Joint EnRoute Care Course (JECC): A Look Back at 10 Years of Excellence

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Introduction
• Previous operations in Iraq and Afghanistan highlighted the need to improve en route care (ERC) during evacuation from the point-of-injury (POI).
• Employing forward resuscitative care has brought advances in surgical care, thereby reducing rates of mortality & morbidity and increasing survivability. However, advances with ERC continue to challenge the MEDEVAC system.
• JECC provides trained healthcare providers (HCPs) for the clinical management of Critical Care patients across the continuum of care and during combat operations.

Background
• In 2002, analysis revealed a gap within MEDEVAC for the movement of critical care patients in the operational environment. The Dean of USASAM sought a joint solution to this gap by developing a course specific to the rotary-wing mission.
• In 2005 the pilot Joint En Route Care Course (JECC) took place and was then validated in 2006 to train Army, Air Force and Navy HCPs (physicians, physician assistants, nurse practitioners, certified registered nurse anesthetists, registered nurses, flight paramedics, medics, and corpsmen) to manage high acuity patients during MEDEVAC.

Methods
The purpose of this abstract is to review 10 years of JECC training and initiatives which prepared HCPs in administering quality care to complex, poly-trauma patients on board MEDEVAC (ground & air) platforms in the operational environment.

Results
• Since inception, JECC has trained 1362 HCP. With a breakdown of: 828 Army personnel (519 officers, 309 enlisted); 250 Navy personnel (228 officers, 22 enlisted); 250 Air Force personnel (228 officers, 22 enlisted) and 34 foreign national personnel from countries such as the United Kingdom, Philippines, Saudi Arabia and Columbia.
• During OIF/OEF, small numbers of Army nurses assigned to medical treatment facilities were trained through the JECC course which then added an advanced level of clinical skills to MEDEVAC for interfacility transports. Between 2006 and 2009, the Joint Theater Trauma System (JTTS) validated the gap for transports of critical patients from both POI and between facilities. USASAM began the work to transition toward both Flight Paramedic and Critical Care Flight Paramedic training.
• Since 2006 JECC has incorporated lessons learned from the operational environment, as well as ongoing student and subject matter experts feedback to transform into a robust course that today consists of 80 hours distance learning with a focus on altitude physiology and clinical practices in MEDEVAC; followed by a 2-week resident course at Ft Rucker with didactic and exposure training designed to prepare HCPs for both their medical mission and their crewmember role on board MEDEVAC platforms.

Conclusions
• USASAMs role in establishing the JECC program significantly contributed to advancing ERC for critically injured/ill Warfighters during evacuation.
• Over the last 10 years, JECC has been instrumental with developing SMEs with expertise in ERC and cultivating quality care and patient safety as essential elements to this program and future ERC endeavors.
• Sustainment of critical skills specific to ERC now becomes a major challenge for the future. As well as, defining what are the standards of care for ERC under combat operations.

Implications to En Route Care and Future Research
• In the journey towards increasing reliability in healthcare operations, ERC must also be recognized for standardization, clinical and operational training, and improved patient movement items designed for rotary wing environment - with the goal to improve patient outcomes.
• Development of toolkits for the HCPs will decrease clinical and operational variances in patient care, optimize the ERC team, and foster good communication with the patient hand-off.

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