The University of Toledo: Developing Military/Academic Partnerships

Shared Challenges

While training for trauma combat casualty care (TCCC) and training for civilian patient care bear only modest comparison, in our ongoing discussions with our colleagues at Wright-Patterson Air Force Base (WPAFB) of Dayton, Ohio, and the Defense Medical Materiel Program Office (DMMPO) of Ft. Detrick, Maryland, The University of Toledo (UT) understands that civilian health care and military medicine share many similar challenges. Central to these discussions is improving the outcomes of care through focusing on the safety and survival of patients and the safety of the health-care professionals. Through attending Military Summits at the DMMPO, UT recognizes the increasing desire between the military services to work collaboratively. We also find that we share the reality that centuries of tradition make true collaborative practice challenging to accomplish. Thus, both civilian and military medicine are both working to break down the "silos" or "stove pipes" between the disciplines, so that care and equipment can be standardized and our health care professionals can learn to function in effective cross-disciplinary teams.

Feedback from the Field

Both civilian and military medicine use simulation to train their health care providers to develop clinical skills that enable them to respond efficiently and effectively to medical emergencies, including humanitarian response and disaster preparedness.



Testing the I-Space[™] UT Interprofessional Immersive Simulation Center

While simulation technology is evolving rapidly, current models still have limitations related to simulating live tissue, including the ability to realistically manage very difficult airways, place chest tubes, control hemorrhage and manage the parameters of shock. Thus, UT has expanded our concept of simulation training to include a progressive anatomy and surgical skills center and virtual immersive reality environments.

Our mutual health care providers must be able to trust the equipment they use in the daily care of patients and be optimally trained to use this equipment. Using new equipment or learning new techniques is all too often learned on the job under highly stressful conditions. We are also aware that equipment and procedural protocols can be highly variable. Therefore practicing procedures, operating equipment and working in teams under supervision, using simulation models and simulated scenarios, are considered essential in providing the safest possible care.

To ensure a high level of competency and improve outcomes of care, it is critical to develop methods of using metrics-based skill assessment of individuals and teams. Thus, both civilian and military medicine are committed to accurately assessing the competence of our health care providers, prior to engagement in critical situations.

Progress with Relationship

In UT's relationship with the 711 HPW at Wright-Patterson Air Force Base, three priorities have been identified.



711th Human Performance Wing - Advancing Human Performance in Air, Space, and Cyberspace through Research, Education, and Consultation

First, is the creation of an educational agreement that supports the mutual exchange of students and scientists and involvement in research that enhances human effectiveness.

Second, is to create synergy for education and research between the UT Biomarker Center of Excellence and the scientists in the 711 HPW at Wright-Patterson Air Force Base.

Third, UT is a member of the Dayton, Ohio Human Performance Consortium (HPC), which is dedicated to community, military and academic collaboration to study and augment human performance.

Finally, UT is very grateful for the opportunity to work with our military colleagues. Our goal is to partner to expand knowledge, examine training techniques, test products and conduct human effectiveness research. This journey of discovery ranges from nano-technology to the biological and psychological study of individuals and the society in which they function.

