



Central Texas VA Enhances Medical Education with Immersive Rapid Response Simulation Lab

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(Chief Resident Dr. Nikhil Seth provides debriefing to resident and medical student with the assistance of RN Sara Holton after the conclusion of the Brain Scan Episode. From Left to Right Dr. Nikhil Seth, Medical Student Chloe Todd, Dr. Phi Tran, Sara Holton RN)

The Central Texas Veterans Healthcare System conducted a simulation-based rapid response lab in the new [Center for Innovation and Learning](#) (CIL) in Temple, Texas, called 'Nightmare on CIL Street' (NOCS). NOCS offers new medical residents and students a controlled environment to tackle challenging scenarios with limited resources. The goal was to enhance learners' decision-making skills and critical thinking abilities within a controlled, psychologically safe environment.

During the simulation lab, learners faced difficult situations where patient transfer was not possible and additional help was unavailable. Relying solely on the assistance of a registered nurse (RN), participants had to determine a differential diagnosis and apply appropriate medical interventions. The scenarios were derived from common Rapid Response Team (RRT) calls and low-volume, high-impact situations which require quick clinical decision-making for optimal patient outcomes. High-fidelity manikins and equipment were utilized to create a highly realistic patient environment.

NOCS began with three clinical episodes named Cardiac (A Tell-Tale Heart), Respiratory (Don't Breathe) and Neurological (Brain Scan). Based on learner feedback and clinical data, additional episodes will be added to the program. Each experience included a rotation through all three episodes, allowing

individuals or teams of two learners to actively engage with the nightmare scenarios and provide care and stabilization.

The program employed a comprehensive approach. After a safety briefing and pre-data collection, learners received a phone call from the floor with minimal information about a patient in need. They then responded to the designated area and provided treatment to the patient over a 25-minute period, collaborating with the bedside nurse. Following each scenario, a physician subject matter expert (SME) provided a personalized ten-minute debrief to the learner, offering customized learning points and opportunities for improvement.

A group debriefing session, utilizing the [gather-analyze-summarize \(GAS\) approach](#), took place after all learners completed the three episodes. Key learning objectives were discussed, and each scenario was thoroughly examined. Finally, a safety out brief was conducted and post-event data was collected.

To evaluate the program's impact on medical education, pre and post surveys were administered to all participants. The surveys assessed learners' comfort levels on a Likert scale ranging from one to 10. The data collected from these surveys revealed a concrete improvement in participants' perceived value of the simulation experience. On average, learners scored two points higher on their post-test surveys. The narrative section of the post-survey also reflected increased feelings of preparedness for rapid response situations and the development of a systematic approach.

Overall, scenarios proved to be beneficial for trainees. Participants reported improved abilities in addressing cardiac, respiratory and neurology rapid response scenarios, increased preparedness, and the development of a systematic approach for future encounters. Central Texas encourages other simulation facilities to create their own “nightmare labs” for medical residents and students. The team is more than willing to share scenarios, objectives, surveys and other resources to promote the overarching goal of enhancing Veteran care.

For additional resources or inquiries, please contact Michael T. Finch at Michael.finch3@va.gov.