



Stanford
HEALTH CARE
STANFORD MEDICINE

Nursing Annual Report

CREATING A GLOBAL COMMUNITY



2015



SHC Nursing Annual Report 2015

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FROM THE CHIEF NURSING OFFICER & VP PATIENT CARE SERVICES

In reflecting upon our journey since our last Annual Report, I am proud of an amazing year for nursing accomplishments at Stanford Health Care. This was our first year of almost eliminating Stage III and IV Hospital Acquired Pressure Ulcers and Central Line Associated Blood Stream Infections. We have hired over 350 Staff Nurses, including new graduate residents, while continuing to have one of the lowest turnover rates of any academic medical center at 11.02%.

Our NDNQI Nursing Engagement scores improved at the same time as our patient satisfaction scores soared, no surprise to anyone. The role of the professional nurse who owns their practice is a hallmark of the Stanford Nurse.

Additionally we completed our first full year of our new Shared Leadership program. Through the work of all of the council members we accomplished over 100 new improvements both large and small. Please check out the Shared Leadership tab on our internet to see a comprehensive annual report. This program has been a model for other Magnet® institutions.

I have never been more in awe of the nursing staff than I have over this past year. You have

provided excellent nursing care in some of the most challenging circumstances ever. Let me remind you that last year we were in the middle of the international Ebola crisis which pushed the health care system of the planet to a new level. Our organization responded to this emergency in a manner that ensured that staff and patients would be protected and cared for. The nurses in the Emergency Department and D1 units stepped up to the plate to help us to be prepared in the unlikely event we would actually receive an Ebola patient. Our increasing patient volumes in every sector is a reflection of success, we give the best care anywhere!

Thank you for the work you do every day.
Thank you for the joy and grace that you provide for both our patients and your teams.

Nancy J. Lee, MSN, RN, NEA-BC

FROM THE PRESIDENT & CEO



The title of this year's nursing annual report, "Creating a Global Community," nicely summarizes the array of accomplishments over the past 12 months. You will learn about what it was like to treat earthquake victims halfway around the world in Nepal. Closer to home, you will hear about the important role nurses played in the design of our new, state-of-the-art Stanford Cancer Center South Bay and the new Stanford Hospital.

As I prepare to embark on my new role outside Stanford, I look forward to helping people live healthier lives and helping to make the health system work better for everyone. It was an unbelievable honor to have served as your president and CEO, and I will miss working with all of you. It was your efforts

that enabled us to achieve Magnet status and the best patient experience rankings in the Bay Area. I know that with your collective talents, Stanford Health Care will continue to transform health and care.

Stanford Health Care is indeed fortunate to have outstanding nursing professionals who embody our vision of healing humanity through science and compassion, one patient at a time. Thank you again for allowing me to be part of this amazing team. I will always cherish the friendship and camaraderie, commitment and compassion you all have shared!

Amir Dan Rubin
President & Chief Executive Officer

FROM THE ASSOCIATE CNO



The Stanford Nursing Annual Report always fills me with pride to see the incredible work of our nurses in the last 12 months. Stanford nurses are leading the way in nursing excellence and patient/family centered care. As we prepare for our Magnet redesignation the exemplary nursing stories we have to tell show how we have developed patient centered, role based professional nurses. It

is our responsibility to share that knowledge with the greater nursing community to keep the profession of nursing thriving and constantly solving health challenges in the United States and around the world.

Wendy Foad MS, RN
Associate Chief Nursing Officer

The background is a solid dark red color. On the left side, there are several overlapping, light blue geometric shapes that resemble torn paper or abstract architectural elements. These shapes are irregular polygons with some curved edges. The text 'TRANSFORMATIONAL LEADERSHIP' is positioned in the lower right quadrant of the image, centered vertically relative to the blue shapes.

TRANSFORMATIONAL
LEADERSHIP

'BEING MORTAL' IN THE COMMUNITY

Our mission at Stanford Health Care (SHC) is threefold; to provide the very best care for our patients, to educate our community about health and well-being, and to discover new medicines and therapies to treat disease. In alignment with this mission is the development of our palliative medicine program.

The aim of the palliative medicine service is to address physical, social, psychological, and spiritual needs of patients who are suffering. The goal is to improve the quality of life for those patients with a chronic illness or life limiting condition. A key component of palliative care is educating patients on a broader range of choices for end-of-life planning; which is referred to as advance care planning, where a patient identifies a durable power of attorney (DPOA) or surrogate decision maker. Patients are encouraged to communicate their wishes to their surrogate decision maker and document this in one of many documents available for this purpose.

Situated within Silicon Valley, SHC serves a unique community that is best known for its innovation and technology. U.S. Census (2015) data of the surrounding Bay Area reveals that people from Caucasian and Asian descent represent over 70% of the community. However just three miles from the Stanford campus, is the community of East Palo Alto (EPA), home to 28,000 residents. Unlike the majority of the San Francisco Bay Area, EPA is home of an underserved population with a very different racial composition (61% Hispanic, 16% African American, and 11% Hawaiian/Pacific Islander). Residents of EPA have a median household income that is nearly one-third of their neighboring suburb,

Palo Alto (\$48,734 v. \$121,465, respectively); and a poverty rate that is three times higher than that of the city of San Francisco (16% v. 5%, respectively).

The state of California is striving to improve the experience of end-of-life care for its residents. To that end, SHC was awarded a \$2000.00 grant from the California Healthcare Foundation to engage the underserved community in a showing of "Being Mortal" followed by a guided-discussion of the film. This very meaningful film is based on the best-selling book *Being Mortal* (Gawande, 2014). The film aired on Public Broadcast Station's (PBS) FRONTLINE® in February 2015. Narrated by Dr. Gawande, he explores the intersection of life, death, medicine, and what matters the most. By showing the movie, the planning committee hoped that the viewers would consider sharing their wishes with loved ones, so they might have end-of-life care that is dignified and reflects their values and goals.

To reach the underserved in the community, SHC partnered with Elizabeth Jordan, Chief Operations Officer, YMCA of Silicon Valley. The film was screened at the Lewis and Joan Platt East Palo Alto Family YMCA, situated in EPA. To increase attendance, dinner was provided by local restaurants and the event



Chief Nursing Officer Nancy Lee with the SHC community project team at the first showing of the film 'Being Mortal'.

was held on two different occasions. To better serve the diverse population in EPA, SHC Interpreter Services, under the direction of Alberto Molina, Manager of Interpretation and Translation, took on the challenge of dubbing the film in Spanish. SHC interpreters voiced over the English translation of the movie and interpreters were present for both events to assist with non-English speaking attendees. Healthcare team members who planned the event and acted as facilitators in the small group discussions were from: Aging Adult Services, Palliative Medicine, Nursing, and Spiritual Care. Participants were given the opportunity to share their impression of the film and asked if after viewing the film, they had thoughts on the type of care they might desire if they were seriously ill. Team members spent time reviewing the role of the surrogate decision maker. One of the goals of the planning committee was to normalize discussions on serious illness of participants and/or loved ones and hospitalization, which can be challenging in a crisis situation. Participants were given an extensive list of resources in Spanish and English, as well as the option to take home Advance Care Planning materials translated from English to Spanish. Prior to the film, attendees were asked to complete a survey

about their experience from watching the film and the influence it had on Advanced Care Planning for their personal lives. The results will be shared with the California Health Care Foundation and be used to direct future palliative care education.

The grant, along with partnering with the YMCA, provided SHC the opportunity to take on a “Being Mortal” initiative. Per the words of Atwul Gwande, “in this life, aging, and dying are unfixable.” Educating people on end-of-life care before they, or loved ones, are too ill to make decisions is the first step to improving quality of life. As a result of the initiative and planned events, FRONTLINE has accepted the Spanish translation of the movie, which will allow the California Health Care Foundation to show the movie to other Spanish speaking communities.

FRONTLINE® is a registered trademark of WGBH Educational Foundation.

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HEALTHY FOODS FOR THOUGHT

Having staff nurse participation in positive programs is crucial to encourage nurse investment in the organization, which leads to increased nurse satisfaction and nurse retention. (Fitzsimons & Cooper, 2012).

Since its inception, Stanford Health Care (SHC) has strongly partnered with their community to increase awareness of health related services. In fact, nurses volunteer in a multitude of community projects including the American Heart Walk, the Race against Pulmonary Hypertension, blood pressure monitoring at community events, and participation in many other community events. As part of a collaborative practicum experience for master's degree nursing students, the Holy Names University students were assigned as a triad to work on a health care organization need showcasing SHC's Nursing commitment to their local community. A hallmark of a Magnet Hospital, committed to assessing community needs and supporting the requisite.

Although SHC is located in the middle of thousands of high-tech businesses, parts of the community still suffer from food insecurity. At the Hunger Action Summit in 2015, Kathy Jackson, Chief Executive Officer, Second Harvest Food Bank® stated "hunger is a big problem in Silicon Valley," which leads to health problems. "Chronically hungry people are found at hospitals, and chronically ill patients are found at food distributions." To abate this dilemma, the SHC nurses decided that they could serve their community by starting a food drive at the hospital that

emphasized healthy food donations and would be a consistent event annually.

This was not designed to be the typical food drive; the nurses understood that a momentous challenge to a food drive was collecting donations of healthier, higher quality food. To address the gap between donors and receiving healthy food donations, the nurses designed a program to educate donors to make thoughtful decisions and choose healthier food items to donate. SHC nursing partnered with nursing students from Holy Names University (HNU) to design, organize, and implement the first annual healthy food drive at the hospital. The goals for the food drive included collection of a minimum of 1,000 lbs. of healthy food donations and a minimum of \$250 in monetary donations, which would all be donated to the Second Harvest Food Bank.

The education campaign started with handouts and pamphlets targeted to raise awareness of the food drive, food insecurity, nutritional needs of the recipients, and the rationale behind healthy food donations. The educational materials were specifically designed with the targeted donor group in mind: nurses, physicians and auxiliary staff working at the hospital. Educational materials provided information on the profile of the

recipient population, and included evidence-based information on the importance of donating foods low in sodium, high in protein and high in fiber. Handouts and pamphlets included a list of healthy food and photos of preferred and not preferred donations. After collaborating with SHC nutritional experts, the educational materials were finalized and used to promote Stanford Health Care's First Annual Healthy Food Drive.

In an effort to reach potential donors, a table was set up at a Shared Leadership meeting at the start of the campaign with a display of healthy food items. Staff members were provided 1:1 education on the purpose of the drive and how to make healthier donation choices. A mobile educational display was designed for the nurses throughout the hospital which included educational exhibits, pamphlets, and samples of healthier food choices. The event was also publicized through SHC Connect, the hospital electronic newsletter, and by engaging staff at the unit level.

The combined efforts of the HNU nursing students and the SHC leadership and nursing staff contributed to this food drive and successfully contributed to obtaining its objective. Although more importantly, this team effort benefited the members of the Stanford community by providing over 1,000 pounds of healthy food donations and over 1,660 additional meals from monetary donations for those in need.

Food Drive team members share the program at a recent Shared Leadership Council day.



References

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NURSES LEADING 500P

From planning where the cardiac monitors are placed, to designing the workflows for each unit, nurses of all levels and multiple settings will be involved in the transformational efforts of construction of the new hospital, scheduled to open in early 2018.

The new building, called 500P to denote its new address, 500 Pasteur Drive, will consist of 8 floors with 368 inpatient beds. It will feature individual patient rooms with state-of-the-art modern medical technology, natural lighting, and roof top gardens contributing to a calming environment for patients. A total of 84 ICU beds and 284 Acuity Adaptable Unit beds will be available on opening day. After the 500P hospital facility opens, conversion of the hospital rooms in the present hospital into single patient rooms will commence. Post construction, SHC will provide 100 percent single-patient rooms for inpatient stays.

Leading the way for transition to the new 500P Stanford Hospital is Nancy Lee, MSN, RN, NEA-BC, CNO and VP of Patient Care Services. She sits in a prominent position on the 500P Transition Cabinet which has oversight for the entire project, including financial approvals. Similarly, Wendy Foad, MS, RN, Associate CNO, serves as the co-chair of 500P Activation Committee, which is responsible for the project at large. Gretchen Brown, MSN, RN, Administrative Director of Patient Care Services serves as the 500P Project Team Lead for nursing and under her direction, numerous clinical nurses serve on the many nursing committees and task forces involved in designing the new hospital. Nursing and interprofessional committees and task forces that are currently in progress include:

- 500P Activation Committee
- Patient Care Services Activation Committee
- Acuity Adaptable Unit

- Inpatient Nursing Work Group
- Inpatient to Diagnostics/Procedure
- Admit to Inpatient
- Emergency Department Work Group
- ICU Nursing Work Group

Multi-disciplinary team collaboration occurs on a daily basis to provide coordinated care for each patient. To ensure workflow efficiency, work groups consist of members from multiple departments. The Emergency Department Work Group of nurses, physicians, Patient Access Registration staff, Guest Services staff, and Information Technology staff have come together to develop the future workflow state for patient admission to the future Emergency Department of 500P. Similar workflow planning will continue throughout the organization for the duration of the transition planning phase, and all workflows will be designed and reviewed by the end of Fall 2016.

Dissemination of the progress and work of the groups is accomplished through monthly presentations at the various nursing committees throughout the institution, weekly updates in the electronic nursing newsletter, *Looking Forward* and via the intranet website, SHC Connect.

Nurses at all levels are serving as leaders of change through the transition to 500P. Through collaboration and team work, SHC continues to focus on its vision, healing humanity through science and compassion one patient at a time.



STRUCTURAL
EMPOWERMENT

The devastating 7.8 earthquake in Nepal on April 25, 2015 caused more than 8,000 deaths and 23,000 injuries, and triggered an avalanche on Mount Everest which resulted in 19 deaths.



SURREAL EXPERIENCE FOR SEMPER TEAM DEPLOYED TO NEPAL

Inception

Following the hospital's inaugural disaster relief work in Haiti, in which an ad-hoc Stanford Emergency Department team of 4 physicians and 4 nurses arrived within 5 days of the January 2010 earthquake to aid victims, Stanford Emergency Medicine Program For Emergency Response (SEMPER) was formed. The mission of SEMPER is to develop well-trained medical response teams that rapidly deploy to disaster relief efforts in the U.S. and worldwide. Recently, SEMPER was deployed to Nepal following the devastating 7.8 earthquake on April 25, 2015. More than 9,000 deaths and 23,000 injuries have been attributed to the initial earthquake and its aftershocks. This was considered as Nepal's worst natural disaster, which triggered an avalanche on Mount Everest that resulted in 19 deaths; the deadliest day in the mountain's history.

Teamwork

SEMPER's Nepal deployment occurred in three waves: an initial assessment and coordination with International Medical Corps (IMC), collaboration with the Nepal Ambulance Service, and then a full SEMPER team deployment on May 17th, 2015. The SEMPER team, which included doctors Ian Brown, Alan Gianotti, Phil Harter, and Dan Imler and nurses Nataly Kuznetsov, Joselinda Landon, and Julie Racioppi, worked in coordination with IMC in mobile medical units in the Gorkha District near the quake's epicenter.

Divide and Assist

Upon arrival in Kathmandu, the team was met and briefed by IMC partners on Nepal's current state and the plan of work. The teams were divided into two groups, one to be based out of Gorkha and one out of Dhading Bazars, allowing for wider coverage to areas that had not yet been medically assessed. Each team also included local volunteers of pharmacists and translators, which were welcomed additions into each small SEMPER team.

Gorkha Based Team

The villages that required healthcare-needs assessments were located in remote locations, which required a 4-wheeldrive vehicle and a one day hike to get to the location; therefore the most efficient way to transport the Gorkha-based team was by helicopter. On a daily basis, the team was dropped off at a different remote location. The routine, of being helicoptered in to set-up a mobile medical unit, run a clinic all day, camp on-site overnight, and the next day to repeat it all again at a different location, continued for over two weeks. The team was helicoptered back to the base area every two or three days to replenish supplies and take care of personal needs (take showers, get clean clothes, etc.)

The Gorkha-based SEMPER team arranged a mobile medical unit at each site by first providing initial assessment of each patient's vital signs and chief complaint by the nurses. Next, the patient was seen by one of the physicians who worked closely with an

*Diverse medical needs
in remote locations
required the team
to be transported by
helicopter.*



interpreter to evaluate each patient. Patients that required treatment such as wound care, tetanus or antibiotic injections, or preparation of lacerations for physician suturing were directed to the nursing area for provision of that care. After treatment, the patients were sent to the pharmacy area for discharge medication instructions and dispensing. Although the system was an efficient system, team members did not complete seeing all of the patients until just after dusk, using headlamps to conclude care.

The village of Pokhari was the first site visited. The buildings were nearly all destroyed as it was located very near the earthquake's epicenter, and there was no existing health-post. After landing and setting up a treatment area and tents, the team saw

and treated many villagers. The spectrum of complications or disorders included trauma, secondary to the earthquakes such as wounds requiring care, back pain, acute stress reactions/anxiety, insomnia, weakness/dizziness, and trauma from hard living such as knee and neck pain. The team provided primary care treatment for hypertension, diabetes, and cases involving dental and vision issues; and the physicians administered pregnancy checks using a portable ultrasound machine. Patients were also treated for a multitude of infectious disease-related complaints such as diarrhea, skin problems, worms, urinary tract infections, gastritis, and vaginitis.

On their first night, the team endured the onslaught of a monsoon with a large deluge



*Julie Racciopi, RN,
back in her role in the
Emergency Department.*

of rain while camping. Team members had to dig large trenches around each of the tents in order to drain the water away from them. On top of this, the four a.m. violent episodic aftershock gave team members a terrifying glimpse of why they were all there.

The village of Samaguan, near the border of Tibet, was the highest elevation (greater than 11,000 feet) where the mobile medical unit provided care. Much to the team's delight, this was a gorgeous mountainous area nestled at the foot of Mount Manuslu with yaks grazing freely. This area also had an existing health-post where the team was provided two vacant small wooden buildings to set-up their mobile medical unit for the day and proceed with their clinic just as they had done before. Their work once again brought them to dusk, seeing large numbers of villagers. The team members heard that above the village there was a monastery with many elderly occupants who had not been assessed since the earthquakes. With IMC's assistance, the Gorkha-based SEMPER team extended their stay an additional day to ensure all were seen. Fortunately, their visit to the monastery proved to yield healthy occupants with only minor complaints.

The last mobile medical unit was set up in the village of Saurpani. This was possibly the team's most difficult site to establish care, as there was no existing health-post and the team members needed to build the area with tarps and tape, attempting to provide the much needed shade for patients and healthcare workers. Each team member used camping mats for the exam area and knelt or sat on the ground next to each patient. This day proved no different than the previous, with long lines of villagers seeking medical evaluation and the team working until dusk to see all of them.

Homeward Bound

After just over two weeks, the Gorkha based SEMPER team members arrived back in Kathmandu. After reuniting with the Dhading Bazars based SEMPER team members, who had also provided life changing assistance, the entire SEMPER team returned back to the U.S.

Although the SEMPER team was in the midst of an earthquake-stricken country, the days were surreal in an environment of raw beauty with the people of Nepal radiating abundant strength.

MEETING PATIENT NEEDS

Teamwork is Hallmark of The New Stanford Cancer Center South Bay

On July 13, 2015, the Stanford Cancer Center South Bay (CCSB) opened its doors, bringing Stanford Health Care's renowned comprehensive and compassionate cancer services to a new location. This new, state-of-the-art, patient-focused site blends a sense of community with a National Cancer Institute (NCI) designated academic learning medical center to help patients feel both comfortable and confident.

CCSB is a full service cancer center with medical and surgical oncology clinics, an infusion center, outpatient surgical services, radiation oncology, diagnostic radiology, and a laboratory. Support services at CCSB also include the following departments: social work, palliative care, genetic counseling, cancer supportive care, patient navigation, spiritual care, patient relations, and a health library open for patient use. An innovative practice implemented at CCSB is the use of badges equipped with a real-time locating system (RTLS). RTLS allows staff members to locate a patient within the clinic, decrease patient wait times and increase patient flow. Universal registrations, a single check-in for patients for all services, and co-location of key departments have also contributed to streamlining care for both patients and staff. Each staff member has committed to a set of "Guiding Principles," which include Partnership, Positivity, Holistic Treatment, Coordinated Care, Innovation, Flexibility, and Comprehensive Cancer Care.

Planning for the building included extensive workflow design to provide an environment which is welcoming yet efficient in walking patients through their complex care. In

partnership with Stanford's Patient and Family Advisory Councils and members of the local community, a multidisciplinary team of nurses, physicians, and staff contributed to the design of the present comprehensive center. This team approach has permeated the culture at the new center and allowed staff to play an integral role in the planning process. Infusion Center Manager, Jennifer Landes, BSN, RN, OCN, explained that the experience has been amazing. "Nurses from different work cultures, including community practice, other Stanford infusion centers, and other related areas, have now become a team. Individual nurses are sharing their expertise in specific aspects of our work with each other." Landes added, "We are focusing on continuity of care in the infusion center, matching nurse to patient whenever possible, throughout treatment. We are making our house here a home."

Preparation for the new center included regular team "walkthroughs" to identify workflow gaps by testing systems and patient progress on a typical visit to the center. These "Days in the Life" mock visits brought both patients and healthcare team members together to identify processes that worked



Kate Surman, Amir Dan Rubin, Evan Low, Lloyd Minor, Sridhar Seshadri, Beverly Mitchell and Kansan Chu attend the ribbon-cutting ceremony for the Stanford Cancer Center South Bay.

and those which needed to be improved. According to infusion treatment nurse Anna Kozlova, BSN, RN, “As we planned the new center, I was surprised to find how much we had as nurses. I am pleased that my input is considered valuable as we work together to design a system that is best for patients and also good for staff.”

Lakeeta Daniels, BSN, RN, BSHA, MOL, Assistant Director of Radiation Oncology Clinical Services, said, “As a leader, I am extremely proud of the collaboration between Stanford sites and departments to ensure delivery of the highest quality of care at CCSB. Nurses from all specialty areas came together to participate in workflow design, training sessions, and mock licensing surveys. The CCSB Radiology/Radiation Oncology

nursing team is eager, not only to provide excellent care, but to serve as a beta site for many best practice initiatives that we intend to bring back to the main campus. They are functioning as clinical experts rather than clinical assistants in ‘On Treatment Visit’ assessments of patients undergoing radiotherapy and doing an amazing job with pre- visit planning to identify and prepare for patients with special needs.” Members of the Radiology and Radiation Oncology team agree. “I believe the integration of Radiation Oncology and Radiology has gone very smoothly. The ability to offer patients the two services at once is so great,” said clinical nurse, Victor Benlice, BSN, RN. “Patients appreciate that they can have their imaging performed close to home. We’re just so happy to be able to offer all these services

*Cancer Center
South Bay nurses
prepare for
the move into
their brand new
workplace.*



in the South Bay.” Infusion treatment nurse, Yvonne Liu, MSN, RN, OCN, added, “I feel so supported by our team. Everyone is looking out for each other. I had a patient in crisis one day, and my colleagues jumped in to help without being asked.”

Patients have also commented. “It is my second visit here today. I feel so fortunate to

be here. Everyone here is helpful and involved in my treatment. I feel like I can let my guard down here, knowing I will be well cared for.” Another said, “My nurse was top notch. He carefully explained everything and answered my questions. I hope I have him again.” And, “I received happy and loving care from the nurses in the Infusion Center.”

“As we open this new center and embark on the work of continuous improvement together, the team continues to develop and strengthen. It is an honor and a privilege to work with such a fantastic team of people. They set the bar for professionalism and are committed to Stanford’s vision of healing humanity through science and compassion, one patient at a time. Their dedication shows every day, as we strive to bring our guiding principles to life.”

—KATE SURMAN, ADMINISTRATIVE DIRECTOR OF THE CANCER CENTER SOUTH BAY

SHARED LEADERSHIP

Achieving the Outcomes of Clinical Excellence



Shared Leadership aligns frontline staff with the Stanford Operating System.

Stanford Health Care (SHC) overhauled Shared Governance two years ago to align with the Magnet® Model and the nursing strategic plan. Since then, several major milestones have been achieved to attain the goals of clinical excellence.

Shared Leadership, as it is known today, embodies the principles of accountability, ownership, equity, and partnership in shared decision-making (Swihart & Hess, 2014). SHC restructured their Shared Leadership to epitomize the Stanford Operating System (SOS) using the Lean Methodology and the active daily management processes.

Alignment with the Stanford Operating System (SOS)

The successes of Shared Leadership at Stanford Health Care can be attributed to its alignment with the Stanford Operating System's (SOS) three key components of Lean Methodology: strategic alignment, value stream improvement, and active

daily management (Rubin, 2015). Shared Leadership was also strategically aligned with the hospital's mission, vision, operational initiatives, and nursing strategic plan. These alignments navigate prioritization of goals according to the triad of clinical excellence, which are: people/professional practice environment, patient satisfaction, and patient outcomes. Value stream mapping and A3 thinking approach were used to outline current state issues, identify priority objectives and goals, and redesign a sustainable future state. These approaches engage leaders from all levels of care to critically analyze processes, eliminate waste, and develop effective and efficient strategic interventions. Lean Methodology of council goals is continuous with the frequented cycle of "plan-do-study-act" until desired outcomes are achieved. On a quarterly basis, A3 council goals are updated along with a report out of achievements to the Coordinating Council.

Active Daily Management and Action Request Process

To sustain improvement efforts, active daily management is exemplified through day to day operations and partnerships of management with frontline staff through action request management. Action requests are submitted by staff in the organization to

voice their concerns, issues, or recommended solutions to daily clinical practice or work environment issues. Upon submission at the unit level, a council chair, along with a council advisor/unit manager, initially review the request for prioritization. These action requests are then discussed at the unit council meeting for action planning. If the action request is unresolved at the unit level, the action request is referred to the Coordinating Council for discussion. The Shared Leadership steering committee reviews all new action requests to determine the decision making category, to distribute request to the appropriate council, or to determine referral to appropriate resources. Action requests are prioritized to ensure that council meeting agendas are outcomes driven with full participation in shared decision making.

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EXEMPLARY
PROFESSIONAL
PRACTICE

For the aging adult with complex health issues, there is a great risk of care becoming fragmented as they see multiple specialists and take multiple medications. (Ghatak, R. 2008).



AGING RE-IMAGINED

America's aging adult population is expected to reach 72 million by 2030, more than double the number in 2000 (U.S. Census Bureau, Current Population Survey, 2014). This dramatic growth in numbers, increased life expectancies, and energetic lifestyles, now enables us to live 20% - 25% of our lives in active retirement and has great impact on preventive healthcare and hospital practices. For those with chronic disease, the combination of frailty, disease, and disability, mandates us to imbibe integrated patient and family centered care across the continuum (Coleman E.A., Parry C., Chalmers S., Min S.J., 2006).

Nationally the shift is towards prevention, continuity and coordination of care across inpatient, outpatient and sub-acute settings (Avarale Consultants, 2014). Based on the Coleman Transitional Care Program an innovation pilot was started in 2007 which gave birth to Aging Adult Services (AAS) at Stanford Health Care (SHC), (Coleman E.A., Roman S.P., 2015). To date, AAS has served over 15,000 patients and families through the continuum of care. The program helps coordinate multiple intersections of providers, health partners, caregivers and post discharge follow-up. Almost 56% of patients referred to AAS are

Aging Adult Services Through the Continuum



visited at home by a nurse, thus proving to enhance care planning and outcomes.

Stanford Health Advantage offers premium services to Medicare patients, and nurses at SHC are pivotal in providing care and working collaboratively within the SHC AAS continuum.

SHC Achieves NICHE Exemplar Status

The vision and mission of the organization, the nursing strategic plan, and the Magnet® Model empowered AAS and SHC nursing to apply for NICHE (Nurses Improving Care for Healthsystem Elders) status in 2012. After a rigorous self-evaluation of geriatric care services, SHC achieved designation as a NICHE hospital. NICHE encourages nurses to uphold best practices for aging adults while engaging in a culture of compassion, research, and innovation. NICHE hospitals report higher patient and family satisfaction rates and more positive outcomes for older adult patients (Mezey, M., Kobayashi, M., Grossman, S., October 2004). In 2015, SHC also achieved “Exemplar” status from NICHE, just the second hospital in the west coast to achieve this honor. SHC champions the use of Geriatric Resource Nurses (GRN’s) enterprise wide to promote best practices. From 2013-2015, among other practices, the GRN’s have focused on creating risk models for delirium, compliance with the CAM (Confusion Assessment Method), staff/family education about delirium, and sleep support protocols while geriatric patients are hospitalized.

“The face of the population we serve is aging and Stanford Health Care will be prepared to care for seniors, our NICHE ‘Exemplar’ recognition represents our preparedness”, says Nancy Lee, MSN, RN, CNO and Vice President of Patient Care Services.

Nurses, Home Technology and the Continuum of Care

Technology for the home environment can have significant impact on the lives of functional adults and those with functional and cognitive limitations but wish to age in the comfort of their own place. In 2013, AAS launched its Home Technology Program which is facilitating aging adults into lead adopters of emergency response systems with a global positioning system (GPS), medication dispensers, and tele-health, a new 24/7 lifestyle of being empowered to maintain health, safety and wellness. To allow caregivers and family members to monitor the well-being of their loved ones, the AAS health team is discussing possibilities of sensors, telecommunication, and tablets in the home. Using lessons learned, the AAS partnered with the SHC Heart Failure (HF) group to review evidenced based practices of nursing and technology in the home. Together they pioneered a pilot program for health in the home which evaluated the use of biomedical equipment (digital scale, blood pressure cuff, pulse-oximetry and hub station) to assist in daily self-monitoring for heart failure (HF) patients.

The pilot program collaborated with a home health agency and Philips Healthcare to automatically transmit vitals to a central monitoring portal. A unique feature of the pilot program was home visits by nurses from the AAS to assess, educate and reinforce home monitoring equipment use. At the conclusion of the pilot program, patients participated in a telephone survey by HF nurses and 83% reported they would like a home monitoring program if it were available. Patients also positively reported that the nurse home visits establish a personal



**Teresa McManis,
BSN, RN, PHN and
Earl Shook, patient.**

connection with the health care team. One patient stated, “The nurse who came for a visit really took the time to talk to me and listen to what I am feeling. She reviewed my medicines, diet and how to gauge my symptoms”. Patients also reported that the home monitoring prompted them to contact their cardiologist or primary care provider when needed. Tele-health monitoring is leading to lower readmission rates with increasing self-management techniques by using technology to help expedite transfer of information (Klersy, De Silvestri, Gabutti, 2009).

SHC nurses are helping to bridge the gap between inpatient, outpatient and long term care in the home to aid health needs of the elderly population. The power and purpose of living long as a result of increasing longevity is compelling and thought-provoking. SHC is well on its way for preparing for the new normal of a reimagined aging. Health care and aging services will continue their integration enabling the emergence of a cohesive concept of whole-person-oriented community-based connected aging.

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QUILTING FOR PATIENTS

Patient Centered Care: The Fabric of Love for Blood and Marrow Transplant Nurses

The Blood and Marrow Transplant (BMT) program at Stanford Health Care successfully performs over 300 transplants a year and continues to grow. Along with the program growth, comes many new nurses that need to be oriented on the unique needs of the BMT recipient.

BMT nurses develop expert clinical management by excelling in the administration of complex intensive chemotherapies, biotherapies, and symptom management. Just as the physical clinical management of caring for a BMT recipient is complex, so is the emotional work associated with this care. BMT nurses guide their patients through a grueling process that is both emotionally and physically demanding for patients and their families. Despite providing compassionate care with the integration of research, patients and families must often face end-of-life discussions and care with long hospitalizations. With the average length of stay at 29 days for allogeneic transplants and 21 days for autologous transplants at Stanford Health Care, BMT nurses practice primary nursing which fosters a unique relationship that develops throughout the long length of stay. For the BMT program, patient-centered care and the patient's experience is at the core.

As a means to strengthen the core and show support for its patients at the end-of-life, nurses from the BMT unit created the Quilt Project. The idea for the Quilt Project originated from a group of Stanford Health Care BMT nurses who attended the End of

Life Nursing Education Consortium (ELNEC) training. Upon returning from the training, the nurses wanted to find a way to improve the many aspects of end-of-life care for the BMT recipients and families facing difficult, lengthy, and uncertain hospitalizations. As part of the project, the BMT nursing team built a partnership with a local quilting group called the "Quilters & Chatters" from The Granary, located in Sunnyvale, California. The partnership was established to create quilts as a memento for patients and their families experiencing the difficulties and hardships of a lengthy and uncertain hospitalization.

Once the Quilters & Chatters create the quilts, the BMT nurses use fabric paint to imprint patients' and families' hands on the quilt. Personalizing a quilt gives the family lasting memories and provides a positive experience during end-of-life care. The quilts are then either hung in the patient's room to serve as a constant reminder of support or they are used as a blanket to keep the patient warm and reminded that they are wrapped in love. A patient who received the quilt after relapsing, had pictures taken with his adult children imprinting all their hands on the quilt during his final hours. The family displayed the quilt at his funeral and is grateful for the



E1 Quilting Project members show an example of their work before it is given to a patient.

loving care their father received, and also for their final memories spent as a family. Other quilts have been used as a celebration. A single mother who was hospitalized for several months from severe graft-versus-host disease missed her son's elementary school graduation. Knowing how difficult this was for the patient to miss the graduation and understanding that her chances of survival were slim, the nurses threw a surprise graduation party for the mother and her son. While the patient was off the unit for a test, the patient's room was decorated with streamers, balloons, and a graduation sign. The party included cake, party favors and even a guitarist who played uplifting music from the nurses' station. The surprise for the patient, her son, and family led to a wonderful day of normalcy that patients seem to lose when they enter the hospital. As a gift from the nursing staff, a quilt was imprinted with hands from the family. The quilt hung on the wall in the patient's room for almost a month before she passed, serving as a constant reminder of good times and as encouragement for her to continue fighting.

Just as making a quilt is full of complex small details that together, in the end, form a beautiful piece of art, the Stanford BMT

nurses are putting together a similar complex detailed plan to improve the care of their sickest patients. The Quilt Project represents the art of nursing in a tangible form. The quilt is a representation of the essence of the Stanford professional practice model components of honesty, excellence, advocacy, respect, teamwork, and compassion.

Honorable recognition to the Quilters & Chatters, who, without their dedication and talent, the Quilt Project would not be possible.

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ADVANCED PRACTICE PROVIDERS

Orientation and Mentorship Program for the MED9 Inpatient Hematology/Oncology Advanced Practice Provider Team

Advanced Practice Providers (APP) have been integrated into nearly every inpatient and outpatient care team at Stanford Health Care. Due to a shortage of physicians, the limitations on resident and fellow training hours, and the increased demand for health services from the growth and aging of the population, APPs have assumed a critical role in the health care team.

There are two main models of inpatient care teams; in one, APPs are integrated into medical house-staff teams, and in the other, APPs are independent from medical house-staff teams (Gershengorn et al., 2011; Paton, Stein, D'Agostino, Pastores, & Halpern, 2013).

In hematology and oncology, APPs have been part of the inpatient care teams since 2004. There were two inpatient medical teams: the MED8 hematology service and the MED10 oncology service. In these care teams, APPs were integrated with interns, residents, and fellows supervised by the attending physician. By 2012, the increased number of cancer patients necessitated an additional care team. The MED9 team transitioned from the integrative model to an inpatient cancer care APP team, separate from the house-staff teams. The MED9 Hematology/Oncology service is a group of nine APPs who work directly with an attending physician to provide care to an average daily census of 15 acutely ill cancer patients with plans to expand to 20 patients next year. The hematology/oncology MED9 APP service provides care seven days a week for 12 hours a day. Overnight patient care is signed out to a hospital nocturnist team.

Orientation and Mentorship

The majority of MED9 Hematology/Oncology team members were either new APP graduates or APPs transitioning from outpatient to inpatient. Twenty-five years ago, Dreyfus and Dreyfus postulated that skills acquisition through instruction and experience occurs progressively through a series of five levels: novice, advanced beginner, competent, proficient, and expert (Dreyfus & Dreyfus, 1980, 1986). That model has been adopted by both medicine and nursing to describe the acquisition of clinical skills and professional expertise (Carraccio, Benson, Nixon, & Derstine, 2008; Benner, 2001, 2004). According to this model, the level “competent” can only be achieved with experience in real situations, which generally requires 12 to 24 months of practice (Benner, 2004).

The formal training for APPs is generally through masters programs, where the emphasis is on primary care or general acute care with little specialty training in hematology/oncology. The absence of formal training in hematology/oncology creates a steep learning curve for APPs to transition to a role of directing inpatient care for acutely ill cancer patients. The transition can be

Table 1. Educational Curriculum for MED9 APPs

<p>Didactic</p> <p>Admission and Discharge Process</p> <p>Documentation</p> <ul style="list-style-type: none"> ▪ H and P ▪ Discharge summary ▪ Progress notes ▪ Death summary/Death certificate worksheet ▪ Medication reconciliation ▪ Procedure note <p>Symptom Management</p> <ul style="list-style-type: none"> ▪ Nausea and vomiting ▪ Pain management ▪ Venous thromboembolic disease ▪ Diarrhea ▪ Constipation ▪ Skin toxicity <p>Oncologic Emergencies</p> <ul style="list-style-type: none"> ▪ Sepsis ▪ Neutropenic fevers ▪ Spinal cord compression ▪ Tumor lysis syndrome ▪ Cardiac tamponade ▪ Hypercalcemia ▪ Superior vena cava syndrome 	<p>Recognition And Management Of Drug Toxicities</p> <p>Addressing Sensitive Patient Issues (e.g., sexual dysfunction, fertility preservation, end-of-life issues)</p> <p>Palliative Care</p> <ul style="list-style-type: none"> ▪ Advanced directives ▪ Goals of care ▪ POLST form ▪ Procedure Training ▪ Bone marrow biopsy and aspiration ▪ Lumbar puncture ▪ Ommaya reservoir access ▪ Intrathecal chemotherapy ▪ Paracentesis ▪ Skin punch biopsy <p>Oncology-Specific Training</p> <p>Month-long rotation through hematology/oncology specialty clinics and the hematology/oncology infusion treatment area</p> <p>Required Online Courses</p> <p>ONS/ONCC Chemotherapy Biotherapy Certificate Course (15 hours)</p> <ul style="list-style-type: none"> ▪ Oncology Nursing Society (ONS) Post-Master's Foundation in Cancer Care (36.5 hours) ▪ Collaborative Institutional Training Initiative (CITI Program) Human Subjects Research Training (6 hours)
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daunting due to knowledge deficits, high expectations, and the pressure of being responsible for time-sensitive, high-impact decisions in patients with complex medical diagnoses and psychosocial needs. Therefore, a critical aspect to the success of the team has been the orientation program and ongoing mentorship and education.

To that end, a 6-month orientation program for MED9 APP team was developed. The Lead Advanced Practice Provider creates the orientation schedule and serves as a mentor. A senior APP is designated as the main preceptor and “buddy” for each new hire, yet the entire team supports and precepts the orientee. The first three months of the orientation program includes one-on-one preceptorship, didactic teaching, procedural training and advanced training in medical decision-making (Table 1). This includes training with sub-specialty inpatient teams

such as infectious disease and palliative care, as well as rotations in the hematology and oncology clinics. The orientation is broad-based to foster working relationships with consultants and to facilitate effective communication between the primary outpatient teams and the inpatient care team. Between three and six months into orientation, the APP assumes a reduced patient load of three to four patients a day; after completion of the entire 6-month orientation, this increases to a full patient load of five patients per APP. The lead APP meets with the orientee at regular intervals to assess progress through the orientation and to offer support and resources. After completion of the 6-month orientation, there are continuing education sessions several times per week, periodic medical conferences, and ongoing mentorship from senior APPs and attending physicians.

Successes and Challenges

As expected, challenges were faced during the implementation of the inpatient hematology/oncology MED9 APP team. There was a general lack of understanding by physicians about the required six-month-long orientation. Guidelines regarding an APP's patient load were not available or were not directly applicable since the scope of responsibilities varied between APP teams. And when the MED9 APP inpatient team was created, some physicians felt the team should not provide care to patients with complex medical diagnoses and conditions. Over time, the MED9 APP team has gained the confidence of these physicians and now provides care for newly diagnosed acute leukemia patients, as well as for other cancer patients with complex diagnoses. The MED9 APP team has reached a point where the acuity and breadth of diagnoses on the APP team parallels that of the house-staff hematology/oncology team.

The advantage of a collaborative model is that well trained hematology/oncology advanced

practice providers can provide the majority of patient care and collaborate with attending physicians for complex medical issues. The patients receive expert medical care and every provider practices at the highest level of their training. An internal review of Stanford faculty and patients indicated that there is high patient satisfaction, effective coordination of care, timely communication with referring physicians, adherence to research protocols, improved symptom management, and decreased length of stay. These advantages can only be realized, though, with a commitment to providing a comprehensive orientation, ongoing mentorship, and a respect for collaborative practice.

The demand for APPs in specialty care is growing and centers will have to continue to develop strategies to provide advanced specialty training. The success of the APP team depends on the relationship between the attending physicians and the APPs and their shared commitment to professional development, mentoring, and team-based care.

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The background features several white, irregular, angular shapes that resemble torn paper or abstract architectural elements. These shapes are scattered across the light blue background, with some overlapping. The overall aesthetic is clean and modern.

NEW KNOWLEDGE,
INNOVATION
& IMPROVEMENTS

SCIENCE AND COMPASSION IN ACTION

Stanford's Model for Evidence-Based Practice

This past year, Shared Leadership's Research & Innovation Council developed the Stanford evidence-based practice (EBP) model. EBP is a dynamic approach to patient care, combining empirical evidence, clinical expertise, and patient perspectives to guide clinical decision making. EBP is also a mindset, a way of viewing one's role in a clinical setting and owning one's responsibilities as a health care professional.

As such, the Stanford EBP model is expressed in a series of affirmations:

- 1) I question what I'm doing. This means taking responsibility for understanding the rationale for practices we implement or observe.
- 2) I systematically investigate. Once one inquires about the rationale for a given practice, one compiles relevant evidence through literature review.
- 3) I measure an outcome. This may occur through data collection or systematic examination of reported studies.
- 4) I make a decision. After gathering evidence, decisions are made whether it is sufficient to justify clinical changes, whether it is inconclusive, or whether further investigation is warranted.
- 5) I disseminate. That is, findings and recommendations are shared with colleagues and others involved in patient care.

As a Research Scientist, André Valdez, PhD, Office of Research, Patient Care Services at SHC, has consulted with physicians, nurses, physical therapists, and nursing students on tests of change, quality improvement projects, and human subjects research. And a question commonly encountered was, "Where do I start?" The response often involved reinforcing the Stanford EBP model. For instance, a nurse practitioner wanted to use an educational intervention to increase providers' awareness of guidelines on the treatment of urinary tract infections. She had little prior experience in developing research-related projects, and she was referred to a template created for research-related proposals. This template features subheadings and suggestions for content: Purpose statement (questioning current practice), a Background and Rationale section (systematically investigating the literature), a Methods section (outlining plans to measure an outcome), and Results and Implications sections (describing how the clinician will make a decision and disseminate knowledge). The nurse practitioner, who went on to submit her study for a Stanford University School of Nursing Alumnae Legacy

Project Grant, was grateful for this resource, one of many that the Office of Research now offers or plans to soon offer. Other resources will include a series of online education modules focusing on research literacy, a webpage that will allow clinicians to submit action requests, and a set of other tools for completing EBP projects.

What sets the Stanford EBP model apart is its simplicity and directness; it is more than a

collection of concepts, it is a call to action. So far, the clinicians have been eager to take up that call. As a force for positive change and leadership, the Research & Innovation council has helped Stanford Health Care achieve a significant milestone with a universal and powerful EBP model. Above all, the most enduring contribution of this model is that clinicians can be confident they are providing care that is well informed, well balanced, and of the greatest benefit to patients.



Nurses proudly wear t-shirts which depict their evidence-based practice model design.

BE READY. BE PREPARED.

FEMA Training

The tragic memories of the Boston Marathon explosions are still as vivid as if it happened yesterday. Stanford Health Care (SHC) continues to focus on providing the tools that will enable our nurses to maintain the highest level of patient care for the communities we serve.

In preparation for Super Bowl 50, which will take place at Levi's Stadium in the San Francisco Bay Area, a team from Stanford Health Care and Stanford Children's Health gathered to attend a disaster management course in Anniston, Alabama at the Center for Domestic Preparedness (CDP), a branch of the Federal Emergency Management Agency (FEMA). This group included leaders from the Office of Emergency Management (OEM), Nurse Managers, Nurse House Supervisors, and Clinical Nurses. Attendees took part in a four day hospital emergency response training for mass casualty incidents which was designed to provide medical operation guidance to healthcare facility personnel. The immersive learning course provided the team with an understanding of the relationship between a Hospital Incident Command System (HICS), an on-scene Incident Command System (ICS), and other incident management systems used by Municipal Emergency Operations Centers (EOC). The training prepared Stanford to be ready in the case that a mass casualty was to occur.

"It's all about boxes and lines. If you aren't staying within your box, you are out of line," states Brandon Bond, the administrative director of Stanford Health Care and Stanford Children's Health OEM. Everyone needs to know their function and role within the HICS

to effectively coordinate best patient care practices while working with interdisciplinary and regional groups - all within a complex command and control system. If any one person works outside of their sphere of influence, the person might inhibit or even be in conflict with other groups' activities. In times of emergency, it is essential for everyone to solve problems with ingenuity and resourcefulness, with the limits of staying in the box.

To enhance classroom education on how to effectively function within a complex command and control system, real life simulations and drills were enacted within CDP's Noble Training Facility (NTF), a former Army hospital, which is now solely dedicated to preparing healthcare systems for a mass casualty response to catastrophic natural or man-made disasters. At the facility, 14,000 first responders and emergency managers migrate to NTF each year to be trained through classroom time and immersive learning exercises. Emergency response providers are faced with realistic case scenarios, where actors and actresses are utilized to enact catastrophic situations. During training, the SHC team encountered wounded patients staggering through a mock downtown, radioactive exposed victims crowded in hospital hallways, and



Staff from Stanford Health and Stanford Children's Health partnered together at FEMA's Center for Domestic Preparedness in Anniston, Alabama for immersive disaster management training.

even actors who represented anthrax and ricin exposed patients. The CDP's full scale facility enabled real life simulations of an emergency department surge and the activation of a hospital's command center during a mass casualty response. The Stanford team members were also trained on mass disasters which included structural collapse and foodborne illness. The team practiced providing care for events centered on biological agent release, chemical warfare release, explosions, and multiple motor vehicle accidents.

The foundational basis for training healthcare providers on advanced emergency preparedness is, when providers are better prepared, they will respond effectively and provide better care to patients. The goal of SHC's OEM is to achieve resiliency through

planning, education, and exercise. While the OEM's goal is to provide tools and resources for preparedness, it is the individual who creates and builds resilient organizations.

"Nurses are the front line of patient care," states Brandon Bond. "Their ability to handle chaotic and complex situations during a catastrophic event is crucial to enable them to focus on patient care. We applaud the nurses who have taken their time to increase their emergency awareness and education - preparing them more thoroughly should a catastrophic event occur."

With this team in place and SHC's OEM in charge, the community can spend less time worrying and more time focused on the Super Bowl game.

NURSE PRACTITIONERS PERFORMING CARIOVERSION

Atrial fibrillation is one of the most commonly encountered cardiac arrhythmias (Camm et al., 2010). Direct Current Cardioversion (DCCV) is an effective method of converting patients with atrial arrhythmias to normal sinus rhythm and is historically performed by a physician.

However, with the increasing demands in health care, and the decreasing supply of medical healthcare professionals, alternative approaches have been sought out.

After reviewing the literature, the Electrophysiology Nurse Practitioners (NP) found that nurse-led elective cardioversion was a safe and effective way of restoring sinus rhythm in patients with atrial arrhythmias (Moore et al., 2014).

The NPs were credentialed by the Hospital Credentialing Committee and underwent training by the SHC electrophysiology physicians. They were educated on how to prevent, identify, and manage complications. Once the NPs were trained on the standardized DCCV procedure and had performed a minimum of 10 supervised DCCVs, they were prepared to lead the cardioversion program. After order, history and physical, procedure, and discharge templates were approved by the Credentialing Committee, the program commenced in September 2011.

To evaluate the NP-run outpatient cardioversion program, a retrospective review of consecutive outpatient cardioversions via electronic medical records was performed between January 2009 and July 2014. Primary objectives of the review were that NP-run cardioversions were non-inferior to MD-run cardioversions

in immediate safety and effectiveness. A total of 869 cardioversions in 557 patients were reviewed. Successful cardioversion occurred in 93.4% of the overall sample, with 93.9% in the MD group and 93.2% in the NP group. There were no short-term complications in either group. The length of stay, albeit skewed, was shorter for the NP group versus the MD group ($X = 3.79$ and $X = 4.31$ respectively; $p = 0.637$). This was most likely due to continuity of care, expertise, consistency of service, and more streamlined communication with supporting services. The conclusion of the review was, an NP-run cardioversion program can be safe and effective where a standardized procedure, credentialing, and appropriate education are employed.

Presently, the program has four NPs performing 30-35 DCCV procedures on both inpatients and outpatients per month. NPs are leading the way on running programs which were originally doctor-led, thereby allowing doctors to spend more time with complex cardiac patients.

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The background features a dark purple grid pattern. The grid lines are slightly curved, creating a sense of depth. Several squares within the grid are filled with a light blue color, scattered across the page. The text 'EMPIRICAL OUTCOMES' is positioned in the upper right quadrant of the page.

EMPIRICAL
OUTCOMES

UNDER PRESSURE

Open Label Randomized Control Trial Evaluating Optimal Patient Turning Procedures for Reducing Hospital Acquired Pressure Ulcers (LS-HAPU Study).


Pressure Ulcers are insidious unwanted complications of hospitalization, accounting for more than \$11 billion in health care spending each year. A pressure ulcer is the result of unrelieved compression of tissue, often over a bony prominence, causing cellular damage. A pressure ulcer may be minor, leaving the skin intact and causing some underlying redness and discomfort, or be a wound with full thickness skin loss with muscle, tendon, or bone involvement.

For over 150 years the prevailing thought was that pressure ulcers are avoidable. In one of her many influential writings Florence Nightingale wrote that “if he has a bedsore, it’s generally not the fault of the disease, but of the nursing.” Since the inception of modern nursing, pressure ulcer formation has been one of the earliest metrics for nursing quality. A long held tradition in nursing stemming from this is the practice of regular turning patient rounds. These are often conducted and documented at least every two hours and are aimed at preventing the development of pressure ulcers.

Recently the Centers for Medicare & Medicaid Services (CMS) discontinued reimbursement for care related to facility-acquired pressure ulcers. Institutions of care are now incentivized to eliminate pressure ulcers from occurring. Like Nightingale, the CMS see pressure ulcers as unnecessary and avoidable complications of care. But despite regular turning and best efforts throughout healthcare organizations, pressure ulcers continue to occur.

It is becoming more obvious that ritualistic one-size-fits-all patient turning, as is done in many healthcare organizations around the world, is inadequate to fully prevent pressure ulcers. Clearly smarter health care practices are needed. Predictive models could be developed for each patient that reveals the likelihood of pressure ulcer development, given their current state of health, admission diagnosis, and likely treatment course. In this way, patient turning regimes could be customized by nurses to fit individual patient needs. If we could be more thoughtful in how we provide care, we could effectively eliminate the ritual of patient turning rounds. This would have a tremendous impact on basic physiological needs, like sleep in the ICU.

In an effort to understand and develop smarter pressure ulcer prevention practices, researchers within Patient Care Services are using technology developed by Leaf Healthcare (Pleasanton, CA). This technology uses an individual sensor that is attached to the patient’s chest to quantitatively record



changes in patient position and movement. This information is relayed through a proprietary Mesh network of antennas to a Patient Monitoring System (PMS). The PMS then displays pertinent information to the clinical team regarding the patient that includes the time-to-next turn and the patient's current position. You can also set an alert to restrict turning to an affected position, i.e. on a side following hip surgery.

As a Level-1 Quaternary Medical Center we care for some of the most difficult and highly complex patients. So it stands to reason that a one-size-fits-all approach to preventing pressure ulcers is inadequate. To begin to gather this knowledge, we have recently commenced the Leaf System-Hospital Acquired Pressure Ulcer (LS-HAPU) study; a randomized controlled trial aimed at evaluating whether optimal turning (patient turning at least every 2 hours with at least 15 minutes of tissue decompression) reduces the formation of pressure ulcers in patients hospitalized in the ICU.

The LS-HAPU study is a first of its kind study that ambitiously randomizes all consecutive patients that are admitted to an intensive

care unit at Stanford Health Care. The study will enroll 1,800 patients and use the Leaf Healthcare system with over 300 nurses, to generate optimal turning care. We hope to be able to demonstrate a meaningful reduction in pressure ulcer formation with the provision of optimal turning procedures.

Another important aspect of this study is the exploratory analysis that is aimed at developing explanatory models for patients developing pressure ulcers. As not all patients have the same risk profile, we will be sub-analyzing data based on whether the patient is admitted as a medicine or surgery patient. This is important as we believe intraoperative factors may play a significant role in pressure ulcer formation post-surgery, and hence provide a very different risk profile than those admitted to a medicine service.

The study has taken nearly two years to develop with the involvement of many teams within Stanford University, Stanford Medicine, and Stanford Health Care.

The study is funded and supported by Stanford Health Care with additional funding and technical support from Leaf Healthcare.

DAISY AWARDS 2014-2015

Nurses who receive a DAISY award demonstrate a Caring H.E.A.R.T.

CARE AND COMPASSION – show kindness and caring for everyone

HONESTY – show truthfulness and sincerity in all aspects of patient care

EXCELLENCE AND EDUCATION – commit to doing the best of all times

ADVOCACY – speak for or defend the patient’s right to make choices about their care

RESPECT – show consideration and appreciation of others and sensitivity for individual differences, needs and concern

TEAMWORK – collaborate with team members to assure excellence in patient care

MYRNA BEDOLLA, E3

“It is through Myrna’s compassion for people and for her caring nature that the patient was able to receive the appropriate care and education.”

JOVY BORJA, C3

“She exerts more effort to make patients comfortable and at home in our unit. I’ve seen her bring flowers, fruits, and decors or small token to give to patients to show her care and compassion. She treated our patients as her own family.”

ANDRHEENA CHUA, G1

“She was involved in an incident on the unit within the past year, and in addition to managing the situation well, she turned it into a learning opportunity for the entire G1 staff by creating an in-service on the relevant issues.”

ELISA CUNEO, D1

“I can count on her to be a team player in every clinical scenario - whether it requires her to act skillfully in tandem to resuscitate a patient together or to provide extensive education to a patient and family whom I hesitated were ready for discharge.”

JUDY HASSE, E29

“The day after his wife died, the husband called the unit to let the manager know that he never would have made it through this experience without Judy’s compassion & honesty. She was able to help him see his wife’s perspective through a different lens.”

SARAH O’LEARY, D3

“It seems that every patient Sarah touches has been touched by an angel. Sarah connects with patients in a special way.”

SHERWIN PACE, B3

“He would take me for walks to make sure I had fresh air. (If he was busy, he would find someone who could.) He would ask me about the disease I have to better understand what I was going through.”

ROSE SANTA ANA, D1

“Rose is an excellent nurse and leader. I have learned through her example how to be a strong advocate and provide excellent care for my patients.”

CERTIFICATES AND DEGREES

2014-2015

Accredited Case Manager (ACM)

Cathena Campbell, CQSS/Social Work

Acute Care Nurse Practitioner (ACNP-BC)

Kristie Duoss, APP Inpatient
Stacy Fairley, Nursing Education & Practice
Evelyn Lopez, APP Inpatient
Kara Rainusso, Cardiology
Amber Rickner, APP Inpatient
Michael Sakamoto, APP Inpatient
Quan Thai, APP Inpatient
Yu Zeng, APP Inpatient

Adult Acute Care Nurse Practitioner (ACNPC)

Ani Bagdasarian, Vascular
Tatsiana Furman, Nursing Education & Practice
Marie Rinaldi, APP Inpatient
Joe Simmons, APP Inpatient
Elizabeth Wilson, APP Inpatient

Adult Gerontology Clinical Nurse Specialist (AGCNS-BC)

Judy Chu, Cardiovascular
Jane DeLancey, Nursing Education & Practice
Julia Itsikson, Cardiovascular

Adult Nurse Practitioner (ANP-BC)

John Boggs, APP Inpatient
Heather Clark, APP Inpatient
Shelly Gray, APP Inpatient
Veronica Lopez, APP Inpatient
Kimberly Lui, APP Inpatient

Advanced Oncology Certified Clinical Nurse Specialist (AOCNS)

Chang-yi Liu, South Bay Cancer Center

Advanced Oncology Certified Nurse (AOCN)

Margaret Yount, Radiation Oncology Clinic

Advance Oncology Certified Nurse Practitioner (AOCNP)

Alison Holmes Tisch, Thoracic Oncology
Arati Jairam-thodla, Breast Oncology

Advanced Practice Registered Nurse (APRN-BC)

Guillermo Burga-hogan, Pre-Anesthesia Evaluation

Advanced Public Health Nursing (APHN-BC)

Lalaine Garsula, Medical Specialties

Board Certified Case Manager

Eric Lee Escobedo, Contact Center

Bone and Marrow Transplant Certified Nurse (BMTCN)

Erwin Carino, Infusion Treatment Area
Karen McIntyre, Palliative Care
Brianna Owens, Infusion Treatment Area
Meiduo Zhu, South Bay Cancer Center

Certified Ambulatory PeriAnesthesia Nurse (CAPA)

Katherine Stormberg, Post Anesthesia Care

Certified Clinical Transplant Coordinator (CCTC)

Marvin Mailom, Lung Transplant

Certified Diabetes Educator

Loice Ongwela, Nursing Education & Practice

Certified Dialysis Nurse

Namgyal Gemphel, Dialysis

Certified Emergency Nurse (CEN)

Reyanne Boardman, Cisco Life Connections Health Center
Maribeth Cambridge, Nursing Float
Stella Chiu, Emergency Services
Christopher Cinkowski, Emergency Services
Heather Hickman, Emergency Services
Brett Higham, Post Anesthesia Care
Danielle Hurley, Emergency Services
Justine Kundert, Emergency Services
Julie Racioppi, Emergency Services
Amy Rejent, Patient Transfer Center
Misty Stawasz, Emergency Services
Mark Stevens, Nursing Practice & Education
Maureen Sullivan, Critical Care Float
Daugherty Werner, Emergency Services
Elizabeth Witte, Emergency Services

Certified Flight Registered Nurse

Emily Otto, Life Flight

Certified Hospice and Palliative Care Administrator (CHPCA)

Sarah Parker, Urologic Oncology

Certified Healthcare Simulation (CHSE)

Susan Eller, Continuing Education

Certified Infection Control

Jocelyn Cooper-Sterling, Infection Control
Bernadette Revak, Infection Control

Certified Gastroenterology Nurse (CGRN)

Karen Golding, Endoscopy

Certified Medical Surgical Registered Nurse (CMSRN)

Olivia Anderson, B1
Tina Cartwright, F3
Allie Collignon, C1
William Cunningham, H2
Angeli Danao, Critical Care Float
Marisa Gonzalez, E3
Acacia Kautz, C2
Chen Ting Kuo, GI Oncology
Alexandria Luc, Neuro Oncology
Tien Ly, B3
Emily Mansueto, C3
Denise Martin, C1
Robin Martin Caban, C3
Joriliezl Mendoza, B3
Sarah Newman, Infusion Center
Ian Njoroge, H2
Emily Philipps, D2/G2
Enrico Quitevis, C1
Roopa Rajagopalan, B1
Richelle Reid, E1
Julie Rosenberg, E2
Linda Sikes, B3
Kelly Straight, B1
Jane Vergara, Transform Program
Kily Ward, D3

Certified Nephrology Nurse (CNN)

Melwida Avides, Dialysis
Diosdado Frasco Jr, Dialysis
Laurencio Marcelino, Dialysis
Gwendolyn Sampson, H2
Jasper Zapanta, Dialysis

Certified Neuroscience Registered Nurse (CNRN)

Yuliya Palsson, G1

Certified Nurse Operating Room (CNOR)

April Abigail Abregana, Byers Eye Institute
Mary Karoline Asilum, Ambulatory Surgery Center
Elizabeth Augustine, Operating Rooms
Bryan Alcoran, Operating Rooms
Sandra Kasden, Outpatient Surgery Center
Hsu-chun Liu, Operating Rooms
Camilla Navarro, Operating Rooms
Jacqueline Nguyen, Operating Rooms
Rosa Vilma San Pedro, Operating Rooms
Albert Santos, Operating Rooms
Rowela Sy, Operating Rooms
Ellen Mae Valdez, Operating Rooms
Dawn Wuerflein, Operating Rooms

Certified Orthopedic Nurse (ONC)

Ranjanna Pratap, DGR

Certified Professional in Healthcare Management (CPHM)

Mary Rose Ready, CQSS/Social Work

Certified Professional in Healthcare Quality (CPHQ)

Donna Jones, Operating Room Education
Mary Snyder, Quality Patient Safety and Effectiveness

Certified Professional in Healthcare Risk Management (CPHRM)

Deena Dudas, Accreditation

Certified Public Health Nurse (PHN)

Raisa Tracy Angeles, E3
Carol Castillo, Stanford Referral Center

Certified Radiology Nurse (CRN)

Claudia Harrison, Cath Angio Labs

Certified Registered Nurse Anesthetist (CRNA)

Kenneth Childers Jr., Cath Angio Labs
Thuy Dao, Endoscopy
Jonathan Entwisle, Endoscopy
David Nicholson, Anesthesia Byers Eye Clinic

Certified Registered Nurse Infusion (CRNI)

Guadalupe Salinas, Cath Angio Labs

Certified Wound and Ostomy Care Nurse (CWOCN)

Barbara Polito, Wound and Ostomy
Chungmei Shih, Wound and Ostomy
Kerri Stevenson, APP Inpatient
Emma Tyrrelle, Wound and Ostomy

Certified Wound Specialist (CWS)

Robert Robertson, Op Ctr Wound Care-Tech Billing

Clinical Nurse Leader (CNL)

Christine Aceves, Nursing Quality
Allison Brenner, D3
Amanda Chue, D2/G2
Flora Kechedjian, F Ground
Amanda Lawrence, Gynecologic Oncology
Bernadette Lojo, Nursing Administration
Jenna Manza, B3
Doshia Williams, F3

Clinical Nurse Specialist Core (CNS-BC)

Patricia Henry, Nursing Education & Practice

Critical Care Registered Nurse (CCRN)

Rohini Arulananthan, D3
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Sandra Cardoza, Cardiology
Yutse Chien, Endoscopy
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CCRN- Cardiac Surgery Certification (CCRN-CSC)

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Elizabeth Demedal, D3
Clara George, E29

Family Nurse Practitioner (FNP-BC)

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Connie Carr, Palliative Care
Channin Daugherty, Palliative Care
Danielle Katz, IR Vascular
Angie Murkins, Emergency Medicine
Jennifer Seither, Reconstructive Plastic Surgery
Priscilla Wild, Pre-Anesthesia Evaluation

Nurse Executive- Board Certified (NE-BC)

Charlene Kell, Cancer Center/
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Oncology Certified Nurse (OCN)

Brittany Alfonso, F Ground
Amber Anderson, F Ground
Evelyn Barte, Infusion Treatment Area
Kera Bottoms, C3
Brianna Cala, Infusion Treatment Area
Traci Clark, South Bay Cancer Center
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Jennifer Realin, Infusion Treatment Area
Ruth Rhee, Infusion Treatment Area
Tamara Schwartz, D Ground
Ellen Smiley, Infusion Treatment Area
Tiffany Tan, Infusion Treatment Area
Bridget Toomey, Infusion Treatment Area

Progressive Care Certified Nurse (PCCN)

Kathleen Bagaybagayan, H1
Kristine Caingat, Nursing Float
Lauren Chuck, B2
Jenefer Ciriaco, F3
Diane Dobbins, D3
Rebecca Douthit, D3
Allison Fader, H1
Kelly Gee, D2/G2
Tiffany Goodwin, D3
Kelly Gordon, D2/G2
Fiona Holtzclaw, D2/G2
Jennifer Jean-pierre, Nursing Float
Heather Jenkins, Critical Care Float
Natalie Johnson, B3
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Christy Nelson, E2
Grace Park, G1/H1
Andrea Prost, D3
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Progressive Care Certified Nurse- Cardiac Medicine Subspecialty (PCCN-CMC)

Hillary Adams, H1
Rosa Blemur, SNHC Infusion Center
Meagan Brown, D2/G2
Leticia Calles, Cath Angio Labs
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Registered Nurse- Board Certified (RN-BC)

Katherine Barrett, D2/G2
Laurie Columbo, Cancer Services Transformation
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