MEDIC
Phil Reidinger
AMEDD Center and School

The cry for “medic” has been heard on battlefields for centuries beginning with the establishment of battlefield medical treatment by Baron Dominique-Jean Larrey during the Napoleonic Wars. Larrey was Napoleon Bonaparte’s surgeon who developed the most comprehensive casualty transport system of his day, first tested during the battle of Metz in 1793.

Our Army’s medical personnel have responded to the challenges of treating, evacuating and caring for hospitalized battlefield casualties since 1775 with the establishment of the Army Medical Department. Major John Letterman developed a system of evacuation for the American Army that was proven at the battle of Antietam in 1862.

The combat medic was established during World War II, prior to that enlisted medical personnel served as hospital stewards or litter bearers.

Frequently referred to as “doc” by the soldiers they care for, the 68W Healthcare Specialist or combat medic is the second largest military occupational specialty in the Army, second only to the infantryman. Of the 52 medical personnel awarded the Medical of Honor, 32 are combat medics or their antecedents.

Army Medical Department Center and School commanding general, Maj. Gen. David Rubenstein, emphasizes that “The combat medic is the first line of medical aid on the battlefield and is supported by the entire military and Veterans Affairs healthcare system.”

The survival rate of Soldiers wounded during World War II was 69.3 percent. During Korea, the rate was 75.4 percent. During Vietnam the rate was 76.4 percent. Today, the survival rate for Operation Iraqi Freedom and Operation Enduring Freedom is 90.7 percent. More Soldiers are saved today than during any war in our Nation’s history because of advances in tactical combat casualty care techniques, improvements in medical technology and equipment resulting from research and lessons learned and the expertise of medical personnel who are the first responders on the battlefield – the combat medic.

Medics are known throughout combat formations for their selfless courage and to charge into dangerous situations, to stabilize and to evacuate their fallen comrades. Their initial training is similar to that of the Emergency Medical Technician, but their pre-deployment training and practical experience allow them to do much more. Medics going into combat zones conduct certification at the Center for Pre-deployment Medicine (CPDM). This training focuses on Tactical Combat Casualty Care and those injuries most seen by medics in the field. Graduates have an increased ability to control bleeding, conduct airway management and treat chest wounds - all trained in simulated combat environments. Combined with the experience provided by medics with multiple combat deployments, the training of today’s 68W ensures that injured soldiers on the battlefield receive more comprehensive care sooner than ever before.

To become combat medics, Soldiers must successfully complete a grueling 16 week course at Fort Sam Houston that begins with a requirement to complete a national registry EMT certification during the first eight weeks of training.

The Department of Combat Medic Training, part of the 232nd Medical Battalion, is one of 14 teaching departments within the AMEDD Center and School Academy of Health Sciences. The AHS provides manages 315 programs of instruction to officers, enlisted and foreign students with a total staff and faculty of 1,860 and an average daily student load of 4,900.

“The mission of the Army Medical Department Center and School is to envision, design and train the Army’s medical force and the mission of the Department of Combat Medic Training is to provide fundamental instruction in tactical battlefield medical principles to prepare soldier combat medics to care for Soldiers and other warriors,” Rubenstein emphasized.

According to Don Parsons, deputy director of the Department of Combat Medic Training, “These principles include providing care in different phases of the tactical mission: care under fire, tactical field care, and combat casualty evacuation care”. Training includes hemorrhage control, airway management, treatment of a variety of different types of penetrating trauma, IV hypotensive fluid resuscitation, Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) principles, and triage and evacuation using both air and ground support. In addition, soldier medics are taught force health protection measures and limited primary care skills. Their training culminates with both a situational and field training exercise, where they must demonstrate both individual and team level medical skills. Upon completion of this training they must be capable of managing trauma patients on the battlefield.

Colonel William LaChance, 32nd Medical Brigade commander noted, "The 68W training culminates with a 12-day scenario that is conducted in a field environment using demonstrations, hands-on practical exercises and scenario-based training. This Field Training Exercise includes an integration of Warrior Tasks and Battle Drills incorporating all medical tasks in multiple scenario driven events, to include the use of Mine Resistant Ambush Protected (MRAP) ambulances and UH-60 Helicopter mockups for students to become familiar with loading and unloading casualties from these vehicles.” He added “Scenario topics involve convoy operations, patrolling, Military Operations in Urban Terrain, Battalion Aid Station operations, and Chemical, Biological, Radioactive, Nuclear, & Explosive mass casualty exercises”.

During the FTX, Battalion aid station (BAS) simulations use advanced human patient simulators in realistic and stressful training events to "crawl, walk and run" the soldier through individual and team single and multiple casualty training events. This provides the opportunity for Soldiers to become more familiar with the Improved First-Aid Kit (IFAK), Warrior Aid and Litter Kit (WALK) incorporated into the scenario-based training.

“Each soldier and team is evaluated in daylight and limited visibility scenarios. These training events were developed using OIF and OEF lessons learned with student's receiving an on-the-spot critique of what they performed well and possible alternatives that may produce a more positive outcome,” La Chance said.

Lessons learned from battle field experiences are quickly incorporated into the training programs by the veteran instructors of the Department of Combat Medic Training and shared

within the Army Medical Department using Medical Warfighter Forum and the AMEDD Issue Program (https://www.us.army.mil/suite/page/131414). Another forum is the AMEDD Lessons Learned Forum (lessonslearned.amedd.army.mil).

Among the latest lessons learned taught to students are hypothermia effects associated with hypoperfusion (shock); the use of the Combat Application Tourniquet (C-A-T) and improvised tourniquets is stressed as a graded practical exercise, acknowledging the most significant cause of death in current operations. The use of the Combitube® (vs. endotracheal intubation) and the nasopharyngeal airway (vs. oropharyngeal airway) were established as the technique of choice at the point of wounding on the battlefield. Instructors also added a new airway device (the King LT) and moved most airway training to the EMT portion of the course.

Parsons noted the concept of triage has changed from sorting casualties in a strict A-B-C rank order. Lessons learned dictated the soldier medic consider the limited resources available to them, predominant battlefield injuries and the establishment of priority based on the casualties' likelihood of survival.

Added to the instruction as a graded exercise is the use of the Combat Gauze Hemostatic Dressing as a means to control hemorrhage and the use of the F.A.S.T.1 (sternal intraosseous device) to provide fluid resuscitation where peripheral intravenous access is not possible.

"Next to hemorrhage, tension pneumothorax, or a collapsed lung, continues to be the second leading cause of preventable battlefield death. Additional practical exercises hours were added to the course to teach techniques of managing penetrating trauma to the chest with progressive respiratory distress," Parsons said.

Colonel Daniel Chapa, director of the Combat and Doctrine Development Directorate said, "Nine years into the war against terrorism with tens of thousands of battle casualties and more than four thousand combat deaths, the Army Medical Department has learned many lessons of combat casualty care. This effort will continue as the enemy's tactics and weapons evolve and our ability to counter them and to save the lives of soldiers both before and after injury evolves as well. In many respects, the capability to actively study its own performance and to rapidly implement changes in near real time is the hallmark of an Army Medical Department "learning organization" in the 21st century".

Chapa noted that three key "drivers of change" in the area of combat casualty care include new concepts, new technologies and systematic data analysis.

Chapa emphasized that the Army and the Joint Service environment continue to change and evolve. A key piece of this evolution, he said, has been the development and adoption of the concept of Tactical Combat Casualty Care (TCCC). "TCCC involves tactical leaders who must understand the interaction between good tactics and good medical care and combat medics whose skills and hands and equipment must "get it right" to save lives," he said.

Research and development by military researchers continue to produce new medical devices, medications, and treatment protocols. The rapid fielding of these new items and practices throughout the Army helps ensure the benefits of new technologies are made available.

Examples of new technologies include bandages that directly promote clotting of blood from external wounds, small portable fluid warmers to prevent patients from becoming hypothermic and computer-aided protocols for fluid resuscitation of severely burned soldiers.

Capturing and making use of the lessons learned in casualty care requires a system to collect and analyze data, rapidly identify trends and insights and speedily introduce those new insights into patient care. To that end, a Joint Theater Trauma Registry (JTTR) was stood up within the context of a Joint Theater Trauma System (JTTS), a system stretching from the points of injury in Iraq and Afghanistan through every level of the Military Health System, including Battalion Aid Stations, Forward Surgical Teams, Combat Support Hospitals, medical evacuation platforms, Landstuhl Regional Medical Center and Medical Centers in the United States. The JTTR now contains detailed information on tens of thousands of patients. The JTTS, through regular worldwide teleconferences and other collaboration processes, coordinates the care of patients at every level in the continuum of care, ensuring the best outcomes and rapid adoption of new insights into patient care.

“Staying up with the continuous and rapid changes in battlefield medical care helps to make every AMEDD soldier a “learning medic” in a “learning organization” dedicated to conserving the fighting strength and saving lives in combat,” Chapa said..