Army Field Hospitals and **Expeditionary Hospitalization**

To meet the demands of Multi-Domain Battle, the Army is changing combat support hospitals into field hospitals that provide expeditionary health service support and hospitalization.

By Lt. Col. Michael F. LaBrecque and Capt. Michael A. Honsberger

rmy Role 3 medical care has not changed since combat ■ support hospitals (CSHs) replaced mobile surgical Army hospitals and evacuation hospitals during the Vietnam War. But as warfare evolves and adversaries seek to exploit perceived weaknesses, the Army is adapting to develop solutions to improve casualty care as far forward on the battlefield as possible.

The emergence of near-peer competitors who pose a significant threat to the United States and its allies has led to development of the Multi-Domain Battle (MDB) operating concept. Today, armed conflict with near-peer adversaries will challenge our assertions and alter our response within the operational environment as described in the MDB concept. This concept highlights the need for expeditionary capabilities that the Army must possess and leverage across the contested domains of air, land, sea, space, and cyberspace.

As the Army adapts to operating in this new environment, the Army Medical Department (AMEDD) has adapted to provide better expeditionary Army Health System (AHS) support. Under the new construct, the joint medical force can conduct expeditionary health service support (HSS), including early-entry hospitalization, rapidly employable resuscitation, and surgery, to increase personnel survivability during cross-domain and semi-independent operations.

In 2017, AMEDD began transforming CSHs into field hospitals in order to provide expeditionary HSS and hospitalization. The new Role 3 hospital structure rectifies major deficiencies in the CSH with revisions to organizational design, medical and surgical capabilities, and the ability to perform split or geographically dispersed operations.

AMEDD also designed the field hospitals to have the capacity to serve a similar role as NATO's Role 2 enhanced (Role 2E) facility, the Air Force's expeditionary medical support system (EMEDS), and the Navy's expeditionary medical units, which are critical to supporting our joint partners and allies.

Today's CSH

CSHs provide essential care within an area of operations (AO) by treating and returning to duty patients who can be treated within the theater evacuation policy. It serves a critical function in stabilizing and evacuating those patients who require definitive, convalescent, and rehabilitative care at a Role 4, such as Landstuhl Regional Medical Center in Germany or a stateside medical treatment facility.

The CSH capabilities include triage and emergency care, outpatient services, inpatient care, pharmacy, clinical laboratory, blood banking, radiology, physical therapy, medical logistics, operational dental care (emergency and essential dental care), oral and maxillofacial surgery, nutrition care, and patient administration services.

CSHs have a hospital company A

with 164 beds and hospital company B with 84 beds that, when combined, form a 248-bed Role 3 hospital. The hospital company B can serve as an early-entry hospitalization element (EEH) using 44 of its 84 beds with a follow-on hospitalization augmentation element using the remaining 40 beds. This enables CSHs to conduct split-based operations using the 164bed and 84-bed hospital facilities to provide HSS and hospitalization in separate locations.

Although a CSH can conduct operations in more than two locations, it requires using a variety of deployment manning documents, requests for forces, and requests for augmentation to add the personnel needed to operate in multiple locations.

Tomorrow's Field Hospital

The field hospital's enhanced organizational design and collective medical and surgical capabilities are products of numerous capability development process reviews. A field hospital's design enhances flexibility and provides the requisite medical capabilities to support the Army's goal of developing a versatile, agile, and expeditionary medical force.

The field hospital is a modular medical treatment facility designed to provide Role 3 medical capability in a tailored organizational structure to support the Army's varied unified land operational missions. The organizational design allows the field hospital to support the Army's requirement to conduct a mix of offensive, defensive, stability, and defense

support of civil authorities operations simultaneously in a variety of scenarios.

Both the CSH and field hospital provide essential care within the theater evacuation policy to either return the patient to duty or stabilize the patient for evacuation to a definitive care facility outside the AO.

Field hospitals differ from CSHs because one or more medical detachments augment the field hospital to increase its capability to provide HSS for maneuver forces within the AO. Enhanced mission command and communications capabilities have improved the field hospital's versatility and agility. The augmentation detachments have specific clinical specialties that can adapt to better support an assigned mission.

The transformation from the CSH to the field hospital will ensure that the new Role 3 can operate effectively in the multiple operational environments described in the MDB concept. The field hospital's expeditionary resources are provided by establishing the initial hospitalization capabilities with the hospital center and 32-bed Role 3 hospital, as opposed to deploying the CSH medical mission command detachment and the 44-bed EEH.

The field hospital gains additional medical and surgical capabilities when it adds its hospital augmentation detachments. The hospital augmentation detachments expand the 32-bed field hospital to 148 beds. This modular and augmented organization allows commanders to tailor medical forces in support of maneuver forces, match capabilities and medical specialties to the supported population, and meet the clinical challenges presented.

The end state once all field hospital units are deployed forward is to provide HSS and hospitalization with a 240-bed hospital; the hospital center provides medical mission command with up to two field hospitals (32-bed), one medical detachment surgical (24-bed), two medical detachment intensive care units (32bed), and one medical detachment intensive care ward (60-bed).

The Army Health System

The AHS is a complex system of systems that is divided into 10 medical functions that align with medical disciplines and scientific knowledge. These systems are interrelated and interdependent and must be synchronized in order to reduce casualties from disease, non-battle injuries, and battle-related injuries and to maximize patient outcome. The field hospital provides medical mission command and hospitalization in a unique manner that demonstrates how it has transformed from a CSH.

Medical mission command. The

The 10th Field Hospital, 627th Hospital Center, is set up at Forward Operating Base Warrior at Fort Polk, La., on Nov. 2, 2017. (Photo by Scott Gibson)







The 212th Combat Support Hospital trains in a 34-bed field hospital during the Guard-Ex Field Training Exercise in Landstuhl, Germany, on Nov. 7, 2017. (Photo by Oliver Sommer)

hospital center provides mission command for up to two functioning, split field hospitals (32-bed) by serving as a regimental headquarters in a contingency theater. The hospital center command section provides mission command for elements of the hospital and provides AHS planning support within the hospital AO.

The command section provides advice to the supported tactical commander on the health of the command and provides medical surveillance activities within the AO. Command and staff personnel provide supervision and coordination of administrative, logistics, operational, medical, surgical, nursing, and hospital ministry services.

Hospitalization. Theater hospitalization capability is one of the five overarching joint medical capabilities for HSS that the field hospital provides. The field hospital can also provide first responder care, forward resuscitative care, definitive care with augmentation, and en route capability, but its primary function is to provide hospitalization support on the battlefield.

Hospitalization provides definitive medical care for Soldiers capable of returning to duty and essential care for patients who must be stabilized for medical evacuation out of the area of operations.

Field hospitals provide hospitalization not only as a primary task but also as a medical function. The hospitalization medical function includes forward resuscitative surgery, respiratory care, clinical laboratory services, blood bank, radiological services, pharmacy support, nutritional care, patient administration, optometry, physical therapy, and preventive medicine.

Expeditionary Hospitalization

Joint doctrine defines an expeditionary medical facility (EMF) as a standardized, modular, flexible combat capability that provides health services to an advanced base environment throughout the full range of military operations. It is designed in multiple configurations to support a wide spectrum of military health support. The Air Force, Navy, and Army all have EMFs that provide expeditionary HSS and hospitalization, which are in line with the MDB concept.

The Air Force's EMEDS unit provides individual bed-down and theater-level medical services for deployed forces or select population groups. The unit's primary mission is to provide forward stabilization, resuscitative care, primary care, dental services, and force health protection. It also prepares casualties for evacuation to the next level of care.

The EMEDS has a similar modular and scalable design as the Army field hospital, and it allows the Air Force to deploy medical capabilities ranging from a small team that provides highly skilled medical care for a limited number of casualties to a large medical system that can provide specialized care to more than 6,500 people. The EMEDS can grow to a full Air Force theater hospital by incrementally building its capabilities.

Navy EMFs, depending on their size, can provide theater hospitalization capability, but they have a large footprint. The Navy's expeditionary medical unit-10 is a stand-alone 10bed facility capable of being transported by air or vehicle for rapid response to foreign humanitarian assistance missions or immediate short-duration surgical support.

Because of the size of some EMF platforms, significant logistics support is required to relocate these assets once assembly and activation have occurred. The Army field hospital has a similar limitation; once it is established, it is difficult to break down, repack, and prepare for movement as military operations move farther away. The unit's organic vehicles can transport 35 percent of the field hospital equipment in a single lift with some personnel augmentation.

The Army's first field hospital, the 10th Field Hospital (formerly 10th CSH), mitigated this limitation by designing a nondoctrinal EEH that would use the first lift (35 percent) to rapidly establish an EMF capable of providing expeditionary hospitalization (4-bed), forward resuscitative surgery, damage control surgery (2bed), and limited ancillary services.

The EEH (6-bed) is not a Role 3 but functions as a Role 2E that provides basic secondary health care built around primary surgery, intensive care, and ward beds. The Role 2E can stabilize post-surgical cases for evacuation to Role 4 without the requirement to first route patients through a higher Role 3 facility. The 10th Field Hospital's EEH essentially serves as a medical quartering party that sets the conditions for follow-on Role 3 support in the AO once the remaining 26-bed hospital personnel and equipment arrive and establish the full 32-bed field hospital.

Proof of Concept

The 627th Hospital Center and the 10th Field Hospital, 1st Medical Brigade, demonstrated the capabilities of the new 32-bed field hospital during their inaugural decisive action training environment rotation at the Joint Readiness Training Center in November 2017. The units successfully deployed from their home station at Fort Carson, Colorado, to Fort Polk, Louisiana, and established Role 3 AHS support within 72 hours.

The 10th Field Hospital provided hospitalization and HSS to the 2nd Battalion, 4th Infantry Brigade Combat Team, during the 14-day exercise through all operational phases. The unit received 52 casualties from lower echelons of care including the brigade support medical company Role 2 and from the division-level ambulance exchange point on its first day receiving casualties from the forward line of troops.

Overall, the Role 3 received 242 casualties over seven days with a died of wounds (DOW) rate of 5 percent. Evacuation delay from lower echelons of care was the primary reason for 82 percent of the DOW (9 patients) during the rotation. The DOW rate dropped significantly to 3 percent when a patient successfully progressed through echelons of care.

The 10th Field Hospital EEH demonstrated its ability to operate independently of the 26-bed hospital during the last three days of the rotation. The 10th Field Hospital commander deployed the EEH (6-bed) into the combat sustainment support battalion logistics support area and established a Role 2E to support offensive operations forward.

The Role 2E performed exceptionally well. It treated more than 50 casualties in 72 hours and demonstrated the proof of concept that a

Role 2E is not dependent on a Role 3 to stabilize and evacuate patients from an AO. The Role 3 did not receive any patients during the last three days because they were treated far forward by the EEH (6-bed) at the logistics support area.

The Army field hospital demonstrates that it can serve as a Role 3 and provide expeditionary HSS and hospitalization in future operational environments as described in the MDB concept. Conflict with nearpeer adversaries will result in higher casualty estimates requiring robust Army health services far forward on the battlefield to reduce Soldier mortality.

AMEDD continues to provide superior AHS support to maneuver units by transforming the remaining CSHs into the modular and expeditionary field hospitals through fiscal year 2019. Future field hospitals will build on the 10th Field Hospital's success and demonstrate their unique abilities and capabilities through rigorous decisive action training environments provided by the combat training centers.

Lt. Col. Michael F. LaBrecque is the senior logistics trainer at the Joint Readiness Training Center at Fort Polk, Louisiana. He holds a bachelor's degree in civil engineering from the United States Military Academy and a master's degree in administration from Central Michigan University.

Capt. Michael A. Honsberger has served as the brigade support medical company senior observer-coach/ trainer for Task Force Sustainment at the Joint Readiness Training Center. He holds a bachelor's degree in American history from Saint John's University and post-baccalaureate certificates in business and organizational continuity and disaster medicine and management from Jefferson University. He is a graduate of the Logistics Captains Career Course and the AMEDD Captains Career Course for Multifunctional Logistics.