

# SIMULATION EXCHANGE



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National Simulation Center

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## SIMULATION EXCHANGE

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### On the cover:

*Dr. Matthew Bobel, a surgeon at the  
Minneapolis VA Health Care System,  
works on a Fundamentals of Laparoscopic  
Surgery (FLS) testing simulator. The  
Minneapolis VA became the first FLS  
Testing Center within VHA Sept. 3.  
(VA photo by April Eilers)*



**ORLANDO, Fla.** -- On Oct. 11, Scott Mitchell, SimLEARN lead simulation specialist and retired Navy chief petty officer, passed away at his home. As a lead simulation specialist, Scott was responsible for planning, developing, implementing and consulting on a variety of simulation-based training scenarios and supported clinical curricula delivered by SimLEARN.

During his almost 4-year tenure, he implemented numerous projects that had significant and long-lasting positive impact in increasing and sustaining health care provider skills that ultimately improved Veteran patient outcomes. Scott was a major contributor to rolling out SimLEARN's first major train-the-trainer/train-the-provider cascading project – the Out-of-Operating-Room Airway Management, or OORAM project. He actively engaged with staff in the field providing technical expertise and support to facility simulation training labs. He assisted in the development of the VHA National Simulation Network by drafting requirements for the certification program. A true innovator, he conceptualized, developed, tested and validated the capability to conduct remote simulator operations, enabling SimLEARN staff to actively control a high-fidelity mannequin located at a VA facility over the internet.

Harry Robinson, SimLEARN national program manager said, "Scott's devotion to duty was exemplary and a credit to the Training Department, Simulation Division, Employee Education System, VHA and our Veterans. His leadership, technical proficiency, humor and advocacy for teammates and clients was outstanding. Even more importantly than his accomplishments professionally, Scott will be immensely missed as a husband, father and as a friend. He took his

drive, determination and expertise from his service with the Navy as an independent duty corpsman and chief petty officer and transferred it to the benefit of the entire Veterans Health Administration." ❖



*(Left) Scott was a key staff member at a number of simulation training events. Here he smiles for the camera at an event in the Tampa VA Medical Center in Florida. (VA courtesy photo)*

# Minneapolis VA Health Care System achieves two simulation milestones

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

**MINNEAPOLIS** – The Minneapolis VA Health Care System (MVAHCS) simulation program recently received Advanced Tier Certification as a simulation facility. In addition, the MVAHCS became the first Fundamentals of Laparoscopic Surgery (FLS) Testing Center in VA on Sept. 3.

The medical facility has expanded its simulation efforts as part of the VISN 23 Simulation Program. From the genesis of a strategic initiative focusing on patient safety and team communications, a network consisting of 11 regional sites with dedicated simulationists and equipment now exists within the VISN.

Under the new CESAR initiative (Center for Excellence in Simulation and Research), the MVAHCS is focused on future development of

multidisciplinary and interprofessional simulation opportunities.

Minneapolis is one of four centers that received the Advanced Tier Certification, which lasts two years. The application required a program with locally developed simulation scenarios supporting several disciplines. The groundwork and application process takes time, but the end result is considered well worth the time, as well as an investment toward future goals.

Four of the eight health care systems in VISN 23 achieved SimLEARN Simulation Program certification.

FLS was developed by the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) to encourage a standard set of skills in basic laparoscopic surgery.

Laparoscopic surgery, also known as minimally invasive surgery, is a

technique in which an operation is performed through a small incision with the aid of a camera. The procedure can be used to inspect and diagnose a condition, or to perform actual surgery. SAGES believe that learning and applying these fundamental skills will help ensure a minimal standard of care for all patients undergoing laparoscopic surgery.

FLS is endorsed by the American College of Surgeons and mandated by the American Board of Surgery as a pre-requisite for eligibility for the general surgical board qualifying exam. The FLS program is a comprehensive, educational module and assessment tool designed to teach the fundamental knowledge, clinical judgment and technical skills required in the performance of basic laparoscopic surgery. The educational module consists of a web-based multimedia presentation of didactic content and “watch and do” exercises that focus on manual skills training.

The FLS assessment includes two components: a computer-based cognitive assessment and a performance-based manual skills assessment. Those who successfully complete both the educational and assessment components will have demonstrated the basic knowledge, judgment and technical skills fundamental to the performance of laparoscopic surgery. Upon successful completion of the FLS examination, a physician is issued a certificate and called a “certificant” of the FLS program. Re-certifications take place every 10 years.

For the future, the MVAHCS now has a new virtual simulation lab and will continue to focus on its original goal of patient safety through clinical excellence. ❖



*(Above) Dr. Matthew Bobel, a surgeon at the Minneapolis VAHCS, practices colonoscopy procedural skills using a virtual reality simulation trainer. (Right) A photo of the Minneapolis VAHCS Virtual Simulation Lab. (VA photos by April Eilers)*



# Mini-residencies provide women's health clinicians training in Orlando

By Women's Health Services  
Office of Patient Care Services

**ORLANDO, Fla.** – Veterans Health Administration (VHA) trained nearly 400 health care professionals in its women's health mini-residency programs in Orlando, June 16-18 and July 28-30. VHA boasts women's health mini-residencies, which are comprehensive 3-day programs for several professions including providers and nurses in primary care and emergency care. The programs this summer marked 2,400 primary care providers trained during these mini-residencies over the past seven years. In addition, over 500 other professionals in primary care and emergency care have been trained in women's health mini-residencies specific to their professions.

The innovative programs, which incorporate pelvic and breast exam instruction using simulation training equipment and live, trained models, are the result of a collaboration between VHA's Women's Health Services, VHA's Employee Education System (EES) and SimLEARN. The SimLEARN program assists by providing equipment and some staff to conduct training.

Developed by women Veterans health clinical experts, the mini-residency programs continue to further VHA's progress in reaching the goal of implementing comprehensive primary care for women and ensuring that women receive state-of-the-art emergency care at all VHA sites of care. Topics covered in the three-day course included pelvic pain, vaginal bleeding, breast issues, contraception, as well as post-deployment issues and military sexual trauma. Participants rotated through a simulation training lab that is set up at the main conference site, as well as trained with standardized patients (live actors) in the clinical skills and simulation center at the University of Central Florida College of Medicine.

The mini-residencies in primary care and emergency care have been adapted to train inter-professional audiences, providing training in a manner that mimics how care is delivered – in teams. For the past two years a large number of provider-nurse pairs have been able to attend the mini-residency programs together to take advantage of these new programs and return to their facilities to further enhance the care of women Veterans at their sites.

There are currently more than 2.2 million living women Veterans. Over 650,000 of them were enrolled in VHA for health care services in fiscal year 2015. This number rose substantially in recent years. Due to this rapid growth, ensuring that VA has the best training for its providers continues to be a priority.

"We launched the primary care provider mini-residencies in 2008 as a way to proactively prepare our clinicians for the record influx of women Veterans," said Patricia Hayes, chief consultant, Women's Health Services. "I am thrilled that we have trained so many clinicians and see this as a major step toward having every woman Veteran who comes to VA seen by clinical professionals who are both interested and proficient in women's health care."

"Looking forward, we hope to continue to refine and expand our training programs, making them more accessible by utilizing new technologies and other innovative ways to deliver training," said Dr. Laure Veet, director, Women's Health Education, VHA Women's Health Services. "We also look forward to refining plans to help clinical staff stay up-to-date on the latest advancements in women Veterans health care after this initial training."

For more information about VA programs and services for women Veterans, please visit: [www.va.gov/womenvet](http://www.va.gov/womenvet) and [www.womenshealth.va.gov](http://www.womenshealth.va.gov). ❖

## Nominations open for annual Under Secretary for Health's Excellence Awards

By Gerald Sonnenberg  
EES Marketing and Communication

**ORLANDO, Fla.** – The VHA SimLEARN program announced a call for nominations for the Under Secretary for Health's Awards Program for Excellence in Clinical Simulation Training, Education and Research. This awards program recognizes clinical and executive leaders in VHA's clinical simulation community who have supported and advanced VHA's strategic plan for clinical simulation.

The annual awards program was established to promote and advance system-wide progress of VHA goals, objectives and strategies for the deployment of clinical simulation to improve the quality of health care for Veterans.

The award categories still include the Excellence in Clinical Simulation Training, Education and Research Practice Award and the Excellence in Clinical Simulation Training, Education and Research Executive Leadership Award. However, the awards recently expanded, per **VHA Directive 1133**, to include two more categories: the Excellence in Clinical Simulation Training, Education and Research Champion Award and the Excellence in Clinical Simulation Training, Education and Research Champion Award for the Resuscitation Education Initiative (REdI).

Please visit the **Simulation Awards** page on the SimLEARN website to view award criteria and how to submit the nominations. Each award requires its own specific nomination form, as well as a **Form VA0235** for submission.

Nomination acceptance has been extended through Jan. 8, 2016. ❖



*An interprofessional team performs a training scenario. (Pictured left to right) Dr. Ajay Kumar Kaja, Creighton University Medical School; Dr. Ben Monson, an unidentified medical student, Dr. Daniel Almquest, and Dr. Brittany Willer from the University of Nebraska Medical Center; Dr. Amer Alshekh Mousa, Creighton University Medical School; Dr. Corey Rohlfesen, University of Nebraska School of Medicine; and Dr. Daniel Hershberger, Creighton University Medical School – MD Facilitator. (VA photo by Kami Willett)*

## Triple mock training helps save Veteran

*By Kami Willett, MSN, RN-BC, Simulation Coordinator/Clinical Educator  
Nebraska-Western Iowa Health Care System*

**OMAHA, Neb.** – Providers at VA Nebraska Western Iowa Health Care System (NWIHCS) have the upper hand when it comes to cerebral vascular accidents (stroke), ST elevated myocardial infarction (STEMI) and cardiac arrest, according to Dr. Renee Woehrer, hospitalist, NWIHCS. The ST segment is an interval of time when the heart depolarizes and then repolarizes. This has to do with the positive and negative charges within the cell membrane. She and other staff have developed and implemented a monthly interprofessional Triple Mock Training (TMT) for staff members at NWIHCS.

“TMT uses a high-fidelity mannequin, several confederate players and props to mirror real events during the three types of training scenarios. In addition to hands-on scenarios, participants are required to follow hospital procedures for each case,” Woehrer said.

The training was developed for interprofessional teams that respond to emergency situations, including but not limited to physicians, nurses and respiratory therapists.

“There were two goals in mind when the training was being designed. The first goal was to ensure the proper medical care is performed in the event of an emergency. Secondly, proficiency in activating the Stroke and STEMI protocols for transferring a patient to another facility,” added Woehrer.

Although tracking outcomes or practice changes can be challenging in the training world, real-life situations observed at the NWIHCS facilities have made it obvious the training has saved the life of a patient.

One busy day at the Omaha VA Medical Center, a Veteran collapsed in the main lobby of the medical center. Help was summoned quickly, and the cardiac arrest team was activated. When the team arrived, the Veteran was found to be in ventricular fibrillation (VF). Proper advanced cardiac life support (ACLS) algorithms were initiated. Shortly after initial treatment, the Veteran became responsive. The electrocardiogram (EKG) indicated myocardial infarction or MI.

The team quickly activated the

STEMI protocol and the Veteran was transferred to a local level-one trauma center where the patient received life-saving interventions within 19 minutes of collapsing. The code team that responded to this emergency had just completed the TMT training in the VA Professional Education Resource (VAPER) simulation training center the day before the incident.

During the debriefing of the real-world incident, comments included, “the team worked great together, and everything we did yesterday to manage the mannequin STEMI scenario helped immensely.”

Another team member said, “I knew exactly what to assign to each team member from the STEMI protocol to get this Veteran transferred out within the 30-minute window.”

Another clinician, who was in the area at the time of the emergency, said they should have videotaped the incident and response to be used as a training video. “It was flawless and incredible teamwork.” The clinician was not aware the team had just completed TMT training the previous day. ❖

# Patient simulation brings realism to psychiatric ward

By Bill Armstrong, Public Affairs Specialist and Tammy Novak MSN, RN Educator New Mexico VA Health Care System

**ALBUQUERQUE, N.M.** – A man in brown pajamas sat on the edge of his bed, swinging his legs back and forth as he impatiently waited for a nursing assistant to respond to the call he just made. From all appearances, the man with short gray hair and a trim build was a patient in Ward 7, a secure psychiatric inpatient ward at the Raymond G. Murphy VA Medical Center (VAMC) here.

When a nursing assistant arrived at his door, the man jumped to his feet and began uttering a verbal barrage about his dire need for a cigarette. As his voice grew louder, he frantically waved his arms around the staff member to emphasize his “tobacco emergency.”

For her own safety, the nursing assistant (NA) stepped back to increase some space between herself and the patient. In a calm voice, she explained the ward’s smoking policy to him and attempted to offer other options to satisfy his nicotine craving, such as lozenges, gum or a patch.

At that point, two nurse managers who were posted just outside the “patient’s” room walked in and stopped the conversation. Nancy Hobbs, geriatric psychiatric nurse manager, and Marianne Broyles, Ward 7 assistant nurse manager, served as evaluators as they observed how the staff member dealt with the patient’s problem.

The patient was actually an actor from the University of New Mexico. His desperate plea for a cigarette was part of a patient simulation scenario set up by James McCarthy, Ward 7 nurse manager; and Dr. Elizabeth Sullivan, a psychologist for the New Mexico VA Health Care System.

“We give them instructions; we give them a breakdown of the scenario; and we have them do first interaction,” Sullivan said. “After that, we debrief with them and ask them how they felt; did they feel that they did well, and was there anything they wanted to change.”

What the staff member does not get during this first debriefing with the evaluators is specific feedback. The nursing assistant then returns for a second interaction with the actor/

patient. The evaluators will briefly meet to compare notes just before they sit down in another room with the staff member to gather feedback of the total experience and offer some advice for future encounters. During this second debriefing, it was revealed to the nursing assistant that she had just participated in a no-win scenario.

“The patient is not going to be appeased,” said Sullivan. “Her job is to restate the policy, stand firm and maintain warmth, and take whatever the patient is dishing out. For feedback, we want her to balance the professional role with being a warm person. She’s got all the safety and professional stuff down, which is important, but also important is bringing in a little bit of the warmth, interacting with the patient. We also remind her that she is our eyes and ears, and we are strong as a team if everybody maintains the policy. It’s important to stand firm.”

The patient simulations on Ward 7 were planned for a three-day period, using different actors to present their situations to 24 nursing assistants. This was the first time this type of training had been offered to VA staff in Albuquerque.

Considering the amount of valuable feedback and the quality of individual learning experiences, more patient simulations will be scheduled in the future. ❖

## New 3-D dental models aid training

**MINNEAPOLIS** – The VISN 23 Simulation Program recently purchased dental simulation models for 10 dental clinics within the VA Midwest Region for the purpose of supporting Veteran dental patient education.

Dr. Allan Hancock, VISN 23 lead dentist, said, “The use of hands-on, three-dimensional, realistic anatomical dental training models represents state-of-the-art patient and staff education for VISN 23 dental services. They are invaluable when presenting treatment plans to patients, providing oral hygiene education chairside, or for resident case-presentations to staff members or faculty. Particularly in the complex treatment world of modern dentistry, the ability to visually explain to a patient different treatment options is essential for the patient to make an informed decision regarding their long-term health care.”

Dr. Bruce Templeton, dental service chief for the Minneapolis VA Medical Center, said, “The lifelike dental models are an excellent visual aid for helping educate or orient a Veteran on their individual dental condition or planned



Dr. Chia-Yin Lo discusses dental hygiene with Veteran Pam Pettis. (VA courtesy photo)

procedure. They also are a great asset for Oral Surgery resident and dental and hygiene assistant training.” ❖ (Story by David Adriansen, Ed.D, NREMT)

# Simulation key to safer health care

By Wilma Lonzame Ayala, MS, RN, VHA-MC, NE-BC  
Nurse Educator, Program Director-REdI  
VA North Texas Health Care System

**DALLAS** – Do you remember using an orange to learn how to give injections? Did you practice on your classmates to splint a broken arm or bandage a gaping wound? How about mannequins? Has anyone not practiced CPR on one of them? Welcome to the world of simulation.

## Why do we need simulation?

The clinical component of health care education is the application of knowledge at the point of care (Norman, 2012). On the other hand, the ever-changing clinical and academic landscapes present challenges that affect how and when experiential learning can take place. It is not always easy to get hospital affiliations for field practice, and fewer clinical hours limit opportunities for hands-on experience with real patients (Yuan, Williams, Fang, & Ye, 2012). Patients may not present with diagnoses learned in the classroom or require procedures that students can practice doing. Sometimes, patients may not even want to be practiced on.

It has been noted that graduates enter professional practice without sufficient knowledge, skills and attitudes to work effectively in teams (Palaganas, Epps, & Raemer, 2014). Fittingly enough, simulation has evolved as education's "natural hub" for overcoming barriers in hands-on practice (Palaganas, Epps, & Raemer, 2014). Simulation can be used to provide educational experience in an environment that feels almost real (Causar, Barach, & Williams, 2014). Many schools and hospitals are using some form of simulation as a teaching and learning strategy for the development of cognitive, psychomotor and effective competencies.

## Then and now ...

Bradley (2006) identified three distinct phases affecting the growth of clinical simulation beginning with the introduction of part-task trainers like the IV arm, followed by the development of more advanced simulators capable of mimicking certain aspects of human behavior — simulators that breathe, blink and have a heartbeat. The third phase was influenced by medical education reform bringing in its wake the need for continuing education and revalidation, as well as the recognition that learning clinical skills will likely be compromised unless something is done to augment it. This period created widespread adoption of programs and the construction of facilities supporting simulation learning (e.g. simulation laboratory or simulation centers). It also gave rise to high-fidelity simulators with features that are more life-like than previous versions.

The development of simulation took many years and continues to evolve to this day. There are numerous types of simulators and some examples are presented here.

Many of us have used part-task trainers, which by name, implies the simulation of a limb or certain body part. We learned to start an IV or dress a wound using part-task trainers. Haptic models provide tactile perception, such as a breast model to feel

for lumps. Some use standardized patients or SPs; these are real people playing the role of patients. In its most basic description, SPs are "actors" who respond using standardized scripts and can exhibit physical signs, such as agitation and other behaviors called for in a given learning experience. More recently, we have seen the appearance of integrated simulators which are high-fidelity, computer-controlled mannequins with sophisticated software providing physiological responses and giving instructors the ability to manipulate scenarios to meet learning objectives (Bradley, 2006).

Fidelity, when applied to simulation, represents the degree by which planned learning experiences mimic real-life situations. The higher the fidelity, the more real it feels. High-fidelity simulation, however, is not necessarily better than lower-fidelity simulation since this is contingent upon the type of task to be learned and the participant's level of readiness (Munshi, Lababidi & Alyousef, 2015). Fidelity is an important consideration when determining the most appropriate simulation strategy for teaching and learning.

## What's in it for all of us?

Simulation goes beyond individual benefits by also enhancing the essence of teamwork. It promotes a safety-conscious culture through risk-free learning in intense, complex and uncommon situations (Bradley, 2006). Because it is simulation, do overs can be done repeatedly, without shame, and at no risk to a "patient." Practice until you get it right.

Simulation provides participants the opportunity to learn from errors of omission or commission. We are all quite familiar with the ethos of "first, do no harm," and the reminder that to "err is human." Mistakes happen. In simulation, learners have time to reflect on thought processes and actions that may require correction. It also reminds learners that it's better to make your mistakes here, rather than out there. ❖

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## REFERENCES:

- Bradley, P. (2006). The history of simulation in medical education and possible future directions. *Medical Education*, 40 (3), 254-262.
- Causar, J., Barach, P., & Williams, A. M. (2014). Expertise in medicine: Using the expert performance approach to improve simulation training. *Medical Education*, 48(2), 115-123.
- Munshi, F., Lababidi, H., & Alyousef, S. (2015). Low- versus high-fidelity simulations in teaching and assessing clinical skills. *Journal of Taibah University Medical Sciences*, 10(1), 12-15.
- Norman, J. (2012). Systematic review of the literature on simulation in nursing education. *ABNF Journal*, 23(2), 24-28.
- Palaganas, J. C., Epps, C., & Raemer, D. B. (2014). A history of simulation-enhanced interprofessional education. *Journal of Interprofessional Care*, 28(2), 110-115.
- Yuan, H. B., Williams, B. A., Fang, J. B., & Ye, Q. H. (2012). A systematic review of selected evidence on improving knowledge and skills through high-fidelity simulation. *Nurse Education Today*, 32(3), 294-298.

# Women's health adapts training for emergency providers, nurses

By Aimee Sanders, MD, MPH; Lauren Pacht, LCSW, WVPM; Kathleen Robbins MSN WHCNP; and Laure Veet, MD, Director, Women's Health Education, VHA Women's Health Services

**LOUISVILLE, Ky.** – The number of women Veterans using VHA services continues to increase, and the demand for clinical staff to be ready to provide high-quality care to this population at every entry point has never been more important. VHA's Women's Health Services (WHS) is committed to ensuring clinical staff are appropriately trained for this demand. WHS has a long history of delivering national mini-residency training programs for primary care providers, and in recent years, their national audience has expanded to include training of emergency providers and emergency nurses in a team-based manner.

Training in the emergency care setting is particularly challenging given its 24/7 care provision, high-acuity nature and shift-work. However, Robley Rex VA Medical Center (RRVAMC) in Louisville was able to employ an innovative approach to the traditional mini-residency to face these challenges head-on.

As a recipient of a fiscal year 2015 WHS education grant, the RRVAMC delivered the Women's Health Mini-Residency for Emergency Care Providers and Nurses to 10 emergency providers and nurses this past summer, and adapted the training delivery methods to meet the clinical needs of the participants.

To begin, rather than delivering all didactics in a multi-hour, face-to-face event, all participants independently viewed eight, WHS-developed, on-demand broadcasts that covered core topics in emergency care for women. Protected time before, during or after shifts was provided to complete this portion.

In contrast to what is typically delivered in three separate sessions –

simulation task trainers, gynecologic teaching associates (GTAs) and facilitated small group case discussions – RRVAMC staff worked with WHS to adapt the curriculum so each provider-nurse team gathered for a single small group, interactive hands-on session. This approach maximized learning while minimizing time away from patient care. This local interactive session was abbreviated to four hours, compared to nearly nine hours in the traditional mini-residency. Coverage of clinical duties for participants was endorsed by local leadership.

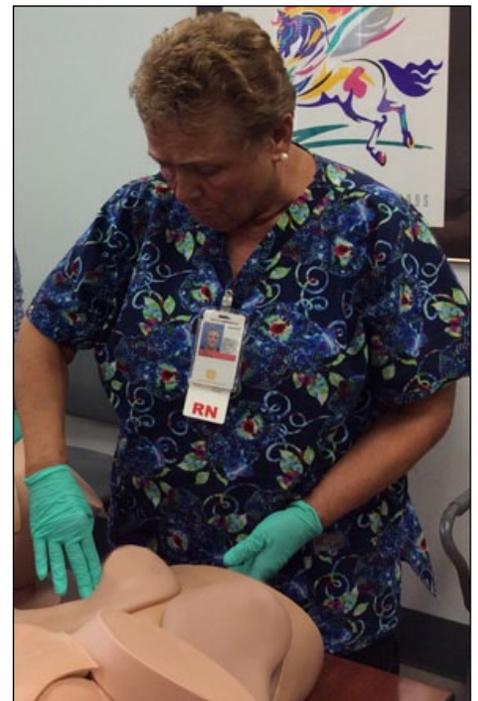
A key element of the interactive session included facilitated hands-on simulation training. Participants practiced exam skills and equipment handling on low-fidelity task trainers that demonstrated normal and pathologic breast and pelvic findings. The provider-nurse teams also had dedicated time to work with a live GTA to practice key training elements: exam preparation and assistance, breast and pelvic exam techniques, patient interaction skills and interprofessional teamwork principles. Valuable feedback from GTAs was provided and very well-received by participants. One participant enthusiastically reported, "Hands-on application (is) ideal for learning."

Scenarios chosen for the case-based exercises were selected based on local need and tailored to include discussions around local practice and process at RRVAMC. Having both provider and nurse input on triage, management and disposition of the cases made for robust and insightful discussions.

While the numbers trained are small, pre- and immediate post-assessments show improvements in self-reported

comfort levels in managing women's health issues in 29 of 30 domains for providers, and 18 of 21 domains for nurses. All participants reported they would recommend this training program to their colleagues. A provider noted the program offered "useful information, especially with (the) projected increase in (the) female population." And a nurse described the program as providing "more awareness with regard to women's health and needs."

Lessons learned from this successful pilot program at RRVAMC will help shape future VHA Women's Health training initiatives for emergency care staff. ❖



Nurse Sandra Hobbs, RN, BSN, participates in identifying abnormal findings on breast and pelvic task trainers. (VA photo by Lauren Pacht)



## FELLOWSHIP CORNER

# VA develops dentist-focused emergency simulation training

By Yahya Acar, MD and Jesse Manton, DDS  
Simulation Fellows  
San Francisco VA Medical Center

**SAN FRANCISCO** – Over the past 8 years, Rich Fidler, CRNA, Ph.D, MBA with the San Francisco Veterans Affairs Medical Center (SFVA) simulation program and Shelley Miyasaki, DDS, Ph.D from the SFVA dental service have used blended didactic and simulation-based education to enhance training for general dental and oral and maxillofacial surgery residents. SFVA's simulation program partnered with the dental service to train more than 100 residents from SFVA, University of California San Francisco (UCSF), VA Palo Alto Health Care System (VAPA) and the Sacramento and Mare Island VA dental clinics.

Current dental school medical emergency certification in the U.S. is limited to basic life support (BLS), even though literature indicates that the incidence of a cardiac arrest requiring cardiopulmonary resuscitation in a dental office is one of the least likely emergencies to occur, with an incidence ranging from .001-.011 cases per dentist per year. This data was a call for a tailored

training program to arm dentists with the skills and knowledge necessary to manage the most common medical emergencies in dental offices, such as syncope, seizure, hypoglycemia, asthma attack and anaphylaxis.

This year, SFVA is revamping and formalizing these sessions into a year-long curriculum. The curriculum consists of advanced training for medical emergency management in the dental office, part of a spectrum of dental simulation programs being developed and utilized for dental student and resident simulation-based education. This novel curriculum is evidence-based and implements a combination of monthly virtual conferences, didactic seminars, part-task skills training and in place simulation.

Limitations on available resources include constrained availability of educators, equipment and physical space, with the sessions also needing to be integrated into the work day of the residents. These sessions are typically held in the evening after clinical duties have ended for the residents.

Each monthly session has the dental residents, along with the simulation fellow, trainers and simulation equipment,

travel to a predetermined institutional site at either SFVA or VAPA. The ability to enhance resident emergency preparedness and, hopefully, improve patient outcomes in a single session for the residents from three different institutions is an efficient and (cost) effective model. In addition to using the SFVA simulation center for sessions, they utilized in-situ settings at the SFVA and VAPA dental services with high-fidelity mannequins to create realistic emergencies in which residents could practice. They also utilize space in hallways and conference rooms in the SFVA medical center library, adjacent to the simulation lab, to deliver small group, task-focused didactic content, skills and simulation training with subsequent debriefing sessions.

Benefits in bringing residents from the three institutions together for sessions include not only cost-effective training with limited resources available, but also the opportunity for residents to collaborate with colleagues and build relationships between the different institutions. The residents gain knowledge in simulation methodology, which can then be used in training their future office staff in crisis resource management. Residents acquire on-site training in both their own (familiar) environment and gain experience managing crisis situations in other dental clinics and environments.

Our fellowship vision is to provide curricula and avenues of training delivery that can help decrease the cost and increase effectiveness of medical simulation programs. By revamping our ongoing dental simulation sessions into a formalized curriculum, we are using our limited resources to significantly impact an important need in every dentist's training, the management of the most common medical emergencies that occur in the dental office. ❖

### REFERENCES:

Arsati F, Montalli VA, Flório FM, Ramacciato JC, da Cunha FL, Cecaño R, de Andrade ED, Motta RHL. (2010). *Brazilian dentists' attitudes about medical emergencies during dental treatment*. *J Dent Educ*, 74(6), 661-666.

Becker L, Eisenberg M, Fahrenbruch C, Cobb L. (2001). Cardiac arrest in medical and dental practices: implications for automated external defibrillators. *Arch Intern Med*, 161(12), 1509-1512.

Fast TB, Martin MD, Ellis TM. (1986). Emergency preparedness: a survey of dental practitioners. *JADA*, 112(4), 499-501.

## Operational readiness a priority at Lovell Federal Health Care Center

By Lisa M. Baker, RN, BSN, MEd  
Program Director, Simulation Center  
Captain James A. Lovell Federal Health Care Center

**NORTH CHICAGO, Ill.** – The Captain James A. Lovell Federal Health Care Center (FHCC) is a first-of-its-kind partnership between VA and the DOD, integrating all medical care into a fully-integrated Federal health care facility with a single combined VA and Navy mission. As the only integrated FHCC, it uniquely brings civilian and military health care staff together as one team caring for patients.

The simulation center here facilitates educational programs to train and sustain the required skills to ensure readiness and safe patient care in both fixed and deployed settings; a true reflection of its mission, “Readying Warriors and Caring for Heroes.”

The Tactical Combat Casualty Care (TCCC) course, a recurring and pre-deployment certification requirement for active duty and Reserve Navy Medicine staff, is designed to enhance operational readiness by providing the basic skill sets required in a tactical setting. Doctors, nurses and hospital corpsmen work together through an immersive 3-day course learning to provide the necessary trauma care to wounded military members. Critical skills are taught throughout the course that involves the student, dressed in full battle gear, completing a rigorous final exam that takes them through multiple trauma station points in real time, while flanked by explosions and gunfire that bring a sense of reality to the training.

Students learn to provide care under fire that includes appropriate patient extraction movements and massive hemorrhage control using combat application tourniquets and a tactical tourniquet. Airway management modalities taught in the field environment include use of nasopharyngeal airways, surgical cricothyrotomy and needle decompression to the lung. Fluid resuscitation and vascular access using the FAST1 sternal interosseous infusion system, rapid head-to-toe assessment, hypothermia prevention and pain management complete the patient assessment and demonstration requirements.

TCCC is offered every two weeks through the simulation center and is open to active duty, reservists and federal employees. Very often, the participants are doctors and hospital corpsman selected for deployment to various parts of the world to support current operations. ❖

*A student performs progressive modalities of airway management during the final exam. (VA courtesy photo)*



## Interprofessional simulation: Prioritizing interprofessional competencies to improve patient outcomes

By Mary Holtschneider, MPA, BSN, RN-BC, NREMT-P, CPLP  
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**Editor’s Note: The following is the summary of an article by Mary Holtschneider and Dr. Chan Park that was published in the *Journal for Nurses in Professional Development*. Please select the logo at the end of the summary to read the full article on the publication’s website.**

One of the most effective ways to improve the quality of simulation training is by improving the quality of the debriefing. Debriefing in simulation is arguably one of the most important facets of the training session. It also provides an outstanding platform for the nursing professional development specialist to highlight aspects of the five core competencies of the Institute of Medicine Interprofessional Team Principles and to reinforce their adoption into clinical practice.

Discussions involving who, what, why and how to better integrate the five competencies will certainly engage learners to think more proactively and outside the proverbial box, providing them with the opportunity to generate more insight on how to better patient outcomes. Such debriefing facilitation also goes beyond the more traditional debriefing techniques of asking the learners what went well and what could be done better.

**Click the logo to read the full article:**



## Thank you

**ORLANDO, Fla.** – The SimLEARN staff would like to thank the simulation champions and other staff for their input in naming this publication. Congratulations to David Adriansen, Ed.D, NREMT, for coming up with the final newsletter name, *Simulation Exchange*.

A VA employee since 2003, Dr. Adriansen is retired from the U.S. Air Force and is the VA Midwest Region Simulation Program Director at the Minneapolis VA Health Care System, in Minnesota. He manages the Minneapolis VA Simulation Center and a simulation program encompassing 14 locations in five states. The program promotes clinical simulation education to support patient safety and clinical skills training. He is one of 21 national VA Simulation Champions helping move simulation education forward within VHA. ❖

