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*Dedicated to the
Indomitable Spirit
and Sacrifices of
the SOF Medic*

Only Break Glass in Case of War? *The Difficulty With Combat Medic Skills Sustainment Within Our Military Treatment Facilities*

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The past 13-plus years of combat have advanced combat casualty care in significant ways. One area of great improvement has been in the continued refinement and education of our combat medics and self aid/buddy aid of non-medics through expert-developed Tactical Combat Casualty Care (TCCC) guidelines. Even with these improvements, more than 80% of combat deaths occurred in the prehospital setting, and more than 25% of those were potentially preventable, as highlighted by Eastridge et al.¹ Kotwal et al.² described a prehospital medicine emphasis program that resulted in zero preventable deaths. The difference in these rates illustrates the importance of a comprehensive prehospital training and sustainment program with commander emphasis.

A comprehensive training and sustainment program contains many components, including didactic instruction, task trainers, scenario-based simulation, and actual real-life performance of skills. Although Medical Simulation Training Centers (MSTCs), located at many Army installations, are established, funded, and successful programs, they cannot provide real-life encounters. Real-life performance of skills has been in great supply during the recent large-scale conflicts due to combat sustained injuries, but this will decrease greatly during force reductions and projected decreasing deployments. Our medics need continued real-life experiences, and the performance of these skills within stateside Military Treatment Facilities (MTFs) is a logical solution.

Lieutenant General Patricia Horoho, as the Army Surgeon General and MEDCOM Commander, issued a policy memorandum on 14 November 2012 that further stressed the importance of using garrison-based healthcare facilities as an extension of the battlefield to provide skills sustainment for the enlisted military occupational specialty 68 (medical) series as a primary

purpose.³ It further specifies that this should be up to the level indicated in their respective *Soldier's Manual and Trainer's Guide*.⁴ These guides list many advanced skills, including parenteral narcotic administration for pain relief, as well as invasive procedures such as incision and drainage and chest tube placement. Yet, despite this guidance that covers all medical military operational specialties, little evidence shows, in particular, that 68Ws are practicing up to the level specified in their critical task and skills list in most MTFs in the garrison setting. Many regulatory impediments and obstacles, as well as hospital cultural perceptions, can prevent an objective that is clearly of great importance so as not to lose the extensive experience of combat so dearly paid for in blood.

The major impediment seems to be in viewing garrison-based MTF care as distinctly different from the combat casualty care mission. Lieutenant General Horoho clearly states "our garrison-based healthcare facilities are an extension of the battlefield," but the majority of our MTFs do not conduct usual business in that fashion. Commanders, clinical leaders, administrators, providers, and nurses speak more in terms of workload generation and preparation for the next Joint Commission site visit and rarely, if ever, about preparing for the next war. In an environment of budgetary contraction and full accountability of cost compared to value, this is undeniably important, but our core mission is still "To Conserve Fighting Strength." The majority of direct combat casualty care was historically performed at medical centers such as Landstuhl, Walter Reed, and Brooke/ISR; however, their respective garrisons or surrounding areas have very little Forces Command (FORSCOM) presence. This further separates our smaller medical centers and hospitals from the direct and immediate impact of theater evacuation care.

Smaller medical centers do share the load most noticeably in respect to psychiatric and behavioral care, as well as Disease Non-Battle Injury (DNBI) treatment. The MTFs at large deploying troop concentration posts, such as Fort Hood, Fort Bragg, Fort Stewart, Fort Bliss, Fort Carson, Fort Benning, and Fort Campbell, experience the brunt of day-to-day sick call and dependent care without an apparent link to and importance in the proficiency and readiness of combat medics to perform the full scope of their expected skills. This situation was unfortunately but clearly expressed in a personal communication with a director of hospital education at a FORSCOM post, who stated that providing educational and clinical opportunities for installation combat medics and the new critical care flight paramedics was not a mission he was staffed to support. But, shouldn't our MTFs be postured to support this important task?

Perhaps there is some reluctance to allow medics to perform clinical skills and scope of practice that most nurses are not credentialed to perform themselves, due to organizational level of assignment and requirements. According to US Army doctrine, nurses are not assigned at Role 1 facilities. Recently, there has been limited experience of critical care flight nurses flying with Medevac units in Afghanistan, which might serve to change existing doctrine. At the maneuver brigade level and below, medics are expected to perform the overwhelming majority of both emergent battlefield care and routine and urgent healthcare, sometimes with infrequent or offsite medical direction. This is in direct contrast to the Role 2 and higher setting, where nurses are assigned always alongside physicians and surgeons and receive their combat experience. This situation is further complicated by a large number of government service civilian nurses in our garrison MTFs who might be very unfamiliar with the full scope of clinical skills and requirements of combat medics. It is not surprising that some discomfort and unease exist with the requirement for medics to sustain their expected Role 1 skills within the garrison system. Medics work daily and closely with either their battalion surgeon or physician assistant and can be delegated many tasks as an extension of that credentialed provider up to the level that the medic is trained both centrally and through unit training programs. This contrasts directly with the garrison facility care model, where the supervisory chain differs from that in combat and the medic is often relegated to other tasks not involving direct clinical patient care, such as equipment servicing, property accountability, and moving or providing basic patient comfort measures. While these are important tasks to ensure garrison hospital operation, unless they are balanced with more appropriate clinical duties, they will quickly dull the battlefield-sharpened skills that we expect our combat medics to sustain.

Patient safety is another area of friction when discussing medics performing TCCC sustainment-type skills within the MTF. Although patient safety should always be a foremost concern, our medics safely and expertly perform complicated interventions in the most dangerous and most austere locations and conditions. As a result, they are certainly capable of providing the same level of skill within garrison MTFs, but there are additional stipulations. Army Regulation 40-68, paragraph 5-2, acknowledges delegation of tasks and allows for selected invasive and high-risk tasks and procedures to be performed by unlicensed assistive personnel (such as 68Ws) if they have documented and formal training, and local policy establishes which tasks can be performed and the required supervision. This step requires hard work, diligence, and consensus building within the MTF. The essential pieces are formalized and documented training with supporting local policy. Although TCCC establishes the baseline along with the critical skills as outlined in STP 8_68W Aug 2013, we must abide by and adhere to AR 40-68 RAR May 2009.

These obstacles are not insurmountable and, while combat medic sustainment should be a goal shared by all within the AMEDD and Army, we must concentrate our focus and efforts on continued combat readiness and skills sustainment in a period of force reduction and planned decreased large-scale combat operations. Success of this program requires collaboration and coordination with line units and MTFs, experienced physicians, physician assistants, nurses, and senior non-commissioned officers as local advocates and instructors, as well as buy-in by local medical command and nursing leadership, for it to succeed and flourish. We must keep combat preparedness as a constant goal, and combat medics as the second largest military occupational specialty within the Army are a major part of this preparedness.

References

1. **Eastridge BJ, Mabry RL, Seguin P, et al.** Death on the battlefield (2001–2011): implications for the future of combat casualty care. *J Trauma Acute Care Surg.* 2012;73(6):S431–S437.
2. **Kotwal RS, Montgomery HR, Kotwal BM, et al.** Eliminating preventable death on the battlefield. *Arch Surg.* 2011;146(12):1350–1358.
3. **Horoho PD.** Memorandum for Commanders, MEDCOM Major Subordinate Commands. "Occupational standards and competency of enlisted Soldiers."
4. **Headquarters Department of the Army.** *Soldier's manual and trainer's guide MOS 68W health care specialist.* 2013.

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