

The Value of Interdisciplinary Simulation for the Development of Critical Thinking in Residents

By: Bonnie Barti, MAed, Simulation Technician | VA Southern Nevada Hospital



(Resident makes critical decisions regarding diagnosis and treatment within a safe environment in the simulation center under the guidance of instructor Dr. Edwin Avallone. Photography by Bonnie Barti)

VA Southern Nevada Hospital is incorporating the healthcare simulation standards of best practices via interdisciplinary simulation scenarios as outlined in the updated standards from the International Nursing Association for Clinical Simulation and Learning (INACSL, 2021). The simulation center designs and completes simulations to advance the science of simulation, share best practices, and provide evidence-based guidelines for the practice and development of comprehensive standards of practice. The process has incorporated Simulation-enhanced Interprofessional Education (Sim-IPE) which enables learners from different professions to engage in a simulation-based experience to achieve linked or shared objectives and outcomes (Rossler, 2021).

By creating this type of scenario, the team can cooperate, communicate, and exchange information with each other during the simulation. Sim-IPE is the overlap of the pedagogy of simulation and interprofessional education (IPE), providing a collaborative approach for the development and mastery of interprofessional practice competencies (Rossler, 2021). The impact of this type of training will reap larger benefits to crisis resource management and patient care for our Veterans.



Figure 1(Simulated patient presents with a septic foot and multiple other ailments for the simulation. Photography by Bonnie Barti

(Physician Hospitalist) had prior experience working in simulation at a previous VA hospital and an interest in continuing to work with simulation and the residents he taught. With nursing easily accessible, it was not too difficult to create and run scenarios with the residents in a variety of situations.

“Teamwork is something we really focus on. We are encountering an emergency in the hospital or in the simulation center and it is a very emotionally charged experience for the patient, family, and participants. We work on how to manage difficult experiences as a team.” Dr. Avallone stated.

For the past year, the program has steadily developed into a model for other simulation centers who desire to create interprofessional simulations. Dr. Avallone and Quentin Hart were featured on the 9 Line podcast April 4, 2022, to speak about interprofessional development in simulation.

There needed to be time dedicated to train and develop faculty towards the implementation of Sim-IPE. To overcome barriers, the simulation center developed interprofessional relationships to promote collaboration. Quentin Hart stated, “We use simulation to develop team skills, to work better together and to be able to solve difficult problems in the most effective way.”

When creating the simulation, it was structured to implement the team dynamic to include challenges in communication and teamwork. The curricula design had taken the essential elements into account to incorporate those criteria. The value of training in real-world scenarios with the group of professionals who would be working to solve the health-related issues of the veterans creates a high-reliability environment.

The program was started from the need to grow the simulation center. Dr. Edwin Avallone



(The Simulation team, led by Quentin Hart, prepares for the simulations. Photography by Bonnie Barti)

Some of the most recent scenarios include code-blue bootcamp, septic shock, cardiogenic shock, simple pneumothorax, and intubation simulations. The feedback from this program has been positive from all participants, and they have commented that learning from other disciplines of healthcare professionals has been extremely valuable. Interdisciplinary simulation scenarios have assisted in critical thinking, which has contributed to a safe learning environment within the simulation center. One learning moment that stood out to residents was needle decompression and the placement of the needle. The skill was not as familiar at first, but the training taught them placement and how to administer to a patient. Residents also shared that taking time to better understand the process would help them in their practice.

References:

INACSL Standards Committee, Rossler, K., Molloy, M.A., Pastva, A.M., Brown, M., & Xavier, N. (2021, September). Healthcare Simulation Standards of Best Practice™ Simulation-Enhanced Interprofessional Education. *Clinical Simulation in Nursing*, 58, 49-53. <https://doi.org/10.1016/j.ecns.2021.08.015> .

Simulation Lab. 9 Line Podcast (April 4, 2022). Retrieved 4 April 2022, from [https://dvagov.sharepoint.com/sites/LASDir/Public_Affairs/The 9 Line VASNHS Podcast/Forms/Thumbnails.aspx?id=%2Fsites%2FLASDir%2FPublic_Affairs%2FThe 9 Line VASNHS Podcast%2Fepisode-44%2Emp3&parent=%2Fsites%2FLASDir%2FPublic_Affairs%2FThe 9 Line VASNHS Podcast](https://dvagov.sharepoint.com/sites/LASDir/Public_Affairs/The_9_Line_VASNHS_Podcast/Forms/Thumbnails.aspx?id=%2Fsites%2FLASDir%2FPublic_Affairs%2FThe_9_Line_VASNHS_Podcast%2Fepisode-44%2Emp3&parent=%2Fsites%2FLASDir%2FPublic_Affairs%2FThe_9_Line_VASNHS_Podcast)