COSCCC Meeting
8-9 December 2016
San Antonio, TX

Meeting Minutes

03 February 2017

Ms. Brianna Premdas

8 December 2016

1. Administrative Remarks and Introductions (Col Stacy Shackelford): Col Stacy Shackelford, the Chair of the Committee on Surgical Combat Casualty Care (CoSCCC), convened the meeting and welcomed meeting participants.

2. Deployed Surgeon's Presentation (MAJ Kyle Ward): MAJ Ward presented 3 clinical cases during the meeting. Clinical case 1 presents with pain when taking a deep breath after sustaining a small wound to his left chest from IDF. Had stable vitals and a 1cm left thoracoabdominal wound, abdomen non-tender. During his care, a chest tube was placed, he was taken to the OR for exploratory laparotomy, and his left hemi diaphragm injury was prepared. The patient's transverse colon injury was repaired primarily and there was irrigation and closure.

Clinical case 2 sustained a GSW through the right forearm and into his face while riding in his truck. The patient follows commands and maintains airway. He has an open fracture on his right forearm and facial trauma. The patient was taken to the OR, intubated while awake, and received a tracheostomy. There was exploration for hemostasis, removal of bone fragments and closure of soft tissue.

Clinical case 3 sustained IDF injury to his left thigh. There was active bleeding from large lateral left mid-thigh wound, the second wound was located at the medial left proximal thigh, and the third wound was to scrotum containing shrapnel. DRE without blood or bony fragments. An additional tourniquet placed and combat gauze packed in lateral thigh wound, he was intubated in the trauma bay, and peripheral IV's were unsuccessful so a central access was placed. The patient was given resuscitation (10u PRBC, 8u FFP), ligation of profound femoris artery branch and repair of superficial femoral vein occurred.

3. Deployed Surgeons Presentation (COL John Oh): COL Oh gave a presentation on the Role III Perspective on Operation Inherent Resolve. Operation Iraqi Freedom (2003-2010) had a peak of 167,000 boots on ground, 4424 casualties and 31,951 wounded in action. Operation Inherent Resolve (2014-Present) has 1500 U.S. Military and Diplomatic Forces in non-combat roles, 31 casualties and 21 wounded in action. The gap in between OIF to OIR was Operation New Dawn (2010-2013) which had 73 casualties and 295 wounded in action.

Col Oh then went on to discuss the lessons learned, pre-deployment preparation, the OIR medical organization, along with the 28th CSH capabilities and limitations.

Conclusions:
1). Need to formalize theater trauma director role recognized at Combined Joint Trask Force Level
2). Continued need for sustainment training platforms

3). Identify required military deployment competencies
4). Incorporate all into CSH training and development while in garrison

4. Administrative Remarks (Mr. Dominick Sestito): Mr. Sestito gave an introduction and provided logistical information to the group in regards to transportation, meals and amenities.

5. JTS Directors Perspective (CAPT Zsolt Stockinger): CAPT Stockinger's comments to the group were to focus on determining what this committee is planning to accomplish. Discuss individual patient care and gaps that need to be filled by the committee that no one else is doing. Work on justifying continuation of committee by producing something deliverable. TCCC's success and credibility is stemmed from the fact that it provides a product for someone looking out for a casualty down range. In a timing perspective, a POM request needs to be submitted by Dec 2017 and provide a statement explaining why funds should be provided for this committee. Need to generate a product that is useful in improving care downrange. Identify gaps and fill the void. Opportunity to make progress in ways we should have in the last few years.

6. CoSCCC – Why are we here? (Col Stacy Shackelford): Col Shackelford asked the group to go around and introduce themselves. Began her presentation by discussing the new DoDI.

The projected deliverables as required by the research funding for year one were listed as:

1). Return on investment report
2). Tri-service expert consensus statement on sustainment and readiness training requirements.
3). Review of existing practice guidelines, identification of gaps and needed changes.
4). Annual literature reviews and evidence updates for en route care and forward surgery.
5). Publications of Top 10 research priorities in en route care and forward surgery.

The agenda in CoSCCC is to identify gaps, guide pre-deployment training, review/create guidelines, institutionalize lessons learned, and create a political action committee. The focus of the committee is forward resuscitation and forward surgery.

The goals of the CoSCCC are to lead change in the DoD trauma care delivery, inform research, prepare (train and educate), develop guidelines, engage existing working groups, reduce duplications of efforts, strategic messaging and deliverables.

Col Shackelford went on to discuss the committee charter along with the subcommittees and their deliverables. Requested that the group sign up for subcommittees by end of day. Mentioned trauma training lexicon terms because the different branches are using completely different lexicon concepts.

7. CCCRP Perspective – Return on Investment (COL Kyle Remick): COL Remick gave an overview on the background of the CCCRP JPC6 and the funding behind creating CoSCCC. The JPC-6 Mission is to optimize survival and recovery in injured service members by planning, programing, budgeting and overseeing the execution of the full range of Combat Casualty Care Research across the spectrum of care from POI through en-route, and facilities.

Injury is major cause of productive life years lost in our country. This is a problem that should be called an epidemic. Leading cause of death in the country is injury of all types and the leading cause of lives

lost. COL Remick went on to discuss the DoD CCC research investment, guiding principles – gap-driven research, operational relevance, and CoSCCC Deliverables.

The problem that the CoSCCC is here to fix is that improvements in combat casualty care and the Joint Trauma System have not been institutionalized, leading to loss of lessons learned in OIF and OEF. The hypothesis is that Tri-Service committees representing En Route Care and Forward Surgical Care will enhance implementation/institutionalization of evidence-based combat casualty care.

8. Turning Lessons Learned into Doctrine (JCIDS Process) (LTC Paul Roley): LTC Roley gave a presentation on MHS Capability Development. The purpose of the briefing was to review the Department's capability development venues, with a specific focus on the Joint Capability Integration and Development System (JCIDS) and Capabilities-Based Assessments (CBA). LTC Roley gave a background on JCIDS, CBA, and the current MHS CBA campaigns.

9. Defense Medical Readiness Training Institute (DMRTI) (Col Michael T. Charlton): Col Charlton gave a background and overview of DMRTI. DMRTI is a Tri-Service organization that offers 32 joint medical readiness training and professional medical programs, for U.S. military Active, Reserve, and Guard, civilian personnel, and international partners for a wide range of military operations worldwide. DMRTI's current initiatives are:

1). Improve Joint Medical Field Training
-C4 Modernization Plan (Enhance Interoperability)
-Integrate JMOC/JMPT
-Develop Field Training Continuum

2). Capture and Respond to CCMD and Service Requirements
-Develop Opportunities for exportable train the trainer
-Develop Expansion Protocol for Contingency Operation Courses to Interagency and International partners

3). Establish proposed National Disaster Preparedness Training Center

9. COL Shawn Nessen Comments: Spoke to the group about the direction of the Committee on Surgical Combat Casualty Care.

10. Life of Pi (Dr. Russ Kotwal): Dr. Kotwal provided a presentation focused on Performance Improvement (PI) and TCCC. PI is a systematic data-guided activity designed to effect health care delivery in near real-time. A well designed health care system should have PI activities that ultimately prompt and prioritize Research initiatives. When reviewing the Joint Trauma System Operational Cycle, it shows that research priorities are driven by PI data, capability gaps and clinicians.

Dr. Kotwal then went on to discuss the history of TCCC and the Committee on TCCC. TCCC is equal to Prehospital Battlefield Trauma Care Guidelines. The important aspects to focus on are circulation-hemorrhage control of the extremities, airway, breathing, circulation-resuscitation, hypothermia prevention, infection control and pain control. The documentation required are the TCCC card, the after action review and the prehospital trauma registry.

Performance Improvement directed through the right structure has the best opportunity to improve culture and strategy. Performance improvement directed through a Trauma System has the best opportunity to improve prehospital care and eliminate preventable death on the battlefield.

11. General Surgery Consultant (AF) (Lt Col Thomas Stamp): Lt Col Stamp gave a presentation on general surgery from the US Air Force perspective. There are 80 our 74 General Surgeons. AFMS Surgical Currency is the challenge. There is limited trauma/acute care surgery and demand is greater than supply.

Col Stamp then went on to discuss the Full Spectrum of Readiness which includes the following categories:

1). Clinical Currency for Readiness
2). Readiness Skills Training
3). UTC Readiness Training

The USAF/SG Strategic priorities are to place a "value" on readiness workload and exploit current opportunities. What is the best way to simulate battlefield medicine at home?

12. General Surgery Consultant (USN) (CAPT Craig Shepps): CAPT Shepps gave a presentation on general surgery from the US Navy perspective. 165 out of 181 general surgeons are clinically active. 74/99 of those are general surgeons while 91/82 are practicing a sub specialty. The rate of general surgery attrition is 10-12% annually. Some with subspecialties practice no general surgery. In the future, billets are to increase by 4 per year up to 298 billets.

CAPT Shepps then went on to discuss career opportunities and deployment. Some challenges are retention, platform assignments, skills maintenance, small hospital closures, NMISOMC, experienced surgeons to Op/OCONUS and joint assignments. Options are to have civilian MOUs, limit tour length/move billets from low volume/acuity, or GHE.

13. General Surgery Consultant (Army) (COL Mary Edwards): COL Edwards gave a presentation on skills readiness from the US Army perspective. There are currently 293 out of 279 in AOC, 91 General Surgeons and 53 Subspecialists. Col Edwards then discussed the mean cases per month by AO.

Current challenges include skills readiness and personnel retention. Solutions include, joint trauma system input on tasking requests, movement of active duty surgeons out of small hospitals with minimal inpatient capability and increased collaboration with civilian trauma centers and surgical practices.

14. CoSCCC Charter and Lines of Effort Year 1 (Col Stacy Shackelford): The group discussed the charter and updated the mission statement. The group also created tasks for each of the subcommittees.

Mission Statement:
This committee promotes the zero preventable deaths initiative and recommends changes to DoD trauma care delivery related to surgical care and resuscitation through the Director, Defense Health Agency, the Service Surgeons General, the Joint Staff and the Combatant Commands.

Col Shackelford is proposing 5 subcommittees and would like each participant to sign up for one of these subcommittees.

CPG Committee:
1). DOTMLPF Domains on CPG's

Research Priorities Committee:
1). "Top 10 Committees"
2). Research Gaps and Priorities
3). Facilitate Operationally relevant research
4). Support deployed research

Operational Resources Committee:
1). Develop capability based standards across the continuum of care.
2). Standards for Training, Staffing, Procedures and Equipment
    -Develop metrics
    -Develop a verification process
    -Conduct verification of deployed surgical resources

Education and Training Committee:
1). Recommend Training Standards
2). Joint Combat Trauma Core Curriculum (JCTCC) Course

Austere Surgical Team Committee
1). Austere Surgical Team CPG
2). Develop standards for austere surgical and resuscitative capabilities
3). Improve data collection and analysis for austere surgical team

9 December 2016

1). Administrative Remarks (Col Stacy Shackelford): Col Stacy Shackelford, the Chair of the Committee on Surgical Combat Casualty Care (CoSCCC), convened the meeting and welcomed meeting participants back for day 2. Introduced MG Lacamera to the group.

2). Remarks (MG Paul LaCamera):
MG LaCamera spoke to the group about how he sees combat trauma care. The military breaks people and you as medical professions must figure out how to keep these soldiers in the fight.

1). Preparation: We enhance capabilities through lessons learned
2). Execute: Is usually the same but the preparation and recovery is often different. Win the game.
3). Recovery

The question is, are we going to provide everything to the soldier? Mentally physically and spiritually? Have to hold us accountable to the standards of care for the soldiers on the battlefield. Wounded warriors became a problem because they were learning they could survive their injuries.

The biggest challenge is leadership. Define your standards. Don't just fix one piece.

MG LaCamera and the group went on to discuss leadership and the leadership role Doctors/Surgeons have and having the funding to have a trauma center and the current general centers.

The concern amongst the group is military surgeons do not have the skills to handle trauma situations and having had the training required for trauma surgeons.

3). Deployed Surgeon's Presentation (Lt Col Jeffrey Lodermeier): Lt Col Lodermeier gave an overview of Africa and his deployment experience. There are huge distances between the location of trauma and trauma centers. There aren't very good roadways so that creates a challenge when traveling. It's a poorer area. Can the host nations healthcare be relied on? Most times not. One Tricare approved facility in the area. Lt Col Lodermeier had one real case and two smaller "cases". : Reference Slide

During his deployment in Africa he taught over 100 Nigerian soldiers TCCC information.

Challenges:
1). Distance cannot apply the Golden Hour rule there due to long distances.
2). Air Assets are unreliable and there is unregulated patient movement.
3). Lack of Host Nation Support
4). Clinical Dilemmas
    a). Bleeding Patients
    b). Tourniquets – minimum time is 4-6 hours. Could possibly lose limbs due to length of time before seen.
    c). Eye Injuries – distance issue. Want to focus on teaching medics how to do some techniques that can help prevent loss of vision
    d). Severe TBI

How to improve these issues?
1). Air Assets, PT Movement
2). Host nation support
3). Clinical Dilemmas – Create an Austere Surgery Course

4). Collaborating with the ACS Action Committee to Effect Change in the DoD through the MHSSPACS (Dr. Don Jenkins): Dr. Jenkins reviewed the development of the NASEM Recommendation. Have to set a requirement in order to move forward. There are a number of committees and 5 initiatives. The number one recommendation is that The White House should set a national aim of achieving zero preventable deaths after injury and minimizing trauma-related disability.

Systems piece has been delayed but will be accelerated with the NDA being signed. ACS currently has a Systems Committee. The education piece is a very busy committee. We are targeting the person who is deployed who is going to a Role II. Looking into what that surgeon should need. Everyone who has been in the military can come to the college. There is now a dedicated home at ACS for military surgeons.

The Joint Trauma System will serve as the reference body for all trauma care provided across the military heatlh care system. JTS will also establish standards of care for trauma services provided at MTFs, coordinate the translation of research from COEs of the DoD into clinical trauma care standards, and coordinated the incorporation of lessons learned from military-civilian trauma education and training partnerships into clinical practice. Finally, the JTS authorizes the Secretary of Defense to enter into an agreement with non-governmental SMEs to conduct a system-wide review of the military trauma system.

5). Military Trauma Training Courses at Civilian Centers (COL Elizabeth Mann-Salinas): COL Mann-Salinas provided an overview of ongoing research projects related to CCC competency, a summary of systematic review of available CCC training and led a discussion of recommended next steps.

CCC Competency – Role II Project includes the review of the literature, review of training centers/resources develop essential domains of specialty knowledge for each AOC, and measure/quantify knowledge.

6). National Academy Report – where are we at today? (Dr. John Holcomb): Dr. Holcomb gave a presentation focused on integrating military and civilian trauma care systems to achieve zero preventable deaths after injury. The imperative is that preventable deaths are happening in the command of the president. There have been 6850 service member deaths with 1000 possible survivable injuries. Civilian deaths total 147,790 in 2014 with 30,000 that may have been preventable with optimal trauma care. The opportunity is the existence of a JTS built on a learning system framework that has achieved unprecedented survival rates for casualties. Also, an organized civilian trauma system positioned to assimilate recent wartime trauma lessons learned and serve as a repository and incubator for innovation during the interwar period.

Zero preventable deaths after injury: It will be hard but it's an aspirational goal, consistent with a learning system. Findings are that within the military leadership structure, there is no overarching authority responsible for ensuring medical readiness to deliver combat casualty care.

We get better with research. Information doesn't translate from the military trauma system to the civilian trauma system because we don't have a National Trauma Care System.

7). Blueprinting Project (Col Jeffrey Bailey): Col Bailey gave a presentation focusing on the prepared expeditionary surgeon. The Blueprinting Project has a tiered approach.

1). Core Clinical Competence
2). Join Essential Military Medical Skills
3). Joint Essential KSAs (Knowledge, Skills, Abilities)
4). Service-Specific Essential Military Medical Skills

The military health system strategic partnership is focused on shared ethos. The initial agreement was signed October 2014 between ACS Executive Director and ASD/HA. The three focus areas/working groups with defined deliverables are quality, systems and education & training.

Out of all of the KSA inventory (JTS CPGs R2 Registry, COL Nessen's book), 472 individual KSAs were created. The next steps are:

1). Scoring model in development
2). Model will allow evaluation of caseload from individual through enterprise
3). Model will be refined based on prioritization of KSA domains
4). Extend model to other expeditionary medical specialties (Ortho, EM, Anesthesia, Critical Care)

8). Traumatic Brain Injury (TBI) Center of Excellence (CoE) – What makes it a CoE? (Dr. Saafan Malik): Dr. Malik gave an overview of the DCoE for PH & TBI. The value proposition is to serve as a single point of accountability for PH and TBI prevention and care, DCoE is uniquely positioned to collaborate across

the DoD, VA and other agencies to orchestrate improvements in PH and TBI outcomes. The three tenets of DCoE's value proposition are as follows:

1). Research and Evaluation
2) Quality
3). Treatment and Outcomes

The overall goal is to improve the lives of families of veterans.

Question: How can DVBIC foster better collaboration with the CoSCCC?
Answer: DVBIC is the designated manager of the PWOC and Chair of the TAC for all TBI related issues that include:
-CPG updates/creation
-Research Gaps identification
-Creation and distribution of educational products
9). Group Discussion – Lines of Effort Year 1: The group went into breakout sessions to have further discussion in regards to Year 1 Efforts.

Disclaimers
The opinions or assertions contained herein reflect the events of the December 2016 CoSCCC meeting. They are not to be construed as reflecting the views of the Department of the Army or the Department of Defense.

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Stacy A. Shackelford, M.D.
Col, MC, USAF
Chair
Committee on SCCC

Date

Enclosure (1) – Meeting Attendance

CoSCCC Voting Members:
COL Scott Armen
Col Jeffrey Bailey
CDR Virginia Blackman
HMCS Troy Brown
COL Lance Cordoni
LTC Jason Corley
HMCS Jeffrey Coslett
CAPT Scott Cota
Lt Col Joseph Dubose
COL Brian Eastridge
COL Mary Edwards
Col Mark Ervin
COL Ray Fang
COL Kirby Gross
LTC Jennifer Gurney
CDR Matt Hannon
Dr. Saafan Malik
COL Elizabeth Mann-Salinas
Col Randy McCafferty
COL Shawn Nessen
COL Mark Pallis
LTC Paul Roley
CDR Travis Polk
LTC Kyle Remick
Lt Col Anne Rizzo
LTC Marty Schreiber
LTC Jason Seery
Col Stacy Shackelford (Chair)
CAPT Craig Shepps
Lt Col Thomas Stamp
CAPT Zsolt Stockinger
CDR Matthew Tadlock
COL Ian Wedmore

Subject Matter Expert
Dr. Frank Butler
Dr. Warren Dorlac
Dr. John Holcomb
Dr. Kenji Inaba
Dr. Don Jenkins
Dr. Peggy Knudson
Dr. Russ Kotwal
Dr. Don Marion
Dr. Nick Namias
COL Sam Sauer
Dr. Mary Ann Spott

CoSCCC Staff:
Mr. Dominick Sestito
Ms. Brianna Premdas

Additional Guests:
LTC Jay Baker
Col Michael Charlton
Mr. Jason Harrington
COL Matt Martin
COL John Oh
LTC Jim Pairmore
LTC David Saunders
Lt Col Antoinette Shinn
Col Simon Telian
MAJ Kyle Ward