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“Needs assessment for a new military burn care educational curriculum focused on prolonged field care: The Burns for Providers Program (BP2)”

Background: The probability that future battlefields will require prolonged casualty care (PCC) of burn injuries has led the U.S. military to solicit an educational program tailored to the needs of inexperienced burn providers potentially delivering PCC across Roles 2 and Role 3. Here, we performed a needs assessment to determine the essential elements for a curriculum teaching burn care during Large Scale Combat Operations (LSCO) against peer or near-peer adversaries within multi-domain contested combat environments.

Methods: Virtual and face-to-face site visit meetings were conducted with 20 stakeholders at 3 different levels: 1) Subject Matter Experts (SMEs) in prehospital military care of burn casualties at the U.S. Army Institute of Surgical Research (USAISR) Burn Center, the Joint Trauma System (JTS), and the U.S. Army Medical Center of Excellence (US Army MedCoE) in Joint Base San Antonio (JBSA) - Fort Sam Houston, TX; 2) Course Directors, Instructors, Curriculum Innovators and Writers for the Combat Paramedic Branch and the Critical Care Flight Paramedic Program (CCFPP), at JBSA – Fort Sam Houston, TX.; and 3) regulatory administrators providing education, research and IRB administration for USAISR and US Army MEDCoEBSA, Fort Sam Houston, TX.

Results: The curriculum needs identified after stakeholder engagement consisted of the following terminal learning objectives: training in appropriate burn casualty monitoring according to available resources; principles of burn wound care according to available resources; best practices during PCC for pain, nutrition, and infection control management; specific management of inhalation injuries, chemical, radiation, electrical, pediatric, and mass casualty burn injuries; and procedural skill training for patient decontamination, debridement, dressings, and escharotomy. Additionally, needs were identified for novel technology that provides asynchronous individual learning capabilities using interactive role play simulations, immersive simulation, or virtual reality simulation as well as hands-on procedure simulators.

Conclusions: Stakeholder engagement resulted in the identification of a series of terminal learning objectives that were subsequently used as the basis for a military curriculum we are calling the “Burns for Providers Program” (BP2). Scenario creation, software development, and tablet simulator design for the BP2 curriculum are currently underway.