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SimLEARN℠ Newsletter

Excellence in Veterans' Healthcare

An architectural rendering of the National Simulation Center. (VA courtesy graphic)

VA awards contract to construct VHA National Simulation Center

By Gerald P. Sonnenberg
EES Marketing and Communication

ORLANDO, Fla. – VA awarded Chicago-based Archer Western/DeMaria Joint Venture VIII a $19.8 million contract June 27 to build the VHA SimLEARN National Simulation Center.

The center, to be located on the campus of the new Orlando VA Medical Center in the Lake Nona "Medical City" area, will serve as the operational hub for coordination of all national VA simulation-based clinical training activities.

The SimLEARN program uses a train-the-trainer model to quickly and efficiently prepare a cadre of qualified instructors who can, in turn, deliver world-class simulation-based clinical training at their respective field VA sites, using standardized curricula and equipment.

The facility will provide an immersive training

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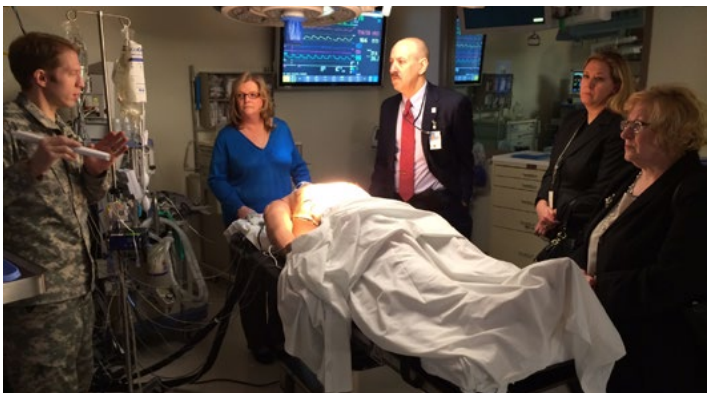
VHA SimLEARN staff tour DOD simulation clinical training centers

By Gerald P. Sonnenberg
EES Marketing and Communication

BETHESDA, Md. – VHA leaders in clinical simulation education and training and in interagency shared training recently toured Department of Defense (DOD) clinical simulation training capabilities at the Walter Reed National Military Medical Center (WRNMMC) and at the Uniformed Services University for Health Sciences (USUHS), both in Bethesda.

The site visits provided SimLEARN staff and interagency shared training representatives with additional insight and detailed understanding for simulation-based clinical training delivery, integration within the facility, competency assessments and meaningful metrics. The USUHS Simulation Center demonstrated their leading edge, high-technology, wide area virtual environment (WAVE) team training simulator. WAVE is an 8,000-square-foot, multi-axis forum using stereoscopic images to provide very realistic, immersive training scenarios designed to support trainer interaction with each other, as well as real equipment that gives instructors the opportunity to teach and assess teamwork skills.

This information will be beneficial in activating the planned VHA National Simulation Center adjacent to the new Orlando VA Medical Center at Lake Nona, Fla. Opportunities for collaboration in DOD-VHA research, staff educational programs, curricula development and participation in the Federal Medical Simulation Training Consortium were also discussed.



(Pictured right to left) Dr. Lygia Arcaro, Karyn Johnstone and Harry Robinson listen to a simulation presentation by staff at the Walter Reed National Military Medical Center in Bethesda, Md. (VA courtesy photo)

SimLEARN participants were Haru Okuda, M.D., national medical director; Lygia Arcaro, Ph.D., national director of nursing programs; and Harry Robinson, national program manager. They were accompanied by Karyn Johnstone, EES national coordinator for interagency shared training. ❖

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environment by replicating actual patient treatment areas, including an outpatient clinic setting, an inpatient hospital setting with an intensive care unit, an operating room and more. Video recording of training will take place for classroom review, and multipurpose classrooms will have reconfigurable walls to provide a number of room settings.

The location of the 51,000-square-foot National Simulation Center, with its close proximity to other large clinical, educational and research facilities, will provide enhanced opportunities for collaborations and research in new clinical simulation technologies and methods. ❖

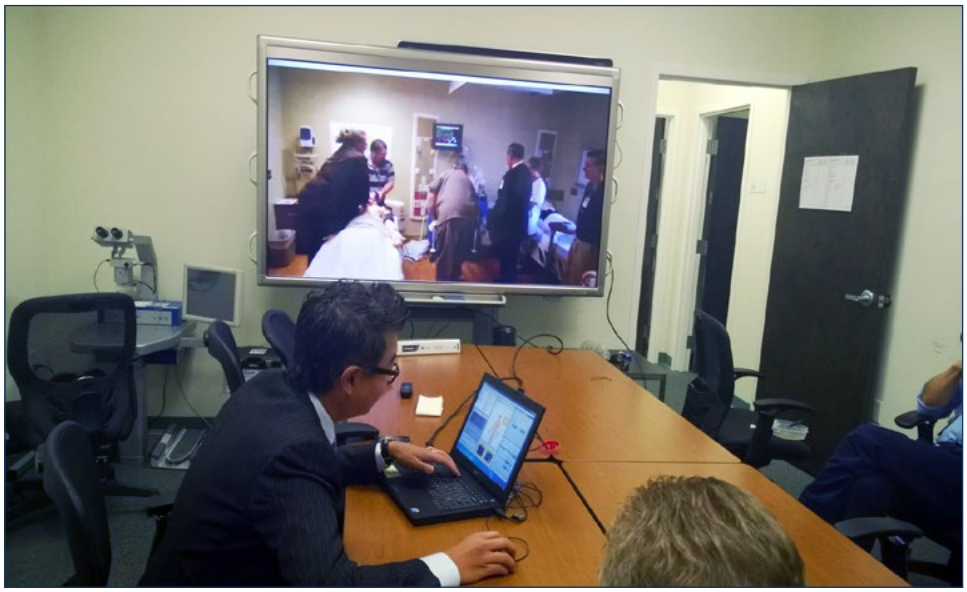
This architectural rendering shows the National Simulation Center (foreground) in relation to the new Orlando VA Medical Center (background) once completed. (VA courtesy graphic)

Remote medical simulation training now becoming a reality for VHA

By Scott M. Mitchell
SimLEARN Health Care Education Specialist

ORLANDO, Fla. – Until recently, using remote control for most people meant being able to drive a model car or plane, or even pilot a drone aircraft half way around the world. How about conducting medical simulation via remote control? With 2,181 miles between the SimLEARN National Simulation Center in Orlando, Florida and the Sheridan VA Medical Center (VAMC) in Sheridan, Wyoming, that's exactly what happened.

After many weeks of research and testing, SimLEARN and Sheridan VAMC staff demonstrated this technology to the Veterans Integrated Service Network (VISN) 19 director on April 11. An earlier test in February proved it possible. During that demonstration, the small simulation lab, overseen by clinical educator Kyle Rhone, along with Sheridan and SimLEARN staff, were able to link up with Dr. Haru Okuda, SimLEARN national medical director in Orlando.



Dr. Haru Okuda (with laptop computer), SimLEARN national medical director, controls a high-fidelity mannequin at the Sheridan VA Medical Center in Wyoming (on screen) from the National Simulation Center in Orlando, Florida. The scenario tested the ability to conduct training via remote control. (VA photo by Scott Mitchell)

SimLEARN's goal for remote medical simulation is to share the options available to connect and share experiential learning, and utilize current simulation and web-based technologies already in the VHA inventory with all VHA training sites. The intent is to have simulation experts mentor new facilitators throughout VHA in the full range of simulation curriculum and instruction: simulation design, curriculum development, simulator maintenance and debriefing.

In April, an interface was established inside the VA Internet firewall for Dr. Okuda to conduct a simulation-based training scenario where he remotely controlled the high-fidelity mannequin (HFM) and served as the patient's voice, interacting with trainees at the Sheridan VAMC. At the conclusion of the event, he debriefed the students.

"It was amazing," said Rhone. "What we are trying to do is give our clinical staff a real life experience during their training sessions. Dr. Okuda not only saw what we were doing, but he was controlling the simulation from his office in Florida, in real time."

Afterward, SimLEARN staff traveled to the Sheridan VAMC to meet with the team that helped all of the technology work. They dissected, discussed and retested the HFM and audiovisual solutions found to work effectively within the VA IT network. The group then produced a document about the entire process. Together, SimLEARN and Sheridan VAMC staff are developing a step-by-step guide on how to set up and conduct remote training sessions.

Using HFM, they found three options that proved to work for remote training, with two of them connecting through the VA IT network, and the other using an Internet "hotspot." All three of these options depend on having the HFM's instructor software placed on a VA-networked laptop with wireless capability. The first two options involve assigning the HFM a "static IP address" and connecting directly to the VA

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SimLEARN national hospital activation team tests new ward at Minneapolis VAMC

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

MINNEAPOLIS – On April 3, five members of the SimLEARN national hospital activation team conducted a full-day simulation testing of Ward 3E, a newly designed best practice medical/surgical ward that opened April 21 at the Minneapolis VA Health Care System (MVAHCS). The SimLEARN team included Dr. Lygia Arcaro, national director, nursing programs; Terry Exum, project manager; Jason Pollack and Larry Davis, simulation technicians; and Davina Dietrich, RN, health education specialist.

Simulation testing included systems testing and patient flow and procedures. Some scenarios were designed to assess responses to patient falls and evacuations, medical emergencies and wandering/elopement and behavioral events, with the simulation testing goal being to identify areas of opportunity for system or design improvements. The facility planned to mitigate the few items found during a 24-hour internal simulation that occurred April 15-16.

(Left to right) RNs Mattie Rivera, Whitney Halvorsen and Cheryl Goldstein (background) practice resuscitation techniques. (VA photo by April Eilers)

(Left to right) Jonathon Johnson, emergency manager and Teresa Capecci, RN, carry a "patient" during an exercise scenario. (VA photo by April Eilers)

Amy Dodge, Ward 3E manager, said, "The simulation testing helped identify numerous items, like suggestions for placement of food trays and glove boxes in patient rooms before ward activation, and the day was very valuable to all of my staff. It was well received and led to a successful training experience. We look forward to additional training opportunities utilizing simulation." ❖

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network via a category 5 cable, or using a secured VA wireless network. A request was granted for placing the HFM software permanently on the VA IT network.

Remote training requires a robust audio/visual component. VHA currently uses three video systems that correctly configure, work well with and allow staff to clearly visualize the remote training. In the near future, they would also like to produce an in-depth video "how to" series that shows step-by-step instructions to use these three remote training options.

These are exciting times in health care simulation, from the rapidly evolving mannequins and task trainers to web-based technologies. The ability to use these technologies for remote training sessions could be a viable option to face-to-face training. There is more work to do, and SimLEARN will continue to strive to provide the highest level of training to VHA staff. This technology can improve the patient care and outcomes for our Veterans. ❖

Everyday ethics in nursing: A simulation-based educational program

Kathryn E. Wilt, Ph.D., MSN, RN
Advanced Clinical Simulation Fellow
VA Pittsburgh Healthcare System

PITTSBURGH – This spring, a quality improvement project was launched at the VA Pittsburgh Healthcare System (VAPHS), which focuses on highlighting ethical situations commonly encountered in nursing practice. It also enhances nurses' comfort and skill in addressing and resolving those situations.

The project, "Everyday ethics in nursing: Improving ethical awareness and clinical ethics skills through simulation-based learning," is an educational program using non-traditional methods in health care ethics education. The program is conducted as an experiential workshop, providing nurses with opportunities to practice clinical ethics skills using standardized patients in simulated nurse-patient interactions.

The ethics project addresses a perceived gap at VAPHS. It has been noted during the annual review process that some nurses struggle with fully articulating the ethical dimension of their role. While nurses are likely to recognize and respond to overt ethical dilemmas that arise in patient care, such as informed consent issues and end-of-life care conflicts, nurses may be less likely to recognize the underlying and always present ethical dimension inherent in their routine, everyday interactions with patients, families and other health care providers. The project aims to enhance the "ethical lens" of the nurse, thereby increasing awareness and discernment of everyday ethical tensions. It also seeks to further develop and enhance clinical ethics skills, such as the application of professional virtues, effective communication and decision-making skills to encourage and support moral action.

(Clockwise from left) Nurses Kathy Wilt, Shelley Thokar, Scarlette Monahan, Ngozi Ezike, Jill Witt, Megan Ambrogio and Bradley Nelsen participate in a debriefing and reflection session following a scenario. (VA photo by Bill George)

(Left to right) Standardized patient Pat Lewis and nurse Bradley Nelson interact during a scenario called, "Patient Refusal of IV Therapy." (VA photo by Bill George)

Clinical ethics simulation presents a nuanced teaching and learning method for addressing the ethical tensions that arise in the clinical setting, providing reflective practice and guided discussion. Everyday ethics in nursing includes practice opportunities using standardized patients (trained actors), role play and didactic content, which illustrates commonly occurring ethical issues in nursing, such as a patient's refusal of a recommended medication or treatment. Nurses interact directly with standardized patients trained to present the patient's situation, symptoms and problems and to provide constructive feedback. Patient-nurse interactions are held in partitioned areas of a large conference room that represent patient rooms.

It is known that simulation has the potential to reduce or mitigate harm to patients and others – whether conceptualized as physical, psychological, sociocultural or moral harm. Ethics simulations, in particular, allow practice that has the potential to prevent moral and psychological harm, such as insensitivity, dishonesty and injury that result from lack of competency in clinical ethics skills.

The ultimate goal of health care ethics education is enhancing the quality of patient care. Participating in ethics simulations has the potential to sharpen the nurse's ethical lens, increase self-reflection and improve clinical ethics competencies, all of which serve to enrich the Veteran-nurse relationship. ❖

Simulated ethics case consultations use standardized patients at VA Pittsburgh Healthcare System

By Marianne Burda, MD, Ph.D.
and Kathryn E. Wilt, Ph.D., MSN, RN
Advanced Clinical Simulation Fellows
VA Pittsburgh Healthcare System

PITTSBURGH – The first simulation-based training in ethics case consultation at VA Pittsburgh Healthcare System (VAPHS) was conducted May 16 using standardized patients from the University of Pittsburgh School of Medicine Standardized Patient (SP) program.

Communication with multiple parties is an important part of the ethics case consultation process. Ethics consultants must be able to explain their role to the parties involved in the consult, including establishing realistic expectations and correcting misconceptions about the ethics consultation process. Ethics consultants must also be able to gather information from all the involved parties in order to understand and analyze the ethical issues and value conflicts present in the case. This workshop provided ethics consultants of varying experience levels at VAPHS the opportunity to practice these skills with SPs in a safe environment that simulated parts of the actual ethics consultation process.

The simulation fellows developed two scenarios with support from the university's SP department staff. Nine members of the ethics consultation team participated in one of two, 2-hour sessions as a member of a two- or three-person ethics consult team. Each session consisted of two scenarios that allowed participants to practice different aspects of the IntegratedEthics case consultation method called CASES or Clarify, Assemble, Synthesize, Explain and Support.

(Bottom photo) Ethics consultants (from center, left to right) Carla Adams, Kathi Elliot and Melissa Dykstra meet with a "patient and his wife" (standardized patients April Arnone and Peter Fernbaugh, far left) as part of the ethics consultation process. (VA photo by Bill George)

(Top photo, left to right) Standardized patient Naomi Grodin talks with nurse Kathi Elliott and et hics consultants Melissa Dykstra and Carla Adams. (VA photo by Bill George)

In the first scenario, participants practiced explaining the ethics consultant's role and gathered information from the requestor of the consult (a "standardized" nurse). In the second scenario, the participants gained experience interviewing the patient about whom the consult was requested, as well as his wife (standardized patient and standardized wife). Participants received feedback from the SPs after each scenario. The SPs provided feedback on skill performance and shared suggestions for improvement with participants. After receiving feedback from the SPs in the second scenario, participants were given the opportunity to re-do the scenario if there were particular skills they needed to work on, or if they wanted to try a different approach. Debriefing followed both standardized patient scenarios.

According to evaluations, the workshop was well received by participants, and simulation evaluation questions were all rated as "Strongly Agree," scoring a five out of five points on a Likert scale. ❖

Voice-assisted mannequins helping aid BLS, ACLS training of VA staff members

By Phil Hargreaves, MSN
SimLEARN Associate Director for REdI Program
and Lisa D. Martin, MA, BSN, RN, CPAN
and Robert Kraemer BSN, RN, CCRN
REdI Health Education Specialists

ORLANDO, Fla. – The use of voice-assisted mannequins (VAM) for resuscitative training is not a new concept. The technology for VAM outcome measurement and feedback has been utilized for over a decade. The VHA Resuscitative Education Initiative (REdI) program has stepped forward to provide VA learners with the most current VAM systems available for training.

Health care providers are able to complete Basic Life Support and Advanced Cardiac Life Support (BLS and ACLS) training in three parts without having to attend a classroom-based course. This approach provides other options for busy health care providers to obtain this essential training and will minimize the impact on classroom-based training scheduling and patient care schedules.

The American Heart Association's (AHA) HeartCode® ACLS part 1 is a web-based, self-paced instructional program that uses eSimulation technology to allow students to assess and treat patients in virtual health care settings. Part 1 provides the didactic portion of BLS and/or ACLS courses online, while part 2, (practice) and part 3, (skills check) are completed with the VAM. The VAM system is a partnership between AHA, the mannequin manufacturer and a health care quality improvement organization called HealthStream, using a quality cardiopulmonary resuscitation (Q-CPR) mannequin system for BLS and ACLS VAM skills, practice and check lists. The VAM includes both an adult and infant mannequins. The program can be used for initial or renewal provider training. Current REdI affiliated training sites have access to Heartcode® BLS or ALCS portions through a TMS link on the HealthStream server. Once the learner has completed Part I of the program, they receive an AHA Part 1 completion certificate which contains an access code to complete their skill check on the Q-CPR mannequins.

The VAM system's Q-CPR mannequins contain the latest technology reflective of the AHA 2013 Consensus Statement

A staff member demonstrates BLS and ACLS using a voice-assisted mannequin. (VA courtesy photo)

and are readily updated to maintain conformity with future training updates. The up-to-date technology provides the learner with the most accurate and objective skills assessment, as well as real-time feedback. It also allows learners the ability to complete their skill check offs 24 hours a day without an instructor present. The systems are portable, which facilitates learning throughout the facility.

REdI affiliated training sites that have received their systems have already been requesting more, and positive feedback continues to roll in.

Tammie Mitchell, an RN from the Hampton VA Medical Center (VAMC) in Virginia said, "We are using our VAM, and I don't know how we lived without them. They are the greatest tool for checking staff off." Kim Harden from the Dayton VAMC in Ohio commented, "Awesome! I tried it, and it works!" Eileen Evans, from the Asheville VAMC in North Carolina, added, "Our instructors love them! We are planning a big VAM kick off here at Asheville to introduce them to our staff. We are so thrilled to add this as another tool to provide training to our staff."

So far, REdI has deployed 238 VAM/Q-CPR mannequin systems to REdI sites nationwide and have created access to the online content from within TMS. Once a learner completes all three components of either the BLS or ACLS course, their course completion is automatically recorded in TMS. To date, 82 REdI Training sites have been trained on the new systems. REdI staff continue to conduct training, and they plan to expand this training to VA community-based outpatient clinics in fiscal year 2015. ❖

San Francisco simulation center conducts community outreach

By Abi FitzGerald, MSN, RN
Simulation Fellow
San Francisco VA Medical Center

SAN FRANCISCO – The simulation team at the San Francisco VA Medical Center (SFVAMC) was recently invited to present at the Marin Science Seminar speaker series. The series was founded by one of SFVAMC's anesthesiologists, Art Wallace, and his wife, Alfia, and is held at the Terra Linda High School in San Rafael, California. It is open to high school students in the community who are interested in any of the presentation topics. The line up of speakers is made up of people with a variety of science-based backgrounds.

On May 14, Rich Fidler CRNA, CRNP, MSN, director, Healthcare Simulation Program, at SFVAMC, and other staff discussed and demonstrated the uses and benefits of high-fidelity mannequins in a medical setting. Included in their presentation were discussions on how the mannequins are used to practice responses in emergent situations in the emergency department, operating room and on the wards. During the presentation, the students were able to see how mannequins are used to practice intubation, bag mask ventilation, intraosseous needle insertion, IV starts, hang fluids and perform CPR.

Students practice hands-on skills. (VA photo by Andrew R. Wallace)

Many of the students tried some of these skills on the mannequins themselves and walked away with a better sense of the dedication and training it takes to be in a medical profession. It is hoped that the experience will continue to inspire them throughout their studies. ❖

SimLEARN welcomes new staff

By Gerald P. Sonnenberg
EES Marketing and Communication

ORLANDO, Fla. – Recently, SimLEARN staff welcomed two key leaders to the National Simulation Center. Wilson Ariza is the new associate director of training, and Leslie Dubow is now the associate director for educational gaming.

Ariza recently retired from the U.S. Army after 24 years of service as the assistant project manager for Medical Simulation at the Army's Program Executive Office for Simulation Training and Instrumentation (PEO STRI). In addition to providing support to SimLEARN, he was responsible for standing up the Army's 19 medical simulation training centers within the U.S. and across the globe. He was also instrumental in the DOD's roll out of the electronic patient record system. In his new role, he provides management, educational expertise and guidance related to short and long-range, simulation-based training solutions that will enhance workforce training and outcomes of care.

Dubow began her career with the military after being commissioned in the U.S. Army field artillery. Before beginning her work at SimLEARN in modeling and simulation, she held positions of increasing responsibility in the Army, managing constructive simulations for the Army in Europe. This first modeling and simulation opportunity led to a successful post-Army career in acquisition and program management of training simulation solutions for the Army, foreign military sales and other services. ❖

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**.

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