

# Newsletter

#### U.S. senator visits location of future VHA National Simulation Center

By Gerald Sonnenberg EES Marketing and Communication

**ORLANDO, Fla.** – On Feb. 13, U.S. Sen. Bill Nelson of Florida saw plans for the new VHA SimLEARN National Simulation Center (NSC) and participated in a demonstration during a tour of some of the new Orlando VA Medical Center (OVAMC) at the Lake Nona Medical Center complex.

As part of a tour and press conference, Nelson went to the OVAMC Domiciliary to receive an overview of the SimLEARN program and current program curriculum from SimLEARN staff: Harry Robinson, national program manager; Dr. Haru Okuda, national medical director; and Dr. Lygia Arcaro, national director of nursing programs. The senator also participated in a difficult airway intubation simulation scenario with news media present.

The current NSC is much smaller and is located in leased space. Construction of the new 52,000-square-foot, high-technology advanced training center is scheduled to begin soon, with completion approximately 15 months later. The facility will be part of the new OVAMC campus and will provide a high-fidelity training environment by replicating actual patient treatment areas, including an outpatient clinic setting, as well as an inpatient/hospital



U.S. Sen. Bill Nelson (right) participates in a difficult airway intubation scenario with SimLEARN National Medical Director Dr. Haru Okuda. (VA photo by Mike Strickler)

setting with an intensive care unit, operating room and more. Video recording of training will take place for classroom debriefing and review, and multipurpose classrooms will have reconfigurable walls to provide a number of room settings. At

continued on page 2

#### In This Issue:

U.S. senator visits location of future VHA SimLEARN National Simulation Center	
VA New York Harbor Healthcare System first in simulation center accreditation	
Home Based Primary Care nurses use simulation during training	
VA Interprofessional Advanced Fellowship in Clinical Simulation program expands	
STAR lab addresses suicide, cultural sensitivity in transgender population	
Houston VA STAR lab granted provisional SSH accreditation	

Excellence the 'Lombardi way'; Using in situ simulation to improve performance	5
Brrr! Simulation helps staff practice hypothermia treatment at Fargo VAMC	
Durham VAMC changing environment with simul	ationC
Chaplains, ward clerks, more included in	
interprofessional simulation training program Sim Fellows present topics at IMSH	
Simulation supports orthopedics bone	/
and joint training at Minneapolis VA	



# Training News

#### VA New York Harbor Healthcare System first in simulation center accreditation

By Claudie Benjamin Public Affairs Specialist VA New York Harbor Healthcare System

**NEW YORK CITY** – VA New York Harbor Healthcare System (VANYHHS) is the first health care system in the Department of Veterans Affairs to have its simulation center accredited by The Society for Simulation in Healthcare (SSH) and the Council for Accreditation of Healthcare Simulation Programs.

Staff members within the simulation center provide state-ofthe-art training for clinicians on a wide variety of procedures and medical treatments, often using extremely sophisticated mannequins. These life-like mannequins can be electronically programmed to respond to challenges set by the trainers. They can develop rapid heartbeat or high blood pressure, can cough and can indicate fever. Simulation gives trainers and training participants the opportunity to fine-tune skills without having to wait to treat a "real" patient with a particular set of issues.

Discussing the range of training and educational activities conducted at the simulation suites at VA's Manhattan

and Brooklyn campuses, Dr. Annemarie Leyden, chief of learning resources and the simulation learning committee for VANYHHS, described sessions focused on the skills of responding to a patient who is coding and in life-threatening distress. Some of the earliest simulations undertaken at VANYHHS involved training sessions to prevent needle stick injuries. Among the most recent simulations are those conducted in response to psychiatric crises.

The most high-tech simulations are training sessions for ultrasound-guided procedures that make these procedures much safer for the patient because the physician can visualize the insertion of a central line. "They can visualize a vessel or see where the fluid is, rather than working blind," said Leyden. She added that simulation trainings are being used extensively for joint treatments, particularly for knee procedures that are so common among an aging population of patients.

"As the first (in) VA to receive accreditation, we are now in a position of leading the way, piloting new ways to advance simulation education," she said. "While many of the technologies we use may be a challenge for non-experts to understand, the bottom line is that simulation labs give us a way to provide ongoing education for our clinicians, making them current on the most advanced technologies that ensure the best and safest medical care for our patients." •

continued from page 1



U.S. Sen. Bill Nelson (right) listens as Dr. Haru Okuda, SimLEARN national medical director, discusses medical simulation. (VA photo by Mike Strickler)

least 10 classrooms will be able to accommodate up to 160 students.

"The building is designed to be a state-of-the-art, high technology, immersive simulation and training center for clinical and medical health care professionals," said Robinson. "This VA project perfectly complements industry in Florida, as our area is a leader in the development of simulation and training; and we have a niche in the Medical Tourism industry (medical professionals come to Florida for their professional training and conferences). Doctors and nurses are going to come from 150 VA medical centers to train to be instructors."

The Lake Nona development site includes other large clinical, education and research facilities. A variety of Federal simulation research and acquisition offices are in close proximity at the Central Florida Research Park. This strategic placement facilitates enhanced opportunities for leveraging synergies in new simulation technologies and methods. ❖

### Home Based Primary Care nurses use simulation during training

By Tammy Novak, MSN, RN Clinical Educator New Mexico VA Health Care System

**ALBUQUERQUE, N.M.** – Home Based Primary Care (HBPC) nurse participants here were introduced to simulation in November for the purpose of integrating best practices, policies and procedural review with low-volume and high-risk encounters within the home setting.

The scenarios focused on the following topics: exacerbation of congestive heart failure, cerebral vascular accident and supratherapeutic international normalized ratio (INR) in the home-based care setting.

The scenarios presented nurses with psychosocial and physiological elements that rendered predictable and unpredictable responses. These responses were explored during a debriefing process. This was the first time these learners utilized simulation, and they shared that the use of simulation was quite valuable in bringing all the learning elements together for the (HBPC) nurse.

The simulations were developed through a collaborative effort with the HBPC team consisting of Karen Modjeska-Oravec, MSN, RN, HBPC, nurse manager; Patricia Trujillo,



(Left to right) Raymond G. Murphy VA Medical Center HBPC nurses TinaMarie Sapien, Patricia Trujillo and Karen Modjeska-Oravec use simulation to practice treating a simulated patient. (VA photo by Tammy Novak)

BSN, RN, HBPC, nurse; and TinaMarie Sapien, BSN, RN, HBPC, nurse.

"We will be using simulation during the orientation of all HBPC nurses," said Modjeska-Oravec, confirming the effectiveness of training with the high-fidelity simulator.

## VA Interprofessional Advanced Fellowship in Clinical Simulation program expands

By Gerald Sonnenberg EES Marketing and Communication

ORLANDO, Fla. -- The VA Interprofessional Advanced Fellowship in Clinical Simulation program is a 1-year interdisciplinary program for physicians and associated health professionals. The program has expanded, and the Office of Academic Affiliations (OAA) recently selected four additional sites to develop leaders to advance, implement, teach and evaluate simulation-based training strategies. After a competitive proposal review process, the four new VA Medical Centers (VAMCs) selected were Dayton, Durham, Gainesville and Providence. These sites will join the two existing programs at the Pittsburgh and San Francisco VAMCs.

This fellowship program was developed collaboratively by SimLEARN and OAA to educate and train clinicians in health care simulation. It is also a step toward creating a workforce with the ability to manage and operate health care simulation programs.

OAA will make trainee stipends available for one physician trainee and one associated health trainee each academic year at each of the sites. Sites will interact closely with the VHA SimLEARN program office, which will serve as the coordinating center for these innovative trainings.

Clinical simulation is an increasingly important strategy for improving quality and safety of health care services and health professions education. The expansion of this program will result in more health care professionals trained in a variety of disciplines to further VA's commitment to improving health care for Veterans. ��



#### Innovation

## STAR lab addresses suicide, cultural sensitivity in transgender population

By Rashanda Banks, MSN, RN-BC, PMHN Racquell Garrett, MS, RN, CMSRN Eron Wahid, MSN, RN-BC, CNL Clinical Simulation Lab Instructors Michael E. Debakey VA Medical Center

**HOUSTON** - In October, the Simulation, Training, Assessment, Resource (STAR) clinical simulation lab instructors here conducted a month-long simulation on suicide awareness and transgender care. The simulation was entitled, "Cultural Sensitivity and Suicide Awareness."

The simulation was developed by the simulation instructors, along with Elizabeth Reimschissel, MSN, RN, CNL and Colt Meier, Ph.D., psychology postdoctoral fellow, lesbian, gay bisexual and transgender health care. Kathleen Molitor, LCSW, suicide prevention coordinator, served as a content expert.

The purpose of the simulation was to educate clinical staff on appropriate care of the suicidal client, while practicing cultural sensitivity with the transgender Veteran. The learning objectives included recognizing suicidal risk factors, exhibiting cultural sensitivity throughout the simulation and completing a suicide risk assessment.

The unique aspect of this simulation is that staff was not informed the patient identified as transgender when the simulation was marketed. As the simulation progressed, staff was required to assess the patient in the clinical setting with minimal social history. The scenario involved caring for a patient with active suicidal thoughts and a history of self-mutilation.

At the end of the simulation, many of the 146 staff who participated reported feeling "enlightened" and "more prepared" to handle both suicide and culture sensitivity when dealing with the transgender population.

The STAR lab simulation instructors can be reached via email with any questions at **vhahoustarlab@va.gov** ❖

## Houston VA STAR lab granted provisional SSH accreditation

By Eron Wahid, MSN, RN-BC, CNL Clinical Simulation Lab Instructor Michael E. Debakey VA Medical Center

HOUSTON – Staff at the Simulation, Training, Assessment, Resource (STAR) simulation lab at the Michael E. DeBakey VA Medical Center (MEDVAMC) have taken some significant strides in the area of simulation in health care since the lab opened its doors in June 2013. As a result, the STAR lab was granted provisional accreditation in December by the Society for Simulation in Healthcare (SSH) in the areas of teaching and education.

Provisional accreditation allows programs with established structure and processes, but which have not yet achieved outcomes, to apply for preliminary accreditation. Current SSH full accreditation standards require the demonstration of outcomes. Due to this standard, simulation programs are required to be in operation for a minimum of two years prior to seeking full accreditation.

Several criteria must be met in order to achieve this

prestigious accreditation. The criteria includes meeting core areas such as education of program instructors, frequency of simulation offerings and courses, intended learners, collaboration with content experts and evidence of program evaluation.

The MEDVAMC STAR lab has four master's-prepared instructors dedicated to this role, to which all have various clinical backgrounds and experiences. The STAR lab staff encourage all clinical staff to participate in simulation, and is available to all shifts (Monday-Friday) in an effort to meet the educational needs of the facility.

With a focus on teamwork and team communication, the goal of staff at the lab is improving the quality of Veteran health care by simulating realistic clinical scenarios and conducting simulations comprised of various disease processes and emergency situations.

The STAR lab has had more than 900 participants working with simulation topics like stroke, code blue, autonomic dsyreflexia, end-of-life care, sepsis and suicide. Future goals of the STAR lab are to increase inter-professional training in the lab, incorporate ethics and evidence-based practices, and conduct high-level research. The STAR lab will be eligible to apply for full SSH accreditation in 2015. ❖

## Excellence the 'Lombardi way'; Using in situ simulation to improve performance

By Rob Bernard, Ed.D. Kyle Rhone, MPA, BSN, CEN Clinical Educators Sheridan VA Healthcare System

SHERIDAN, Wyo. – Legendary Green Bay Packers coach Vincent Lombardi said, "The achievements of an organization are the results of the combined effort of each individual." With this philosophy in mind, staff at the Sheridan VA Health Care System (SVAHCS) wanted to improve their response to life-threating cardiac events.

They began this journey of improvement in December 2011 by establishing a simulation training area and a mock code system designed to assess systems and train all staff in the first two minutes of a code situation. The mock code simulation training revolves around a repeated cycle of briefing, simulation, debriefing and follow-up.

The goal of what became the "2 Minutes or Less" program is to complete all four items within two minutes:

- Assess patient for responsiveness and normal breathing
- Call for help early and request an Automated External Defibrillator (AED)
- If needed, perform high-quality CPR, pushing hard and fast
- When the AED arrives, deploy and deliver the first shock if indicated

During the first mock code exercise, staff did perform all four elements in three minutes and 30 seconds. However, the second mock code proved to be more challenging. It took place in a

remote area of the facility and issues like closed-loop communications, calling the code, elevator delays and defibrillator placement combined to ensure the demise of "Payton Mannequin." The total time to complete the four elements was nine minutes. Three other mock codes were initiated and had similar results.

In order to improve, a teamwork approach was needed to help our Veterans and employees perform the four elements of the 2 Minutes or Less program everywhere in the SVAHCS. The goal was to help teams work together in stressful situations and be successful. With support from virtually every department, three things needed to happen:

- Make 2 Minutes or Less the accepted norm, by emphasizing the four critical elements of the program during Basic Life Support (BLS) training
- Install additional AEDs where they were needed to make the twominute goal realistic and achievable
- Make 2 Minutes or Less training a fun, competitive process

The first and easiest challenge to correct was AED placement. Reviews showed program goals were mostly met when mock codes were initiated near AEDs. Mock codes conducted in more remote areas of the facility did not

meet the 2 Minutes or Less standard. In response, 28 additional AEDs were purchased and then placed on every floor of every occupied building.

In addition, Dr. David Gaba's Crisis Resource Management (CRM) model better equipped the group to address knowledge and systems gaps of AED placement and usage. CRM teaches that employees who know their environments are more competent and confident in responding to emergencies.

Not long afterward, a real-life test occurred when an employee experienced cardiac arrest. Though clinical personnel responded, it was the non-clinical staff that made the difference. Staff members knew what to do and were confident in executing the four elements of 2 Minutes or Less, while clinical staff hurried to the code. That employee recovered and is back at work.

Over time, staff have worked together and learned several things on their road to improving their response to lifethreating cardiac events, and four key things have become the driving force for the program:

- Stating clear goals sets the stage for success
- Realistic in situ simulation (practice) works to identify system and training issues
- Resistance to change lessens over time
- Embedding best practices in the culture is the key to improving survival rates in cardiac arrest victims

For more information, or if you have questions, please contact Kyle Rhone at kyle.rhone2@va.gov. ❖

#### Brrrr! Simulation helps staff practice hypothermia treatment at Fargo VAMC

Story and photo by Mary Douglas, RN, MSN Veteran Health Education / Simulation Coordinator Fargo VA Health Care System

**FARGO, N.D.** – Temperatures can plummet to minus 20 degrees Fahrenheit at times here, and the Fargo VA Health Care System emergency department (ED) needs to be ready for potential patients who may become exposed to frigid conditions. In December, on a day when the temperature outside was 19 degrees below zero with a wind chill advisory, the ED used simulation to practice treating patients with hypothermia and frostbite.

Staff was presented with a simulated patient who had been exposed to the elements for an unknown amount of time and presented with signs and symptoms of moderate hypothermia and frostbite to the feet and face. The team was able to practice lifesaving rewarming techniques using warm IV fluid infusion and warming blankets on the mannequin simulator.



Dr. M. Bruce Parker (left) and Richard Schloesser, RN, participate in the December hypothermia simulation.

This training session provided an opportunity for ED staff to review other treatment measures and possible complications for a patient with hypothermia. It also helped them feel better prepared to handle any future life-threatening hypothermia events. �

#### Durham VAMC changing environment with simulation

Mary Holtschneider, RN-BC, BSN, MPA, NREMT-P, CPLP VISN 6 Simulation Champion DurhamVA Medical Center

DURHAM, N.C. – Simulation as a tool is not only useful for educational purposes, it is also useful for implementing change in an organization. The old way of implementing a change in the hospital environment was to "communicate and train," which involved sending a big email out to staff and then requiring that they do an online learning module. This model did not ensure that stakeholders would embrace or even accept change. Using simulation, we have been able to involve stakeholders and incorporate their input into the change process.

One example in which simulation is effective was the rollout of a new code

cart. Faced with older code carts that were no longer manufactured, staff had no choice but to buy new code carts. Rather than making a decision on what new code carts to buy and how to configure them, staff in the simulation program partnered with end users to determine the best ways to design the cart drawers and compartments. The new configurations were tested using ongoing Code Response Team training simulations held throughout the hospital. The end users gave input on in what drawers certain supplies needed to be kept, supply quantities and external equipment. At the same time, intraosseous needles were rolled out to

use during codes.

Staff also used simulation to develop and implement a stroke code policy. By performing in situ stroke code simulations, it was determined who the responders needed to be. This ended up being the critical care unit (CCU) nurse and CCU physician, since stroke patients would primarily go to this unit once they were diagnosed with a stroke.

A presentation was given at the International Meeting on Simulation in Healthcare, by Healthcare Simulation Educators Mary Holtschneider, Reggie Horwitz and Laura Sescilla. They also discussed documenting the worth of simulation activities by analyzing return on investment. Documenting worth as simulation professionals allows staff to demonstrate to interested parties how important simulation is to process improvement and patient care. •

## Chaplains, ward clerks, more included in interprofessional simulation training program

Mary Holtschneider, RN-BC, BSN, MPA, NREMT-P, CPLP VISN 6 Simulation Champion Durham VA Medical Center

**DURHAM, N.C.** – The annual International Meeting on Simulation in Healthcare (IMSH) provides a venue for simulation practitioners from a variety of disciplines to present their work and engage in discussions about emerging trends in simulation.

For three years, the Durham VA Medical Center (DVAMC) simulation program has focused broadly on the term interprofessional, and has included nurses and physicians, as well as many non-clinicians. Simulation program educators made a presentation at the January 2014 IMSH event regarding how to effectively incorporate many diverse disciplines into simulations; particularly with regard to resuscitation scenarios.

The DVAMC simulation program began a large-scale Code Response Team training (CRT) program in 2010 to promote the development of teamwork and communication skills among clinician responders. This program has been successful and continues today. All CRT training is done using simulation mannequins in the patient care units and are videotaped for immediate debriefing.

An interesting sub-project of this program has been the integration of non-clinicians into resuscitation work. During the early months of implementing CRTs, staff quickly learned that people other than nurses, physicians and respiratory therapists respond to codes. The expertise of these non-clinicians proved to be essential for patient care, even though they were not responsible for chest compressions, defibrillation, medication administration or other clinical tasks.

One group of staff that worked closely to define and document their roles has been the chaplain service. In consultation with their management, their defined roles are to provide a spiritual presence; ask about the patient's do not resuscitate (DNR) status in order to prompt the clinicians; ask the patient's name to personalize the situation; and to provide support to the family, staff and roommates. Other non-clinicians like ward clerks provide support like printing labels for labs, serving as communication liaisons, escorting patients and more. Logistics staff also restock simulation training code carts to ensure they mimic real code carts.

Another important piece to integrating non-clinicians into simulations is to make sure that their concerns are heard and addressed. All non-clinicians participate in the video-assisted debriefing just as the clinicians do. Many of them have identified systems issues that need to be addressed, and they often have a different vantage point than the clinicians.

As is the case for all education/ simulation activities, it is important to engage not only the individual staff members, but also their management, to make sure that staff participation is supported and that there is alignment between the goals of the activity and the organization. ••

#### Sim fellows present topics at IMSH

**SAN FRANCISCO** – VA staff participating in the Interprofessional Advanced Fellowship in Clinical Simulation program conducted poster presentations for attendees at the annual International Meeting on Simulation in Healthcare (IMSH) in San Francisco in January.

The presentations included topics like "Resternotomy Simulation in the Intensive Care Unit" and "Everyday ethics in nursing."

The San Francisco fellowship participants were

Meg Kohn, MaryAnn Rich, Abi Rankin-Fitzgerald and Robert Range. Assisting them were co-directors Rich Fidler and Jan Hirsch; Jennifer Fong (graduate student); past sim fellow Vivan Lee; and Shelley Miyasaki (dental simulation faculty).

The Pittsburgh fellowship participants were Marianne Burda and Kathy Wilt. Assisting them were Doctors Jo-Ann Suffoletto and David Eibling, along with Fellowship Co-Director Mary Ellen Elias. Fidler and Fong received 2nd Place in the Program Innovation podium presentation. Kohn received 2nd Place for her Program Innovation podium presentation .

## Simulation supports orthopedics bone and joint training at Minneapolis VA

By David J. Adriansen, Ed.D., NREMT VISN 23 Simulation Program Manager Minneapolis VA Simulation Center

MINNEAPOLIS – Eight orthopedic residents from the University of Minnesota training program completed a four-hour total hip and knee arthroplasty and joint injection procedures skills lab using bone and joint simulation models at the Minneapolis VA Health Care System (MVAHCS) in February.

The team used commercially available joint injection models and hemi-pelvis and femur bones made of life-like composite materials. This allowed attendees to practice foot, hand, wrist, knee and shoulder injections, and to replicate both hip and knee replacement procedures by cutting, reaming and broaching the composite bones much like they do in live patients. Dr. Terence Gioe, chief of orthopedics, organized the training.

"This is the first time commercial simulation bones and joint injection trainers have been used

to support this type of skills course for our junior residents in our program," said Gioe. "It was well received and led to a successful training experience. We look forward to additional training opportunities utilizing simulation as a training methodology."

(Left to right) Doctors Mitchell Wyffels, Patrick Ebeling and Bryan Trumm participate in a simulated procedure. (VA photo by Tammy Hingst)



Dr. Terence Gioe (left), chief of orthopedics, works with Dr. Mitchell Wyffels during the procedures. (VA photo by Tammy Hingst)



SimLEARN Newsletter is a product of the Veterans Health Administration National Simulation Center. The program's operations and management is conducted by the VHA Employee Education System in close collaboration with the Office of Patient Care Services and the Office of Nursing Services. For more information, visit www.simlearn.va.gov or e-mail VASimLEARNGeneralInformation@va.gov.





U.S. Department of Veterans Affairs

Veterans Health Administration

Employee Education System

