

COMBAT & CASUALTY CARE

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**PROMOTING GLOBAL
SURGICAL AUTONOMY**

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SIMULATION RELEVANCE TO PROLONGED FIELD CARE CRITICALITY

Changing landscapes of military conflicts require rethinking casualty care for our wounded. Is the U.S. ready?

By LTC (U.S. Army Ret.) Walter Engle, PA-C, Medical Consultant/Medical Trainer



U.S. Soldiers carry a wounded Afghan counterpart to a waiting UH-60 Black Hawk helicopter during a medical evacuation mission at Multinational Base Tarin Kowt in Uruzgan province, Afghanistan, Feb. 20, 2013. The Afghan soldier was flown to the Kandahar Regional Medical Hospital for further treatment. (U.S. Army photo by Sgt. Jessi McCormick/Released)

Medics have what is called a “golden hour” to apply their life-saving skills at the point of injury before handing off to a military field hospital. Unfortunately, that golden hour may turn into Prolonged Casualty Care (PCC) during Large Scale Combat Operation (LSCO) making evacuation of wounded over greater distances more difficult.

“We’re worried about future casualties because those distances [to hospitals] are so great,” Col. Stacy Shackleford, Trauma Medical Director for the Defense Health Agency (DHA) warned. “If wounded warriors are unable to get that care within the golden hour window of time, Service Combat Medics, Special Operations Medics, and Independent Duty Corpsmen will need a lot of skills, such as administering pain medications, long-term pain control, advanced airway management, and nursing skills like changing dressings, even things like rolling the patient.”

DHA Director, LTG Telita Crosland, challenged deployable Forces to prepare for PCC and to increase “return to duty” (RTD) rates on the battlefield as all logistics will be contested in a LSCO environment where there is decreased air superiority for medical evacuation.

ADDRESSING THE NEED TO SIMULATE PROLONGED CARE SCENARIOS

Operative Experience, Inc. (OEI) is an innovator in healthcare simulation and tactical medicine, fielding the Tactical Casualty Care Simulator (TCCS) for all combatant Tactical Combat Casualty Care (TCCC) training in 2017. OEI quickly became the go-to technology for TCCC training among nearly all branches of the military. Answering the call for enhanced PCC readiness, OEI’s new Prolonged Casualty Care

Simulator Pro (PCCS Pro) meets all 13 guidelines established by the PCC Working Group (WG) for casualty management over a prolonged amount of time in austere, remote, or expeditionary settings, during long-distance movements. As established by the PCC WG, the PCC principles are all executable in training sessions with OEI’s PCCS Pro through proposed PCC roles of care recommending:

- Performance of initial lifesaving care and continue resuscitation
- Delineation of roles and responsibilities, including naming a team leader
- Performance of comprehensive physical exam and detailed history with problem list and care plan
- Recording and trending of vital signs
- Performance of teleconsultation as soon as feasible
- Creation of a nursing care plan
- Implementation of a team wake, rest, chow plan to take care of the medic and each first responder
- Anticipation of resupply and electrical issues
- Performance of periodic mini rounds assessments to recognize changes in the patient’s condition
- Obtaining and interpretation of lab studies
- Performance necessary surgical procedures, while considering both risks and benefit to the patient’s overall outcome and not merely the immediate goal
- Preparation for transportation or evacuation care while ensuring there are ample drugs, fluids, supplies needed for long distance movement
- Preparation documentation for patient handover

OFFERING MODULARITY TARGETING PHYSIOLOGICAL VARIANCE

OEI’s unique, modular “SmartLimb” technology with interchangeable limbs and wounds instantly enables trainers to create different injury profiles allowing medical personnel to train correctly to handle the most critical and life-threatening injuries in combat. The PCCS Pro includes advanced physiology and conditions, drug library support, fully integrated patient monitoring, and all-new software capabilities and scenarios. A smart tablet queues up human response in real time based on the type and success of interventions a trainee administers.

Past anatomical deficiency in mannequins produced a negative training experience lowering chances of survival for female service members. Female mannequins designed for both the PCCS Pro and the TCCS are solely based on female anatomy, which is important for trainees in multiple scenarios, such as the triage of a gunshot wound to the chest, treatments of chest seal application and needle decompression. Critical injuries to the chest area are often missed due to hesitancy to completely expose female patients during trauma assessment. Training with accurate anatomical representation is essential to saving lives, it contributes to improved survival and RTD rates on and off the battlefield.

More info: www.operativeexperience.com