

Committee on Tactical Combat Casualty Care Meeting Minutes 29-29 April 2009

**Hawthorne Suites
830 N St. Mary's Suite
San Antonio, TX 78205**

Attendance:

CoTCCC Members

COL Frank Anders	US Army
Dr. Howard Champion	USUHS
COL Paul Cordts	OTSG
LTC Jim Czarnik	USASOC
SFC Miguel Davila	USASOC
COL Brian Eastridge	JTTS
COL Warner Farr	USSOCOM
CAPT Doug Freer	NMC Portsmouth
Dr. John Holcomb	UT HSC Houston
Col Jay Johannigman	University of Cincinnati
CAPT Kenneth Kelly	AMC Tripler
Dr. Jim Kirkpatrick	US Army DCDD
LTC Russ Kotwal	75 th Ranger Regiment
MAJ Robert Mabry	AMEDD C&S
Dr. Norman McSwain	Charity Hospital/PHTLS
MSGT Harold Montgomery	75 th Ranger Regiment
Dr. Edward Otten	University of Cincinnati
Mr. Donald Parsons	AMEDD C&S
HSCS Glenn Royes	Deployable Ops Group, USCG
HMCM Eric Sine	JSOMTC
Mr. Richard Strayer	JSOMTC

CoTCCC Guests

CDR Edmond Feeks	Defense Health Board
MAJ James Fulton	Defense Medical Standardization Board
SSG Joe George	342TPS
LTC Doug Hodge	DMSB
Ms. Olivera Jovanovic	Defense Health Board
Ms. Kim Lundberg	Defense Health Board
Mr. Lyle Lumsden	State Dept
SFC John Maitha	75 th Ranger Regiment
Mr. John Miles	FMTB
SFC Eric Strand	5 th SFG
Major Bart Thomas	DMRTI
Major Nick Withers	CANSOFCOM



CoTCCC Staff

Dr. Frank Butler	Chairman
Ms. Danielle Davis	Senior Administrative Assistant
Dr. Stephen Glebner	Developmental Editor

Tuesday 28 April – CoTCCC Open Session

Introduction and Opening Remarks

Dr. Frank Butler

The Chairman introduced Ms. Danielle Davis, the committee's new Senior Administrative Assistant. Dr. Butler also introduced new CoTCCC member Mr. Rick Strayer from the Joint Special Operations Medical Training Center. Mr. Bill Donovan, the second new CoTCCC member, is currently deployed. CDR Feeks introduced Ms. Kim Lundberg and Ms. Olivera Jovanovic from the Defense Health Board staff.

Special Forces Casualty Scenario

SFC Eric Strand

SFC Strand presented a multiple casualty scenario from April 2008 in Eastern Iraq in which a Special Forces unit suffered 6 WIAs and 1 KIA. They also provided care for one hostile WIA. All of the casualties had injuries from gunshot wounds and/or shrapnel. Two CAT tourniquets were applied with good results. Both Celox and Hemcon were used successfully. One casualty with a gunshot wound to the face and severe damage to his lower jaw had his airway managed successfully with "sit up and lean forward" positioning. All of the casualties were treated to prevent hypothermia. Fentanyl lozenges and the medications from the Combat Pill Packs were used as well. The fatality suffered a gunshot wound to the sternal notch. Evacuation time via helicopter was approximately 1 hr 45 minutes. The CASEVAC helicopter could not land at the Combat Support Hospital due to a dust storm, so it landed at a nearby aid station.

SFC Strand's observations, recommendations, and lessons learned included: 1) mission personnel were dehydrated and fatigued at the time of the engagement; 2) there were not enough hypothermia kits - blankets were cut in half to be able to treat all the casualties; 3) weather issues caused problems with both CASEVAC and close air support; 4) the second 18D medic in the unit was severely wounded; 5) keep medical treatment of injuries as simple as possible; 6) the team encountered an IED after the main engagement – the fight is never over; 7) be ready to move the Casualty Collection Point (CCP) quickly if needed; 8) reinforce CCP procedures in training; 9) a casualty event is a tactical event and team members need to train for all aspects of casualty response; 10) repack and recheck aid bags monthly and prior to missions to make sure you know where everything is and that the bag is completely stocked; 11) cross-train others in the unit in TCCC so that they can assist with casualty management; 12) clean

up the CCP before leaving to deny hostile forces casualty estimates and information;
13) all of the WIAs were eventually returned to duty.

Future CoTCCC Meetings

Ms. Danielle Davis

The next meeting of the CoTCCC is scheduled for 4-5 August in San Antonio. Ms. Davis presented date and location options for the following meeting. The dates chosen were November 3-4. Two possible locations were presented to the committee: Tampa, FL and Denver, CO. Denver was the site chosen.

TCCC Update

Dr. Frank Butler

Dr. Butler discussed the TCCC presentation given to the Defense Health Board on 9 March 2009. The presentation included a review of the 2008/2009 changes to the TCCC Guidelines and newly available metrics on the use of TCCC on the battlefield. There was a discussion of the remarkable success in two Army Special Operations units in avoiding preventable deaths among their casualties. With two published reports from Iraq and Afghanistan documenting a preventable death rate among U.S. casualties at approximately 20%, both of the Army units discussed had had no preventable deaths in their casualties despite being heavily engaged in combat operations for almost 8 years with numerous casualties. Both units teach TCCC to every combatant in their unit and have credited this TCCC training as a major factor in their success. Recommendations to the Defense Health Board included the following: 1) Extend training in basic TCCC lifesaving skills to all deploying combatants; 2) Include an overview of TCCC in entry, mid-level, and senior line leadership courses in the services – combat leaders need to understand combat medicine; and 3) Train all deploying medical department personnel in TCCC, as the Army implemented in its February 2009 All Army Activities message. The proposed changes to the TCCC Guidelines and the above recommendations were unanimously approved by the Trauma and Injury Subcommittee of the Defense Health Board. They were subsequently unanimously approved by the Core Board of the DHB at their 9 March 2009 meeting. The Core Board added the recommendation that there should be a thorough and ongoing analysis of the additional first responder care information that should soon be available as a result of the distribution and use of the TCCC Casualty Card. This information should be captured both in the Joint Theater Trauma Registry and at the unit level using the trauma registry methods pioneered by the 75th Ranger Regiment. They added that a TCCC Combat Evaluation Program to analyze the feedback from combat medical personnel on the successes and shortcomings of current TCCC strategies and equipment should be established at the U.S. Army Institute of Surgical Research (USAISR). This program will allow for ongoing process improvement

examination of tactical trauma care interventions and continued improvement in the care rendered to our wounded warriors.

The TCCC curriculum revision has been completed. The updated curriculum includes 5 Powerpoint presentations, 5 instructor guides, 8 skill sheets, and 10 training videos. The curriculum is now maintained on two open internet web sites: the Military Health System site (<http://www.health.mil/Pages/Page.aspx?ID=34>) and the Prehospital Trauma Life Support (PHTLS) site. (<http://www.naemt.org/education/PHTLS/TCCC.aspx>)

There have been requests from several allied nations (Sweden, Spain, Portugal, and Argentina) for TCCC training. The CoTCCC is working with PHTLS, Health Affairs, and several military medical treatment facilities with TCCC training programs to determine how best to respond to these requests.

A new plan for Army Medical Department Predeployment Trauma Training was implemented in the All Army Activities message of 3 Feb 09. The training requirement will be effective 01 Oct 2009 and will include TCCC. All deploying medical department personnel will be included in the program. The training refresher cycle is two years.

A recent memo from the Assistant Secretary of Defense (Health Affairs) dated 4 March 2009 highlighted the multiple published reports of success in saving lives on the battlefield with TCCC. The memo endorsed TCCC to the armed services for use in training their combat medical personnel to manage trauma in the prehospital combat environment.

Also from the Assistant Secretary of Defense (Health Affairs) is a 12 March 2009 memo that restricts the use of aspirin in combat zones because of its adverse effects on coagulation. This reinforces a major point of emphasis in TCCC: people who are bleeding need platelets that are working.

New TCCC Change Approval Procedure Dr. Frank Butler

Changes to the TCCC Guidelines are made by the CoTCCC based on: 1) an ongoing review of the published prehospital trauma literature; 2) input from the service medical lessons learned centers; 3) direct input from combat medical personnel and 4) new information coming from military medical research facilities. Dr. Butler reviewed the updated review process for changes to the TCCC Guidelines now that the CoTCCC has been realigned under the defense Health Board. Changes to the TCCC Guidelines are first presented to the Trauma & Injury Subcommittee of the Defense Health Board. Following that review, the newly recommended changes are presented to the Core Board of the Defense Health Board. Both groups may either vote to approve the changes or attach a dissenting or alternate position. The proposed changes with

comments are then forwarded to the Assistant Secretary of Defense for Health Affairs for review and action as appropriate.

Ranger Prehospital Trauma Registry

LTC Russ Kotwal

LTC Kotwal demonstrated the Ranger Prehospital Trauma Registry. The registry is based on the TCCC Casualty Card developed by the Ranger Regiment and used widely throughout the Special Operations community. The card is sent with the casualty at the time of evacuation, but once the medic has returned to his operating base, he enters the information pertaining to that casualty on a secure website. Once entered, this information is compiled by the Oracle-based system software and provides the unit command structure with near real-time information on the injuries sustained by the unit and what was done for the casualty after his injury. Both the TCCC Casualty Card and the Ranger PHTR are being considered by the Army for use on a much larger scale.

IFAC Standardization

Major James Fulton

Major Fulton's presentation noted that there are currently 11 different Individual First Aid Kits (IFAKs) first aid kits being tracked by the Defense Medical Standardization Board. Currently there is little standardization of these IFAKs. Major Fulton noted that defining requirements through the CoTCCC would enable the DMSB to help coordinate the selection of the most appropriate items. He emphasized that policy statements from ASD(HA) would help to ensure that our warriors have the right equipment in their IFAKs to treat combat trauma on the battlefield. There was concern voiced from committee members that standardization of IFAKs at the HA level would encroach on the training and equipment prerogatives of the services.

TCCC Research Priorities

Dr. Frank Butler

Dr. Butler led a discussion on research topics of interest to TCCC. The topic was tabled for consideration overnight.

PHTLS 7 Update

Dr. Steve Giebner

Dr. Giebner reviewed the progress on the TCCC input for the upcoming Seventh Edition of the PHTLS Manual. Drafts of all of the TCCC chapters have now been submitted by the chapter authors. Dr. Giebner is still finalizing several of the chapters. The chapters will be submitted to PHTLS and Elsevier by July 2009. The following chapters provided by the CoTCCC will be included in PHTLS 7:

Introduction to TCCC	Dr. Frank Butler
Care Under Fire	HMCM Shawn Johnson
Tactical Field Care	Dr. Frank Butler
Tactical Evacuation Care	Dr. Jay Johannigman SMSgt Tom Rich
Triage in TCCC	COL Paul Cordts
Aeromedical Evacuation	Dr. Jay Johannigman SMSgt Tom Rich
Injuries from Explosives	Dr. Howard Champion
Medical Support of Urban Ops	MAJ Bob Mabry
Ethical Considerations	COL Frank Anders
Pre-Mission Medical Planning	LTC Russ Kotwal MSG Harold Montgomery
Theater Trauma System	COL Brian Eastridge
Burn Treatment in TCCC	LTC Booker King

TCCC Outreach Program

Dr. Frank Butler

Dr Butler summarized the TCCC Outreach Program for CAPT Timby, who was attending another conference in support of this program. Recent or planned conferences identified for TCCC presentations are as follows:

Uniformed Services Academy of Family Physicians	April 09 (LTC O'Connor)
Special Operations Forces Industry Conference	June 09 (CAPT Timby)
Wilderness Medicine	July 09 (Dr. Bennett)
Uniformed Services University of the Health Services	August 09 (Dr. Bennett)
San Antonio Trauma	TBD
American College of Surgeons	Oct 09 (CoTCCC Panel)
SOMA	Dec 09 (MSG Montgomery)
American College of Emergency Physicians	TBD

CAPT Timby is coordinating TCCC presentations to these key user groups. Dr. Butler asked committee members to let CAPT Timby know if they were interested in speaking at one of these conferences or had additional conferences to suggest.

Wednesday 29 April – CoTCCC Internal Session

Opening Comments

Dr. Frank Butler

Dr. Butler thanked Dr. Steve Giebner, Ms. Danielle Davis, and Mr. Dom Greydanus for their work in coordinating this meeting.

2009 TCCC Award

Dr. Frank Butler

The 2009 TCCC Award will be presented at the August CoTCCC meeting. Dr. Butler will be contacting committee members via email for their nominations for this award. Ballots will then be mailed out with the names of nominees for this award.

TCCC Research Priorities

Dr. Frank Butler

The committee continued their discussion of this topic from yesterday. After additional deliberation by the committee, the prioritized list of proposed TCCC research topics recommended by the group is as follows:

- Non-Compressible Hemorrhage Control
- Damage Control Resuscitation
- TCCC Care Documentation
- TCCC Combat Evaluation Program
- Improved Battlefield Analgesia
- Electronic TCCC Training
- Truncal Tourniquet
- Optimal Fluid Resuscitation for TBI
- Monitor-Driven Fluid Resuscitation
- Surgical Airway Kits
- Testing of New Tourniquets
- Testing of New Hemostatic Agents

TCCC Charter Review

Dr. Frank Butler

The CoTCCC Charter is due for updating. Dr. Butler discussed the implications of the Committee's new position as a sub-panel of the DHB and how that impacts on the charter. A meeting of the CoTCCC Membership and Bylaws Subcommittee was held in Washington on 6 April 2009 to review these issues. Some of the issues to be considered in this revision of the CoTCCC charter are:

As noted, the committee is now a subpanel of the Trauma & Injury Subcommittee. The committee will, however, still be known as the Committee on Tactical Combat Casualty Care (CoTCCC), since this has been the group's name since

its inception and was recently employed by ASD(HA) in his memo about the new TCCC Guidelines.

The TCCC charter will now become a "mission statement" and will be reviewed every two years. The Assistant Secretary of Defense for Health Affairs holds the chartering authority. The Chair of the Trauma and Injury Subcommittee of the DHB is the individual directly responsible for giving the CoTCCC its charge.

The committee will continue its due diligence procedures with respect to proposed changes in the TCCC Guidelines. Specifically, the members will be notified well in advance of the next meeting if there is to be a scheduled vote on a proposed change to the TCCC Guidelines to give members a chance to consider the change and rebut if desired. Proposed changes to the guidelines that are deemed urgent may be scheduled without advance notice or conducted via e-mail at the discretion of the Chairman.

Consideration will be given to allowing proxy designation for votes at the meetings instead of requiring that this be done before the meeting convenes. The charter may also be amended to allow a voting member present at the meeting to hold two proxies instead of one.

Proposed changes to the TCCC Guidelines will now be reviewed by both the Trauma and Injury Subcommittee of the DHB as well as by the Core Board of the DHB. Comments and/or endorsements added by these two groups will be added to the package forwarded to ASD(HA). Updated TCCC Guidelines and Curriculum will be posted on the Military Health System after action by the DHB.

New committee members, once recommended by the Membership & Bylaw Subcommittee and selected by the Chairman, will also need approval from the Trauma & Injury Subcommittee Chairman. New members will then go through the DHB appointment process and obtain approval from the Assistant Secretary of Defense (Health Affairs) and the White House staff. They will then be appointed by the Secretary of Defense. Memberships will be reviewed every two years.

The role of liaison and ex officio members from the services and other government organizations was discussed. It is critical that the CoTCCC maintain the right mix of individuals in its membership both to make the right updates to the TCCC Guidelines and to see these changes in military trauma care successfully implemented by the services.

The revised CoTCCC deliverables will include: 1) updated TCCC Guidelines and curriculum posted maintained on both the Military Health System and PHTLS websites; 3) input to the Defense Health Board (both the Core Board and the Trauma and Injury subcommittee) as requested; 4) the TCCC Journal Watch; and 5) the TCCC chapters in the PHTLS Manual.

All subcommittees of the CoTCCC will include at least one combat medic, corpsman, or PJ in their membership.

FK Butler

16 JULY 09

Frank K. Butler, M.D.

Date

CAPT MC USN (Ret)

Chairman

Committee on Tactical Combat Casualty Care