

**COSCCC Meeting • 23-24th May 2019 • San Antonio, TX**  
**Meeting Minutes • Prepared by: Mr. Dominick Sestito**

**23 May 2019**

**0700** - The CoSCCC conference opened with the weekly JTS Combat Casualty Care Conference. COL Rob Lim presented on the Austere Surgical Team, limitations, both surgical and non-surgical skills needed and the applicability of the Golden Hour concept.

COL Lim proposed the Golden Hour is not supported by enough data; that severe and critical injured will likely have improved survival going to a better resourced facility; mild and moderate injured do not suffer going to Role 2; and lastly, KSAs and ICTLs are important but success not solely dependent on surgical team's skill.

Take away from the CME Presentation: Best care as soon as possible!

Austere surgical teams need:

- Adequate resources and logistics
- Operational and clinical involvement with medical planning
  - \*\*The "Golden Hour" should not be the main criterion\*\*
- Reliable communication
- Adequately trained providers

**1). Admin Remarks and Introductions (COL Jennifer Gurney):** COL Gurney, the Chair of the Defense Committee on Trauma (DCoT) and Chair of the Committee on Surgical Combat Casualty Care (CoSCCC), convened the meeting and welcomed meeting participants. COL Gurney briefly reviewed the meeting's agenda. Members did personal introductions and Mr. Dominick Sestito discussed transportation and logistical information for participants.

COL Gurney discussed membership requirements, the Subcommittee Chair's roles and responsibilities and how the intent of the CoSCCC was in improve surgical care through work products, communication, and the multiple deliverables from each Subcommittee. Subcommittees can include non-voting members of the CoSCCC or individuals who have applied for CoSCCC membership and waiting for a voting membership position. She introduced each Subcommittee Chair and the overall goals for the each Subcommittee. The current CoSCCC Subcommittees (SC):

- 1) CPG Subcommittee – Chair, CDR Jacob Glaser (stepped down after the meeting and this position is currently available). Given that the CPGs are the primary communication to the clinical stakeholders and our 'face' to the outside – the CPG process and line of effort are foundational to combat casualty care and the JTS. Goal is to continue to leverage the JTS's most fundamental communication mechanism and to produce effective products for the clinical community to improve combat casualty care.
- 2) Austere Surgical Team Subcommittee – Chair, COL Jay Baker. This SC has been working on two lines of effort over the last year: the ARSC CPG and definition paper. COL Baker and the SC members have been working on better control of the FART (Forward Austere Resuscitative Team) Frenzy. Given the lack of a defined capability for the various Services' FARTs, this SC has the goal of capability standardization and a better understanding of FART

utilization. Ultimately, after a better understanding of team composition and utilization, this SC will inform (with the Education and Training SC) a joint core curriculum for standardized FART training.

- 3) Education and Training Subcommittee – Chair, COL Jason Seery. The overarching goals of the ET&T SC align well with the NDAA17 mandate of mil-civ partnerships and training initiatives. Training standards and support of high quality, enduring, committed mil civ partnerships.
- 4) Operational Resources Subcommittee – Chair, COL Kirby Gross. The challenges of this SC are significant. This is the SC that provides guidance and documents that bridge the clinical community to the CCMD/operational force. One of the challenges that the meeting agenda was designed to address is: How to we appropriately influence and communicate with the Line/non-medical operational forces.
- 5) Research Subcommittee – Chair, COL Marty Schreiber, past Chair and filling in for COL Schreiber, COL (Ret) Matt Martin. The Research SC bridges across all of the SC. In addition to setting CoSCCC research priorities (congratulations COL Martin on the recent publication in Journal of Trauma outlining the CoSCCC Top 10 Research Priorities), this SC can help inform appropriate research initiatives for CoSCCC members. During the meeting the Research and AST SCs are going to have a breakout session to look at setting research priorities for AST capability gaps.

**2). JTS Director’s Perspective/ JTS under DHA Update (Col Shackelford/MSG Remley):** Discussed the difference between “busy people” and “productive people” in respect to the transition to DHA, NDAA language and the deliverables of the committees and the JTS as a whole. JTS mission and structure, Combatant Command (CCMD) support capabilities, and standardizing trauma curriculum. Alignment and structure under DHA and inclusion of DMRTi under the JTET and their roles within the DHA AD CS. Col Shackelford then discussed the DCoT survey sent to all Voting Members and the results for the Top 10 current Battlefield Issues:

<b>Top 10 CURRENT Battlefield Issues (Preliminary):</b>
1. Improve capability and capacity for Whole Blood transfusion throughout the continuum.
2. Improve ways to sustain trauma skills.
3. Recruit and retain medical personnel to support operations.
4. Facilitate documentation and data collection.
5. Standardize trauma care training across the Services.
6. Facilitate interoperability and standardization of devices for patient movement items (monitors and materiel products) throughout the continuum.
7. Standardize joint evacuation platforms and communication plans.
8. Optimal number, mix, and training of personnel for variety of missions/scenarios.
9. Improve capability and capacity for FDP transfusion throughout the continuum.
10. Relationship between time to definitive care and outcomes - validating and clarifying the "golden hour" concept.

MSG Remley concluded with discussion of the TCCC Tiers 1-4, CURRICULUM DESIGN APPROACH and the JTS standards for Training and Curriculum Development.

**3). Deployed Surgeon Presentation (COL Wanek):** COL Wanek discussed her experience as a deployed Reservist in an Austere Environment. She focused on manning, training and gaps that the MOS training/employment is highly variable:

Training opportunities are variable and inconsistent:

- Initial training is inadequate to secure civilian employment in that MOS. Common scenario for Scrub Techs, RT's, LVN's, etc.
- Often what the SM looks like on paper vs reality are very different.
- Limited opportunities, if any, for sustainment training. (Would love to send teams to ATTD yearly).
- Work to create either more meaningful initial training or need for military-civilian cooperation for training. ARSC CPG would be very helpful to establish standards for mission critical MOS's.

We do not have a good grasp of Surgeon capabilities:

- Not sure how many are Trauma/CC trained, work as Trauma Surgeons. (CRS researcher, Wound Care, Corporate, etc.) Includes Urologist, GYN Onc. Ortho Hand Surgeon.
- Age of Surgeons is important. Physical capabilities. Some joining later in life and may not be up for the ARSC mission.
- Role for them in a larger unit

Current USAR Battle Assembly/AT model is not ideal

- As missions have no cases, it is getting more difficult to retain surgeons.

Recommendation: Develop validated/meaningful teams. Teams provide for better training and the intangible idea of being part of a mission. Validated appropriately for an austere team with soldier skills.

**4). Improving Battlefield Trauma Care Through Enhanced CCMD/COCSS Collaboration (Brig Gen Friedrichs):** Brig Gen Friedrichs discussed Globally Integrated Health Services (GIHS) as the strategic management and global synchronization of joint operational health services that are sufficiently modular, interoperable, and networked to enable the quick and efficient combination and synchronization by a Joint Force Commander. He stated the functional capabilities emerged as essential to implementation of the JCHS Transform the medical force into a fully integrated health system.

Global integration is necessary because today's strategic environment has changed:

- Proliferation of advanced technologies have accelerated the speed and complexity of war
- Conflicts involve all domains and cut across multiple geographic regions
- United States' competitive military advantage has eroded
- Global demand for forces continues to exceed the inventory

Ways Ahead:

- Understand and leverage line processes

- Inform warfighting risk assessments, planning & resource priorities
  - JCIDS Capabilities Based Assessments
  - Data driven analysis of outcomes to design optimal warfighter support
  - Joint Medical Planning Tool
  - CCMD Integrated Priority Lists, Issue Nominations, POM positions, Portfolio Review
- Identify gaps in current capabilities
  - Accurate Readiness Reporting in DRRS
  - AARs and LLs from exercises and deployments
  - In-theater JTS data collection/analysis to improve war-fighting support
- Demonstrate our commitment to being reasonable and relevant
  - Standardize equipment
  - Standardize training
  - Focus on the warfighter/patient....not the patch
- Leverage the data from the DODTR to help define the capabilities of small teams. Be data driven and use the resources at the JTS to move the needle and communicate better with the CCMDs about surgical capability
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**5). CCMD Round Table Discussion:** CCMD Leadership (Col Sampson, COL Calder, CAPT Edson and COL Baker) offered service perspective on how do we influence the Line to improve: surgeon utilization; team utilization; deployment tempo; informing the CCMD/FORSCOM and the Fleet how to optimize trauma care in their CCMD. Brig Gen Friedrichs also discussed the overwhelming importance of using data from the DODTR to help define team, especially austere surgical team, capabilities within the CCMDs. There are significant communication gaps between medical personnel and teams and the CCMD leadership.

**6). Role 2: Austere Surgical Capability (COL Kirby Gross).** COL Gross posed the question: Does the line leadership understand the capability they are receiving?

Team will be split to three locations in support of SF while deployed

- USAR FST deploying in July
- Seven new team members
- Variable degree of fitness
- Two surgeons
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Austere Resuscitative and Surgical Care Working Group

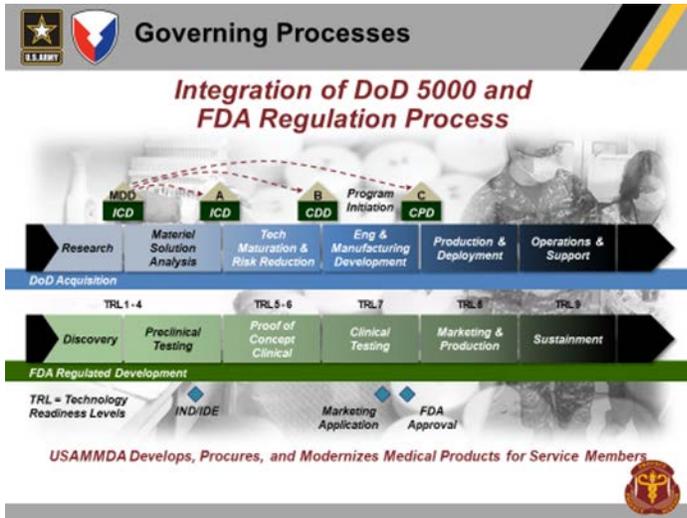
- CPG
- Operational Planning Guide
- Position Paper

Challenges: primarily in the conventional medical assets attached to SF world without socialization and training.

- Does the team understand the capability they are to provide?
- Does the line leadership understand the capability they are receiving?

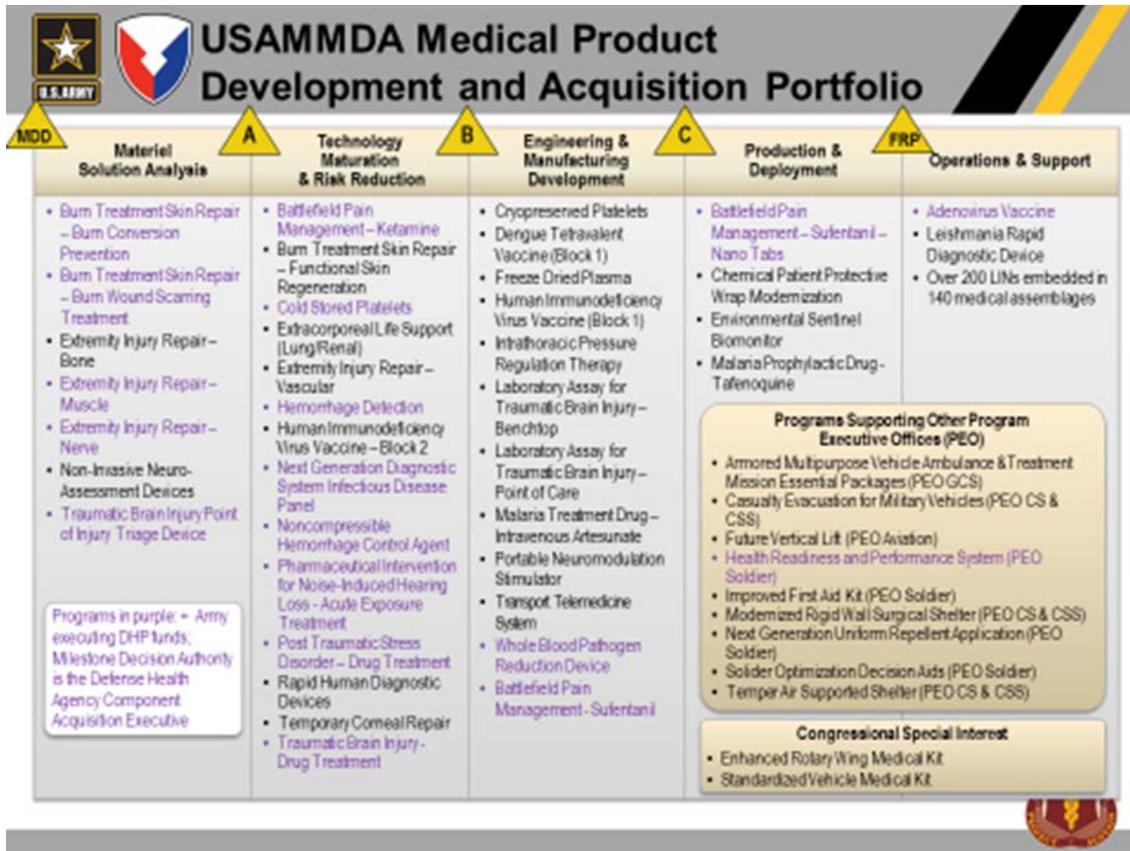
By reviewing our experience, we can determine the medical capability and proximity (time) at an acceptable risk to ensure austere surgical unit and line leadership have same understanding of capability provided

**7). Medical Product Development and Acquisition (Kathy Berst/ Dr Tyler Bennett):** Opened with a discussion of the Mission and Vision of USAMMDA. Outlined the process from start to finish for fielding new items through Requirements, Research, Knowledge Translation, Key External Partnerships, Development and Acquisition and final end users, coordinating fielding to over 2200 Army units. Discussed the path of DoD Acquisition and FDA regulated development.



Mrs. Berst and Dr Bennett gave some examples of products currently undergoing modernization, as well as products in development. Like USAMMA and USAMMRA, JPEO-CBD works through the JCIDS process to document the Services need. As a Joint office, the Joint Requirements Office serves as the interface with the Army, Navy, USMC, and AF to prioritize Joint requirements. JPEO-CBD works across the Chem-Bio enterprise AND seeks innovative solutions from other federal departments/agencies using technologies that could address CBRN capability gaps.

Items in Purple are currently executed by DHP funds



**End Goal: FDA approved, safe, effective, militarily relevant, affordable, and sustainable fielded product.**

**8. Trauma Consultant Updates– (COL Nessen, Lt Col Gavitt, CAPT Bradley):** Consultants provided an update regarding each Service’s Trauma Management Strategy: training, retention, readiness, deployments Recommendations with identified OPR, and the floor was opened for discussion. Lt Col Gavitt and CAPT Bradley gave service number updates. COL Nessen discussed that the use of non-general surgeons, and non-trauma surgeons, to manage trauma was an ethical issue more than a manpower issue.

**9. CCMD Round Table Discussion to generate gaps/ topics/issues to bring to WGs for action- (COL Calder, BG Friedrichs)** Floor was opened for discussion/Q&A.

Takeaways: Communicate with a universal “language of readiness.” Need to use DODTR data to better describe the outcomes and capabilities of austere surgical teams. Need to provide CCMDs capabilities and give them a better understanding of what ‘surgical readiness’ is.

## Subcommittee Breakout Sessions

- Scott Armen
  - Reserve Update
- John Holcomb
  - Trauma Team Validation (*Subcommittee action item*)
- Aaron Baker
  - Recruit and retain surgeon; asynchronous fellowship
- Nick Namias
  - MIL-CIV manning / Trauma surgeons vs Gen. Surgeon
- Gurney
  - PH surgical interventions / ASSETT - / Training

## 24 May 2019

**1). Administrative Remarks (COL Gurney):** COL Gurney, the Chair of the Committee on Surgical Combat Casualty Care (CoSCCC), convened the meeting. COL Gurney briefly reviewed the meeting's agenda for the day.

**2). Recently Deployed Surgeon (LTC Tyson Becker):** LTC Becker served as a trauma surgeon with 102nd Forward Surgical Team Operation Inherent Resolve-Syria and discussed how a busy clinical deployment highlights the need for real combat trauma readiness.

Mission: Support the SOF and Marines who were working with the Syrian Democratic Forces (SDF) fighting ISIS. Provide LLE, DCR, DCS to local SDF fighters:

- Standard split FST with two 61J surgeons
- Augmented at times by an additional anesthesia provider, SOF medics, Navy corpsmen, Army medics, basic CLS
- Co-located with SOST, CF medical teams so available on rare occasion if needed
- SRT about an hour away

Trauma number reported: 6 months: 470 traumas, 132 underwent surgery, many with multiple procedures, many additional ER procedures

- Top procedures:
  - Exploratory laparotomy: 34
  - BKA: 33
  - Chest tube: 30+
  - Lower extremity washout/debridement: 29+
  - Vascular shunt: 22
  - Leg fasciotomy: 18
  - Thoracotomy: 13
    - >97% penetrating
    - >95% partner forces (SDF)
    - >99% of patients who arrived with a pulse left alive
    - >9 MASCALS
    - >6 SDF WBB

Blood Products:

- LTOWB 83
- PRBC 99
- FFP 91
- LP 146
- SDF WB 337

Challenges:

- Complex and broad variety of trauma
  - Need two competent surgeons: one must be experienced in trauma triage, resuscitation, damage control and broad operative trauma technique
  - Real combat trauma readiness does not mean elective surgical cases at MTF
  - Support trauma-specific ODE
  - 61J need recent ATLS and ASSET at minimum

**3). US Army General Surgeon: Current Status (LTC Luke Hoffman):** LTC Hoffman discussed Readiness, Strength, and Deployment Tempo. The deployments of 10-15 years ago are gone.... Most of the surgeons of 10-15 years ago are also gone....

**Bluff1: Our surgeons are not ready as defined by ICTLs and KSAs**

**Bluff 2: Our surgeons are not ready because demand greatly exceeds supply**

**Bluff3: We cannot meet current mission**

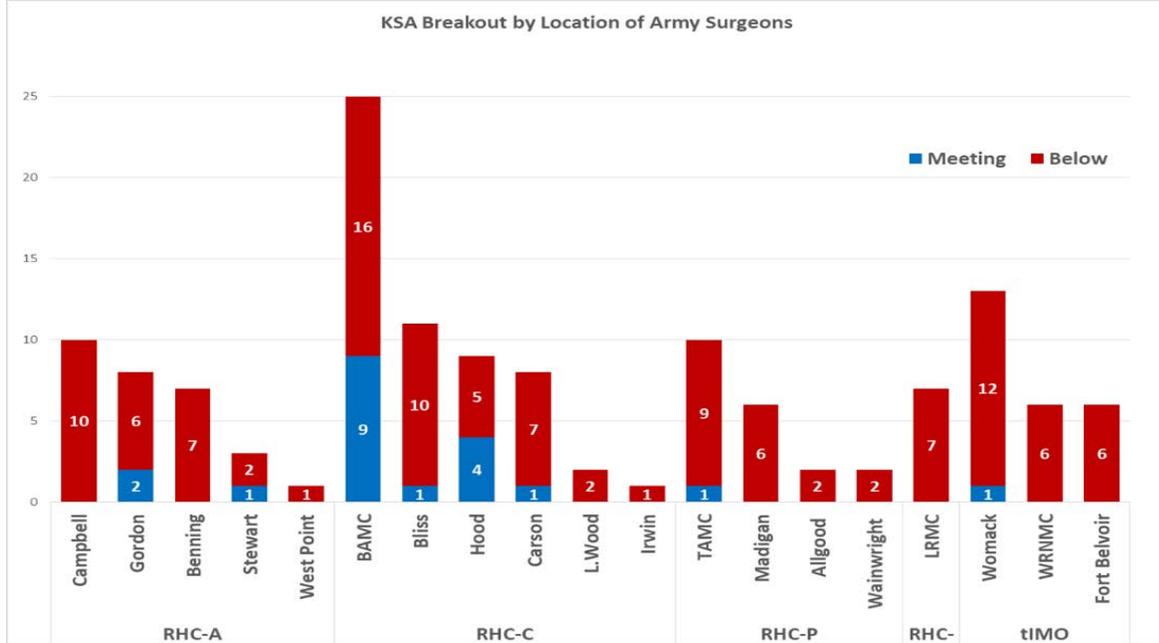
Current N strength

# Assigned	Where
260-270*	Total 61J
135	MOS Qualified (plus chiefs)
125-135	Resident/Fellow

- Current situation:
  - 30% of their time deployed
    - Case MODE IS ZERO
    - Average 1 case per 4.5 moth
    - For Combat deployments only 1 surgeon had more than 10 cases/month in last 4 years
  - Dwell time is decreasing
    - Now approaching 1:1; 50% deployed any given time
    - MTF case volume proportional to time at MTF

MEDCOM overall tracked 112 surgeons (+ 25 Army Surgeons at DHA MTFs). Of the 112 MEDCOM surgeons, 93 were below the threshold– 19 met the threshold for an overall 17% meeting the new standard. Of the 25 Army Surgeons at DHA MTFs, 24 were below the threshold – 1 met the new KSA standard. The graph represents where those 112 + 25 surgeons are located by MTF. Please note though

there are 6 General Surgeons at Madigan, the data is not reliable due to the Genesis migration; therefore all 6 fall below the KSA standard, but data quality/availability is the concern.



Take Away:

- The 61J is a limited resources that needs attention
- Readiness is going to get worse

**4). Joint Trauma Education and Trauma Directorate (COL Jason Seery):** COL Seery discussed his current role as the Chief for the Joint Trauma Education Training Branch (JTET-B) mandated by Section 708, 2017 NDAA (23 December 2016) and the MHSSPACS Mil Civ Partnership “Blue Book.” JTETD to ensure ‘traumatologists’ of the Armed Forces maintain readiness and are able to rapidly deploy for future armed conflict. Duties of the JTETD (Section 708, a-c):

JTET Will fall under JTS

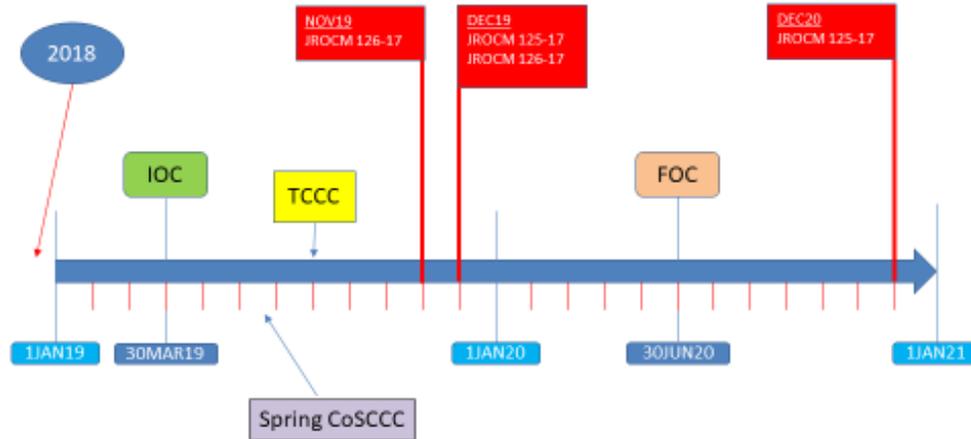
- Function as a Branch and not Directorate
- JTET-D will be th JTET-B...but called JTET

Benefits:

- Supports synergy and integration to standardization across the global Defenses Trauma Enterprise
  - Accelerate implementation
  - Enhance collaboration
  - Improve productivity

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## JTET Pathway



*"Medically Ready Force...Ready Medical Force"*

The mission of the JTET is to improve trauma readiness and outcomes through standardized evidence-driven education and training.

The vision of the JTET is that every Soldier, Sailor, Airman and Marine injured on the battlefield or in any theater of operations will be provided with the optimum chance for survival and maximum potential for functional recovery.

The JTET will serve as the:

- Reference body for coordination of partnerships with civilian academic/trauma medical centers and sharing partnership lessons learned
- Developing standardized combat casualty care (CCC ) instruction for all members of the Armed Forces, and promoting the use of standardized trauma training platforms.
- The JTET will coordinate military-civilian trauma training partnerships
- The JTET will develop standardized CCC instruction for all members of the armed Forces, including the use of standardized trauma training platforms.

## JTET two main efforts

### Develop standardized combat casualty care instruction

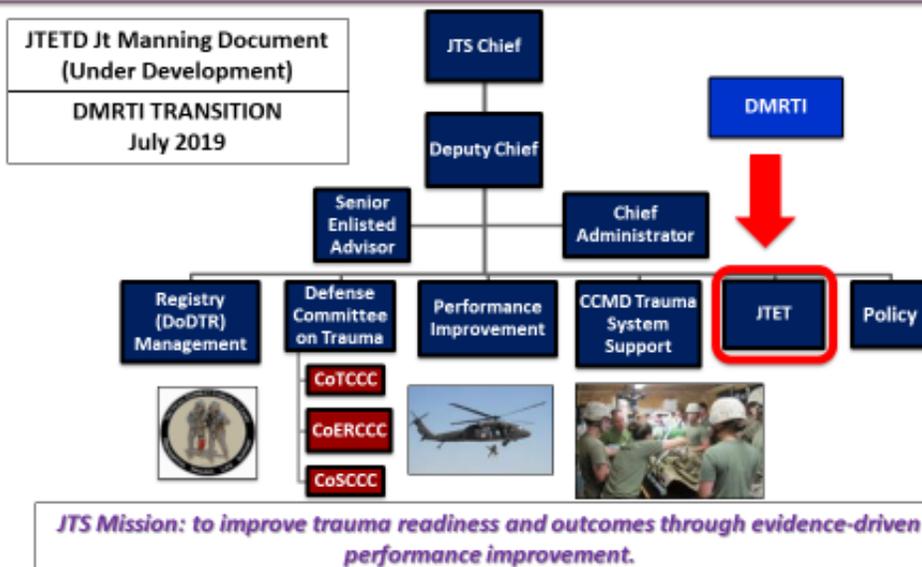
- TCCC Tier 1, 2, 3 and 4
- Prolong Field Care Course
- EnRoute Care Course
- **Emergency War Surgery Course**
- **Combat Extremity Surgery Course**
- **\*Austere Surgical Team Course**
- **Trauma Nursing course**
- **Medical Director Course**
- Casualty Response for Leaders Course
- Trauma PI Course
- Joint Medical Operations Course
- Joint Medical Planning Tool Course
- **Instructors Course**

### Facilitate military-civilian partnerships for trauma skill sustainment

- Establish goals and metrics to enter partnerships
- Establish metrics to evaluate success of partnerships
- Process for assessing and validating instructors and training sites**
- Process for measuring training outcomes**

*"Medically Ready Force...Ready Medical Force"*

## Joint Trauma System Alignment



*"Medically Ready Force...Ready Medical Force"*

## Creation of a “Blue Book”

- ❑ Chapters
  1. Goals and Objectives
  2. The Clinical Readiness Initiative
  3. Partnership Models
  4. Partnership Objectives and General Characteristics
  5. Selection Criteria
  6. Performance Evaluation
  7. Challenges to Address
- ❑ In final stages of development
- ❑ \*Surgeon Focused

### **10). Expeditious Mil-Civ Partnerships for Team KSAs: MTF Surgeons Leading the Readiness Case Analysis & Business Case Analysis (Col John Mitchell):** Col Mitchell briefed the committee on:

- Problem: Too few KSAs at Mil MTFs for all assigned; too little retention; fixed accession rates
  - Too much SG optimism; Total billets 650+ deployable; SG staffs-
  - Ar - RC is shortest; optimism on increased manning
  - Na - little optimism on increased manning
  - AF - optimism on increased manning
- Goal: Increase Retention (& Accession) by Surgeons at MTFs & local markets helping to define KSA-worthy targets
  - Military Dept (RCA)
  - Can minimize PCS, frequency/length of deployments from MTFs or Mil-Civ Partnerships(MCP)
  - Define to DHA the required KSA-worthy workload
  - DHA (RCA & BCA)
  - Assess how much KSA-worthy workload in MTF now & with recapture that is easy and bountiful soon, thus how many FTE get KSA-worthy workload
  - Assess/Arrange MCP available with KSA-worthy workload, but needs SME-defined targets
  - Assess/Arrange Civ hire to do backfill non-KSA-worthy workload; in places where Civ hiring is very challenging, then some sort of rotating surgeons (like Navy does for island installations) arrangement is explored
- Challenges, Possible Ways-Ahead:
  - Next Explorations (including DHA) for MTF/MCP:
  - El Paso
  - San Diego, (Pendelton), Norfolk...Jax
  - Keesler, Eglin, JBER, ....Nellis
  - Use DoJ-proof MoAs, TAAs, etc., as developed by DHA’s Kathy Haight

- Surgeons at MTFs defining KSA-worthy targets to help DHA focus first new MCPs

**11). Updates in Hemostatic Research- Way Ahead (Dr. Bijan S. Kheirabadi):** Dr. Kheirabadi discussed his study to determine safety and efficacy of TCCC-recommended hemostatic agents when used in PFC and the possible identification of alternative novel hemostats suitable for use in PFC.

  **Experimental Design of Pilot Study**

Promising hemostats were compared side-by-side with Combat Gauze (CG)

- Femoral artery and vein on both legs of swine were isolated
- Standard injuries were made on the vessels of left leg
- Following 10 sec free bleeding, the groin wound was packed with CG or test dressing and compressed for 3 min.
- These procedures were repeated on the right leg.
- Limited fluid resuscitation was provided to a target MAP  $\geq 70$  mmHg.
- Hemostasis on each leg was monitored for  $\geq 2$  hrs.
- Stability of hemostasis was checked by vigorous legs movement at 2 hrs.



11



  **Results**

 Successful;  Unsuccessful  
CON= Combat Gauze

Test Product	Pig #	Left Leg	Right Leg
Celox Gauze (CX) vs. CG	2915	CON	CX
	2920	CX	CON
	2929	CON	CX
	3028	CX	CON
Chitogauze (CH) vs. CG	2928	CH	CON
	3030	CON	CH
	2916	CH	CON
	2969	CON	CH
XSTAT (XS) vs. CG	2917	CON	XS
	2918	XS	CON
	3032	CON	XS
	3037	XS	CON
Veriset Patch (VP) vs. CG	7758	CON	VP
	7766	VP	CON
	4310	CON	VP
	4320	VP	CON
HemoPatch (HP) vs. CG	7767	HP	CON
	7772	HP	CON
	7769	CON	HP
	4327	CON	HP



### **Conclusion:**

- Procoagulant agents (CG and XStat) and synthetic tissue sealants (Veriset) are more effective in stopping high-pressure arterial and venous bleedings than chitosan mucoadhesive dressings.
- Hemostasis achieved with above agents are stable and resistant against patient limb movement. These hemostats have been selected for long-term (24 hrs) safety and efficacy study in the new model.

**12). Operational Perspective (SGM Litt Moore)** – SGM Moore discussed the Future Operational Environment Medical Overview; Areas of Focus/Concern; Methodology; and Changing the Thought Process and Culture.

### **Challenges:**

#### Multi-Domain Operations

- Peer/Near-Peer
  - Limited movement
  - Larger casualty numbers
  - Contested within the multiple domains
- Delayed Evacuation
  - Maintaining patients for longer periods and greater numbers than experienced within GWOT
- Longer periods of care
  - Spans the continuum of care

### **Areas of Concern:**

- Structure
- Training
- Equipping
- Sustainment
- Employing

### **Changing the Thought Process and Culture**

- -True understanding of the future environment (not just repeating the “buzz words”)
- -Shift in the current approaches to medicine
- -Mindset (public and military)
- -How to practice quality medicine while supporting good tactics and mission success (situational awareness)
- -Willingness to transcend you personal comfort zone for the greater good

**Subcommittee Break out Session**

CPG Subcommittee: CDR Jacob Glaser

- Discussed Large number of CPGs
  - Need better coordination and adherence to current process
  - Overarching aim to streamline the process
- End user utility and adherence
- Establishing metrics
- 

Austere Subcommittee: COL Jay Baker

- Unanimous vote of approval, none in dissent
- Next steps–
  - Clean up final edits
  - Submit for CoSCCC vote

Product	Personnel
OPG	<b>Kris Filak</b> , Marc Northern, Matt Eckert, Scott Armen, Rob Lim, Aaron Baker, Jon Johnson, Colin Frament, Jay Baker, <i>Paul Allen</i>
Training POI	Justin Manley, Aaron Baker, Mark Ervin, Sandra Wanek, Paul Allen, Chavez, Eckert, Bowman, Charlton, Gavitt, Lance Stephens, Jason Seery (JTET)
Personnel best practices	Colin Frament, Aaron Baker Ervin, Gavitt, Bowman, Wanek
FART crosswalk	Jay Baker, Jason Seery, Eckert
Austere anesthesia	Cary Carpenter, Wilson, Eckert, Becker
Research	Matt Martin...

Education & Training Subcommittee: COL Jason Seery

- Requirements
  - Standardize core trauma training curriculum
  - Enter into and coordinate Military-Civilian Partnerships for combat trauma teams
- Due Outs/ Request for Info:
  - I will link each focus area/volunteer with a JTETD lead POC to coordinate efforts:
  - Some members that were present didn't volunteer for a task. Will discuss with them later the need to participate in an assigned task or transition to a different SC.
  - Member can ask their colleagues to assist with work
- Follow up Plan:
  - Will set up a monthly TCON to discuss progress on each project.

Operational Subcommittee: COL Kirby Gross

Challenges primarily in the conventional medical assets attached to SF world without socialization and training.

What capability is required for the mission (at an accepted risk)

What is the time to capability (at an accepted risk)

- Review missions
- Identify injured
- Determine the capability needed to manage the injured
- Determine the time needed for that capability to be available

Research Subcommittee: COL (Ret) Matt Martin

-Research – Steer DoD research priorities and lines of effort (linkages with CDCMRP/JWMP)

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**JTS Poll: 107 SME responses  
(DCOT and CCMD SG staff, 1 Mar 2019)**



<b>Top 10 CURRENT Battlefield Issues (Preliminary):</b>
1. Improve capability and capacity for Whole Blood transfusion throughout the continuum.
2. Improve ways to sustain trauma skills.
3. Recruit and retain medical personnel to support operations.
4. Facilitate documentation and data collection.
5. Standardize trauma care training across the Services.
6. Facilitate interoperability and standardization of devices for patient movement items (monitors and materiel products) throughout the continuum.
7. Standardize joint evacuation platforms and communication plans.
8. Optimal number, mix, and training of personnel for variety of missions/scenarios.
9. Improve capability and capacity for FDP transfusion throughout the continuum.
10. Relationship between time to definitive care and outcomes - validating and clarifying the "golden hour" concept.

**Action Items**

- Update 4.02 (2 year cycle)
- DHPI/CTS guide for setting up a trauma system
- Annex Q requirement—set up the plan
- Joint Trauma System Assessment by ACS
- Share CPG Supply list Role 2/3 – Send to Voting Members

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Jennifer Gurney, MD FACS  
COL, MC, USA  
Chair, Defense Committees on Trauma

**Enclosure (1) – Meeting Attendance**

CAPT Zsolt Stockinger

**JTS Staff:**

**Col Stack Shackelford JTS Chief**

**Dr. Mary Ann Spott JTS Deputy Director**

**Mr. Dallas Burelison JTS Chief Administrator**

**MSG Mike Remley JTS SEA**

**COL Jennifer Gurney DCoT Chair**

Mr. Dominick Sestito

COL Cord Cunningham

CDR Jacob Glaser

Dr. Russ Kotwal

Mr. Tom Rich

Darin Schwartz

Ms. Elizabeth Mann-Salinas

Dr. Jud Janak

Matt Adams

Larry Crozier

Frank Butler

**CoSCCC Voting Members:**

COL Scott Armen

COL David Baker

COL Jay Baker

LTC Tyson Becker

CAPT Randy Bell

CDR Virginia Blackman

CAPT Mathew Bradley

COL Scott Calder

Col Michael Charlton

Maj Brian Gavitt

LTC Cleve Sylvester

COL Kirby Gross

MAJ Colin Frament

Col Mark Ervin

Maj Andrew Hall

MAJ Keith Jackson

CDR Michael Kearns

MAJ Richard Lesperance

SFC Paul Loos

Maj Justin Manley

MAJ Alexander Merkle

CDR Margaret Moore

COL Shawn Nessen

SMSgt Jose Arias-pation

Col Jay Sampson

LTC Jason Seery

MAJ Regina Tai-see

LTC Eric Verwiebe

Dr Matt Welder

Dr Matt Martin

LTC Chris Graybill

Col Derrick Wilsey

MAJ Melanie Bowman

COL Sandra Wanek

SSG Tommy Chavez

LCDR Jonathan Hamrick

**Subject Matter Experts:**

Dr. Don Marion

Dr. John Holcomb

LtCol Edward Mazuchowski

Dr. Nick Namias

**Additional Guests:**

**BG Paul Friedrichs**

SGM Litt Moore

CAPT Ted Edson

Kathy Berst

Paul Allen

Tyler Bennett

Col John Mitchell

Amber Malloy

Aaron Sawyer

LTC Luke Hoffman

LTC Matthew Douglas