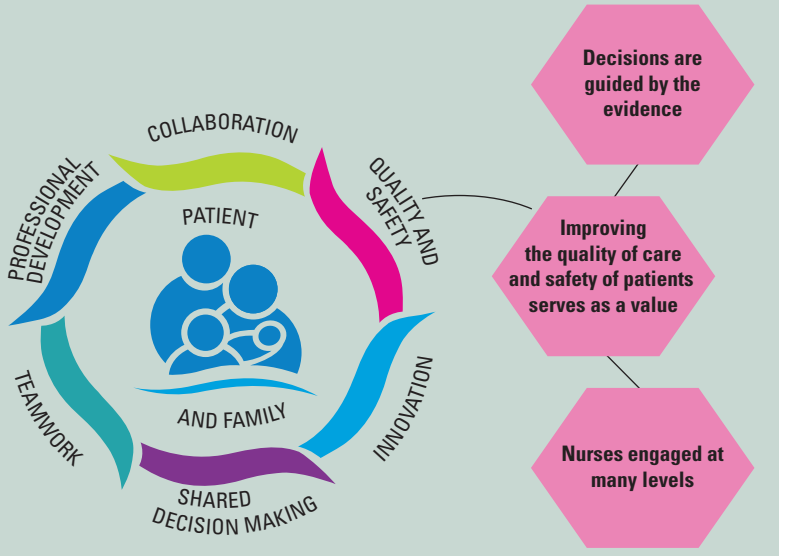
safety through the provision of quality care. This structure is comprised of four primary system-level councils and eight service line councils. (See *Figures 2* and *3*.) One of the system-level councils, the purpose of the quality and safety council is to ensure that patient care is safe and of the highest quality, resulting in optimal patient outcomes through a series of processes.

In 2016, a spirit of inquiry algorithm was added to the model to provide a framework for the decision-making process along the shared decision-making continuum. A culture of inquiry promotes nurses' continuous questioning of the status quo. The spirit of inquiry algorithm provides clinicians with guidance on how to move ideas and suggestions to appropriate councils for actualization.

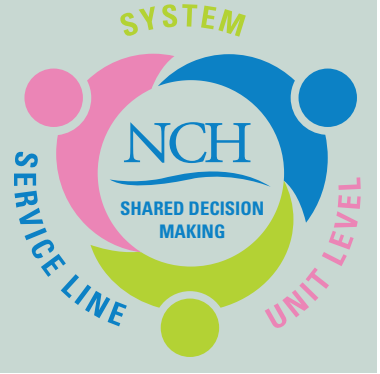
Figure 1: NCH professional practice model



Professional clinical ladder

The nursing professional clinical ladder was also developed by frontline nurses. Its purpose is to promote professional growth and clinical excellence to recruit and retain nurses committed to delivering high-quality patient care.

Figure 2: Nursing shared decision-making structure



The professional clinical ladder also serves as a vehicle to integrate and embed a heightened level of safety and improvement of patient outcomes. The clinical ladder is comprised of four levels defined by varying criteria in the domains of continuing education, clinical leadership, clinical excellence, promotion of professional communication, and commitment to the profession and community.

Throughout the years, the clinical ladder has been modified to promote nurses' involvement in quality and safety improvement initiatives. This includes participation in quality projects using a rigorous seven-step performance improvement methodology, participation in shared decision-making councils (many of which are actively working on process improvement and patient safety initiatives), participation in research and the translation of research into practice, and dissemination of accomplishments through presentations or publications.

Figure 3: System-level shared decision-making councils

For the 2016 review period, 120 nurses participated in the professional clinical ladder. Many of these nurses actively participated in performance improvement projects and research studies, and presented findings at local and regional conferences.

Certification and academic progression

Quality care is strongly influenced by having a well-educated

workforce. Research demonstrates that lower patient mortality, fewer medication errors, and improved patient outcomes are all empirically linked to nurses prepared at the baccalaureate or graduate levels.[7-9] As a result of these findings, as well as recommendations from the Institute of Medicine Future of Nursing report and the American Association of Colleges of Nursing, supporting nurses in elevating their specialty experience, knowledge, skills, and education level has become a focus of our organization.[10]

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This focus has been made a priority on the nursing strategic plan and is supported with programs such as financial reimbursement policies, nursing scholarships, the provision of free onsite professional certification preparation courses, and participation in the American Nurses Credentialing Center (ANCC) Success Pays program. Due to this commitment, we've realized a growth of professionally certified nurses from 61 (2010) to 279 (2015). Nurses with a baccalaureate or higher degree grew from 146 nurses (2010) to 590 (2015). Efforts continue in the realm of increasing professionally certified and baccalaureate-prepared nurses.

Job descriptions and performance evaluations

In an effort to increase the authority, responsibility, and accountability of frontline clinicians to embrace and sustain a culture of safety, job descriptions and performance evaluations were modified to align with the shared decision-making structure. The most compelling aspect of this change was that the recommendation came from the frontline staff shared governance redesign workgroup. The team felt strongly that the commitment of staff in supporting the newly envisioned culture of safety would be best influenced by having direct ties to preset expected performance measures.

RNs' job descriptions were modified to require participation in shared decision making and a commitment to patient safety. A current revision seeks to align the job description with responsibilities and competencies as outlined in the ANA Nursing Scope and Standards of Practice, emphasizing evidence-based practice and outcomes. As part of the annual performance evaluations, nurses are required to demonstrate how they've participated in shared decision making; for example, open comments, council participation, or project participation.

Additionally, staff members are evaluated against key performance indicators that are selected by the executive team and directly linked to quality and improving practice environments for both employees and patients. In 2015 and 2016, performance measures related to falls with injury, catheter-associated urinary tract infections (CAUTIs), hospital-acquired pressure injuries, central line-associated bloodstream infections (CLABSIs), communication, and teamwork were selected.

Technology

Information technology is recognized as an effective way of enhancing the safety and effectiveness of care.[11] As a result, our organization has invested in various types of technology that have enhanced nursing practice and improved patient safety and satisfaction. In recent years, we embarked on the journey of smart room technology implementation and expansion throughout the health system.

The components installed include the following:

- Digital room signage—displays icons directly fed by computerized

order and care planning entry to alert clinicians and other members of the care team on aspects of care and safety alerts. Such alerts include NPO status, isolation and fall status, and neutropenic and seizure precautions. The signage also alerts care team members as to who's in the room with the patient.

• My Station—serves as an entertainment solution for the patient, offering TV, movies, and music, and also allows the patient to engage with the care team and drive his or her experience. The patient can send text messages through My Station to the RN or aide caring for him or her, asking for assistance to the bathroom; pain medication needs; or comfort needs, such as water or a blanket. The RN can send reminders to the patient on pain ratings post administration of pain medication/intervention or reminders not to get out of bed without the RN if the patient scores as a medium or high fall risk. In addition, through the care planning process, the RN can assign patients educational videos. Once the patient watches 70% of the video, an alert is sent back to the RN so that completion of the education can occur, ensuring the patient verbalizes understanding. The patient can also verify medication information through the use of My Station and collaborate with the care team to ensure that the information in the medical record is correct.

• Vitals link—This technology allows vital signs to be sent in real time to the medical record once the aide has completed the vital signs assessment. In addition, abnormal vital signs—whether too high or too low—are sent to the RN's smart phone for early notification and intervention.

• Bar code scanning—Medications, I.V. fluids, blood products, and breast milk are all bar code scanning capable. In addition, I.V. pumps, cardiac monitors, and beds are associated with the electronic medical record (EMR) for automatic download of information into the medical record. In the case of I.V. pumps, orders flow from the EMR to the pump for verification that the order matches the medication about to be infused.

• Connect app—Clinicians use smart phones as a communication device. An app called Connect allows the RN to secure text messages and receive telemetry alerts directly to the phone. Nurses also use these phones to receive critical lab results and acknowledge stat orders.

Culture of safety survey

Each year, the organization also conducts a culture of safety survey to elicit feedback regarding employee perceptions of how we're doing as an organization. This information is used to tailor imperatives on the organizational and nursing strategic plans, as well as implement educational opportunities for staff. The findings of the survey have been instrumental in helping shape and mold an environment of transparency and open dialogue regarding safety efforts, ideas, and concerns.

Quality outcomes

The processes described in this article have largely contributed to favorable outcomes in our organization. This has translated to better care for the patients in our community. As a healthcare system, we've experienced a significant reduction in CLABSIs, with zero CLABSIs in critical care since the third quarter 2010 and a 72% reduction in CLABSIs on the medical-surgical unit in 2015; going from a rate of 3.54 in the first quarter to 1.71 in the fourth quarter and an overall rate of 1.0 year-end.The year-end CLABSI rate of 0.78 for 2016 demonstrates continued progress.

CAUTIs have also declined significantly, demonstrating a

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67% reduction at one campus and a 31% reduction at our second campus from 2013 to 2015. Hospital-acquired pressure injury rates have demonstrated a reduction, with a 53% decrease at one campus and 10% decrease at a second campus from 2012 to 2015; falling well below the Centers for Medicare and Medicaid Services benchmark. Sepsis mortality has continued to decrease, demonstrating a 75% reduction from 30% (2012) to 8% (2015), with 839 lives saved. As a result of these outcomes, our organization earned a Leapfrog hospital rating score of A in the fall and spring of 2014 and 2015 for each hospital in the health system; an improvement from a C rating in the fall of 2013.

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Dissemination of outcomes

Transparency of outcomes, whether favorable or unfavorable, is a key to ensuring that the workforce is highly educated and aware of how we perform as an organization. This promotes accountability and ownership, as well as pride for improved efforts and keeping patients safe. To highlight, recognize, and showcase the impact of frontline clinicians on improving patient and organizational outcomes, the quality department initiated a nursing quality fair in 2010.

Since that time, the quality fair has evolved into an annual system quality fair. Over the last 6 years, the projects have become more robust and evolved to incorporate ancillary departments, with interprofessional collaboration becoming more prominent. Every year, each department in the healthcare system identifies opportunities for performance improvement and implements related evidence-based strategies. The teams follow a structured template that incorporates the Plan, Do, Study, Act performance improvement methodology.

Project outcomes are shared annually during the quality fair and judged by a panel composed of Lean management team members, executive leaders, and board members. The outcomes are also shared with staff through many avenues, including quality boards posted in each clinical area; shared decision-making councils; the annual nursing report; during Nurses Week through a poster display; inclusion in the state of the department address delivered by the CNO; and the weekly president and CEO newsletter "Straight Talk," where employee names are frequently highlighted for making an impact on patient safety and improved quality of care.

Participants at the annual quality fair are also invited and encouraged to share the results of their projects regionally and nationally. Our organization has been an active participant at the annual Institute for Healthcare Improvement conference since beginning the quality fair. In 2011, 20 nursing posters were accepted for presentation. By 2015, 32 nursing and ancillary posters and 1 podium presentation were accepted and displayed. Regionally, we've also seen an increase in poster and podium presentations at local research and evidence-based conferences. The dissemination of outcomes not only highlights our commitment to quality and improving our practice environments, but also motivates, engages, and energizes clinicians who are involved in each performance improvement initiative.

Make an impact

A culture of safety must be integrated into the organizational and nursing strategic plan; both must have alignment of

priorities. The key is to embed safety concepts and initiatives into existing structures and processes rather than implement projects or programs that are viewed as additional work. Leaders need to demonstrate support for the provision of a higher-educated workforce given the empirical evidence of increased education and patient outcomes. Frontline clinicians must be stakeholders in the creation of a culture of safety and understand how they impact quality and safety—directly and indirectly. It's important that leaders make the connection for staff members about how the "big plan" translates into the work they do at the bedside. Educating nurses at all levels to use evidence in their daily practice is also paramount. Lastly, recognition is an instrumental motivator in sustaining a culture of safety. Recognize the small wins and highlight all stakeholders who've made an impact on improving outcomes. NM

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