Simulation Learning: Computer-based vs. High Fidelity...changing the face of trauma nursing

Competency in trauma nursing functions is essential to assure safe and effective care to civilians and Soldiers alike.

Military nurses have an expanded mission, namely to provide support for combat commanders during time of war, preserving the fighting strength during military missions, providing care to victims during humanitarian and peacekeeping missions, and tending to the wounded Soldiers, Veterans and military Families. With the large number of international conflicts and disasters, trauma nursing has taken on an added importance for both military and civilian nursing. This two-year study examines differences in competency-based learning outcomes and cost-effectiveness between learning supported by computer-based computer simulation vs. use of high-fidelity simulation mannequins for selected trauma patient movement scenarios. The results will serve to shape military and civilian nursing and medic curriculum for trauma patient movement on the battle theater and emergency department settings.

Benefits

• An effective and efficient method for assuring that military and civilian nurses and medics have the competency of proper patient movement and transfer
• Has the potential to save lives, reduce morbidity, and enhance recovery and rehabilitation efforts
• Findings will enhance the effectiveness of future training endeavors for military medics and nurses, as well as for civilian emergency medical technicians and nurses.
• Curriculum based a model developed under USAMRMC-funded

Supporting the Continuum of Care

Point of Injury
First Responder Care

Role 1
First Aid Posts

Role 2
Brigade Level Care
(i.e., Bastion)

Role 3
Division Level Facility
(i.e., Multinational Medical Unit Kandahar Airfield)

Role 4
Definitive Medical/Surgical Rehabilitative Care
(i.e., Landstuhl, VA poly-trauma)

This project is managed by the Pacific Joint Information Technology Center, which focuses on rapidly researching, testing, and developing warfighter medical solutions and products, through pilots or prototypes in support of the DOD.