EX SUM OF SUMMIT FOR TRAUMA MEDICAL DIRECTORS AND TRAUMA PROGRAM MANAGERS, 08-09 NOV 2022

Hosted by the Committee of Surgical Combat Casualty Care

INTRODUCTION

The Joint Trauma System (JTS) Committee of Surgical Combat Casualty Care (CoSCCC) hosted the first summit to address the needs of Trauma Medical Directors (TMDs) and Trauma Program Managers (TPM) in the Continental United States (CONUS) and Outside the Continental United States (OCONUS).

> **Goals:** understand the problem, establish a community of military and civilian surgeons who understand the problem, build a framework for trauma systems capability in CONUS MTFs and Combatant Commands, define components necessary to maintain trauma system expertise in the Military Health System, and define resources, personnel, leadership, and strategy needed to deliver high quality trauma care in the CTS and the MTFs.

The TMD Summit opened with an introduction by COL Jennifer Gurney, Chief, JTS, and CDR Shane Jensen, the Chair of the Defense Committees on Trauma (DCoT). This conference was geared at linking the roles of trauma leaders in the Military Health System (MHS) to support the readiness mission and its translation into a functioning deployed trauma system in the operational (forward) realm. The event supports the National Defense Authorization Act for Fiscal Year 2017 and other DHA policies which established and codified a community of military health system trauma medical directors for the direct care and operational environments to support peacetime readiness for execution of wartime trauma mission. The military trauma system is unique in many aspects. Understanding the evolution of the civilian trauma system and the American College of Surgeons (ACS), Committee on Trauma (COT) processes such as performance improvement (PI) and Trauma Quality Improvement Project (TQIP) are foundational to an enduring peacetime and wartime military trauma system. Unlike civilian trauma systems – the Department of Defense (DoD) has a unique mission set in that provision trauma care in the direct care system must provide readiness to save lives on the battlefield for the full scope of military operations.

The conference brought together civilian trauma leaders as well as military senior medical leaders to inform and help establish the future of trauma care in the military in all Combatant Commands (CCMDs). The purpose is to mentor leaders and share/grow ideas as a level setting opportunity. The MHS has two obligations regarding the trauma mission:

1. support readiness to prepare medical professionals to respond during contingency operations, and
2. provide expertise in the operational realm to support the warfighter during contingency operations.

That said, both efforts are executed by the same people. This is due to the limited numbers of uniformed professionals with expertise in both domains as we enter an interwar period.

JOINT THEATRE TRAUMA SYSTEM (JTTS) OVERVIEW

JTTS was developed by mirroring the process that the ACS established standards for the civilian trauma system founded on evidence-based practice, the needs of the patients, and PI. Its emphasis is on a team-based system of care that is dependent on rapid response based on the needs of the patient. The goal of this systemic approach is to eliminate preventable deaths and disability through prevention and evidence-based care. Essential to this is leadership, data collection, addressing the entire continuum of care, research, and PI. At the center of these systems is the TPM. Effective systems need longitudinal institutional knowledge, which is a current and evolving gap in the military system and is difficult to simply “turn on” when the framework isn’t pre-established. Significant time was spent on how the military and ACS can collaborate to address this gap, including sharing best practices, curricula, and mentorship of relatively junior trauma experts in the MHS with the limited ability to rapidly obtain domain knowledge in both “systems” (CONUS and OCONUS).

The discussion included the National Defense Management System (NDMS) and the establishment of a process to respond to a large-scale combat operation (LSCO) or another casualty-inducing disaster, as well as the role of the MHS and civilian system. Dr. Lein from the Defense Health Agency (DHA) and Joint Staff Surgeon MG Friedrichs participated in these discussions.

Operational Commander's Perspective

The customer perspective (i.e. Line) on the casualty response for the MHS from the operational commanders' perspective was also presented. This includes defining readiness and addressing concerns about this gap. A major theme from this discussion was selection and mentorship at the brigade/battalion surgeon level. Discussion centered on who sets requirements for the MHS, how those requirements are met, and where the requirements are located in both the deployed environment and in the direct care/civilian system. The conversation focused on the "what if" scenario of a large-scale combat operation and planning and potential shortfalls of these plans.

CCMD Trauma System (CTS) Operations

The CTS, through the JTS' role as a combat support agency, includes the process to integrate CTS with the direct care/civilian system – two seemingly separate systems – by drawing connections to the level of war. Subject matter experts focused on how this integration should look. The issue connecting these separate systems is the reliance on PI and research to bridge gaps. A general theme among shortfalls here is manning and experience. At the end of the session, an overview outlined how the strategic partnership with the MHS and the ACS has helped close some of these gaps by partnering with civilian experts in trauma care including, but not limited to, curricula, mentorship, and facilitating partnerships with civilian trauma centers for experience.

Each of the geographic CCMD CTS were reviewed.

European Command (EUCOM)

The EUCOM has made progress with recent changes in the area of responsibility (AOR) due to the Ukraine conflict. This has allowed the CTS language to be added to the Annex Q in their operation plan (OPLAN). Challenges include the lack of a universal "readiness" standard amongst the Services and multiple NATO countries; communications among the stakeholders also remains a gap, although there has been improvement with the involvement of the regional TRICARE office.

Africa Command (AFRICOM)

The challenge in this AFRICOM AOR is the tyranny of distance with low kinetic activity, resulting in disparate understanding of capabilities and difficulties aligning capabilities with their need. The entire AOR is served by Role 2 capability, although there may be options for further integration with local systems. Unity of effort and communication has hindered progress, while the rotational nature of leaders in the trauma system creates an additional barrier to communication and progress.

Central Command (CENTCOM)

The decrease in activity and the draw down of forces recent years in CENTCOM have brought challenges. Again, unity of effort has been identified as a challenge, with different named operations requiring parallel trauma systems approaches.

Indo-Pacific Command (INDOPACOM)

In this AOR the tyranny of distance is the largest problem, possibly more so than AFRICOM. According to the NDS, this is where we should focus. However, there is no current contingency operation to "exercise" the system. Significant progress has been made in putting personnel into place, but unity of effort due to geographic constraints impedes progress. Local solutions to expand capabilities are actively in process throughout the AOR. Additional efforts to engage with allies in the region to expand interoperability and opportunities for clinical experience are underway. These efforts are very early in development and are being undertaken with limited unity of effort. A significant discussion on expanding capabilities among MHS assets (specifically Guam) was also initiated with buy-in from all meeting attendees on the strategic importance of expansion.

Southern Command (SOUTHCOM)

SOUTHCOM discussion focused on the mission to engage in local partnerships for both readiness opportunities and "soft" power projection.

Northern Command (NORTHCOM)

NORTHCOM's presentation focused on the NDMS and surgical capacity in the homeland. Transportation Command's integration and movement of patients during an LSCO scenario was discussed. Emphasis was placed on the fact that this is an "active" AOR with limited authorities during peacetime. In summary, all CTS efforts look very different from each other based on the operations and needs of the CCMD. They all should rely on the principles of the CTS construct to continue developing their systems of care.

MTF Center Verification

The focus of the meeting then shifted to the CONUS mission and military medical treatment facility (MTF) center verification. The biggest challenge remains billing and access to civilian patients in the MTFs. The consensus was that there continues to be a need for legislative/high level leadership input to fix this problem in order to facilitate readiness for military medical professionals. This will require DHA, the Services, Congress, and other high-level input to solve. Additionally, there are manning concerns for the staffing that is required for the MTFs to commit to the community to participate in local trauma systems in CONUS. Accountability for personnel and billing is critical, and our current system struggles to give an accurate picture of these gaps.

Trauma Nursing Expertise

Attendees discussed the critical role of TPMs and trauma nursing expertise/leadership. Military leadership and ACS experts in the conference agreed that a lack of this experience causes trauma systems to fail. At the backbone of all effective trauma systems is research and PI, both of which facilitate the preservation of corporate knowledge. These core functions are traditionally the expertise of trauma nursing leaders. The current active-duty paradigms of the services nurse corps, which rely on rotation through various aspects of nursing and leadership, tend to disrupt this preservation of knowledge and skills. This benchmarking metric was emphasized through the TQIP and the ACS' and the JTS' newest effort -- the Combat Casualty Care Improvement Project (C3QIP). Examples of both were discussed, including expanding TQIP to Role 3/4 centers for the benefit of the military facilities.

This was emphasized as a benchmarking metric for quality through the TQIP, as well as the ACS' and JTS' C3QIP.

Lessons learned from building the civilian systems, the core functions that make civilian system successful and enduring will be better understood by military TMDs and senior military medical leaders. Military leaders will provide their vision for the future of the Direct Care and Operational Trauma Systems. This level of guidance socialized across the force will help execute of the DHA/MHS mission and intent. Working groups of TMDs will occur after receiving senior level guidance.

The summit was adjourned with a discussion on the importance of mentorship for trauma expertise and a summary of due outs below.

Due Outs, Requests for Information, Requests for Service

Legislative/Regulatory Recommendations

1. Unity of command for medicine. DHA vs Service SGs have seemingly diametrically opposed missions.
2. Legal Authorities to participate in local trauma systems
    a. Debt adjudication for civilians cared for in MTFs delegated to DHA Director?
    b. Expansion of 717 program
    c. Office of General Counsel support to delegate agreements with payors and to enter into Medical Care Plans (MCP) at the local market level

   d. DoD ability to charge Medicare for care
3. Next Generation deployed Electronic Medical Record (EMR) to facilitate rapid PI
4. International agreements for allowance to care for host nation patients in CCMDs

CCMD/Line Recommendations

1. Implement JTS/CTS into all OPLANs and exercises of these plans (possibly through collective bargaining agreement (CBA) process).
2. Support for Guam to expand as a trauma center

Services Recommendations

1. Nursing career pathway for "traumatologist" – Trauma nurse to Trauma Nurse Coordinator (TNC) to TPM
2. Support for more interoperability and a joint Force concept for a future fight.
3. Acknowledgment of the need for trauma leader development (TMD, TPM, EMS etc.) to include TAD funding for training individual skills, and support for MCPs to help with experience as this is a gap in the MTF structure for most.
4. Mission dependent medical equipment and TTPS tactics, techniques and procedures need more interoperability.
5. Clarification/expansion of trauma billets must include leadership and system development to integrate platforms into a cohesive system. Trauma system management is a skill set.

Office of the Joint Staff Surgeon Recommendations

1. Capabilities Based Assessment for the Joint Casualty Care System to include Disease Non-Battle Illness.
2. CBA for trauma system to establish a cohesive system vs disparate platforms provided by the Services. Linking platforms for functionality. Systems save live as much/more than individuals.

MHS Strategic Partnership ACS Recommendations

1. Sponsor additional meetings/summits to continue this work
2. Share curricula (Advanced Trauma Life Support/Advanced Surgical Skills for Exposure in Trauma, etc.) on deployedmedicine.com and the https://jts.health.mil/.
3. TQIP collaborative to include Role 3/4 centers to support MTFs
4. Trauma system assessment for Guam
5. Re-examine the visiting senior surgeons' program, even during interwar period, for mentorship of active duty (AD) members.
6. Include AD surgeons in Trauma Center Verification visits to expand this skill set for AD.

DHA Recommendations

1. Support legal clarifications above.
2. Clarify/expand the role of hybrid MCP/MTF program.
3. Use T6 in garrison
4. All trauma centers take care of civilian patients under the same authority for 12 months.
5. Request Institute for Defense Analyses/RAND etc. study for comprehensive solution to billing issues.
6. Base Access Rule for patients returning for follow up for 12 months
7. Support for Guam Trauma system with NH Guam at the center
8. Civilian Chief of Trauma for Role 1/2 ACS verified Trauma Centers.

9. Expand 717 Central funding for TMD/TPM courses provided by ACS or Trauma Center Association of America.

JTS Recommendations

1. Require MCPs to train trauma systems skills as part of agreements.
2. Update Trauma Systems Manual.
3. Trauma Leadership development handbook
4. JTS to help define the role for a TMD and how they incorporate into hospital leadership.
5. Develop metric for trauma system performance that can be tracked by CCMND, DHA and services

Trauma Services Working Group Recommendation

Trauma System Metrics for benchmarking.

Summit Survey Results

A survey was sent at the conclusion of the meeting to provide closed-loop communication on the perceived impact of the Summit. The summary (in no particular order) is as follows:

- Generally well received and necessary meeting. Very good discussion and important topics
- Multiple instances that the agenda may have been too big for a 2-day meeting, critiques of important discussions needing to be truncated to stay on schedule. The meeting should have either been longer or had a more focused/smaller agenda
- Overwhelming support to continue this meeting.
- In general, the participants had < 5 years' experience in their role.
- Multiple suggestions for formal mentoring for professionals including a nursing track for trauma expertise. Including a DHA TMD/TPM to organize further efforts and a repository of lessons learned to rapidly expand corporate knowledge when positions rotate.
- Well run meeting with minimal hardship to participate.
- More interactive format seems to be favored with less directive discussion (information-based presentations).
- More focus on the way ahead vs historic perspective. Emphasis on deliverables.

About the Committee on Surgical Combat Casualty Care (CoSCCC)

The CoSCCC is a Defense Committee on Trauma, part of the Joint Trauma System, DHA Healthcare Operations. CoSCCC promotes optimal surgical care of combat casualties and recommends changes to DoD trauma care delivery related to surgical care and resuscitation through the Commander, Medical Research and Material Command; Director of DHA; the Service Surgeons General; the Joint Staff; and the Combatant Commands.