

ANNEX D

Combat Health Support

CONTENTS	PAGE
SUPPORTING THE FORCE-PROJECTION ARMY	D-1
ECHELONS OF COMBAT HEALTH SUPPORT.....	D-4
FORWARD SURGICAL TEAMS.....	D-4
PATIENT CARE AND MOVEMENT	D-5
MEDICAL FUNCTIONAL AREAS.....	D-5

The combat health support (CHS) mission is to conserve the fighting strength. Health services are employed to provide the most benefit to the maximum number of personnel. Patients are examined and treated and returned to duty as close to their unit as possible or, if unable to return to duty (RTD), evacuated further to the rear.

SUPPORTING THE FORCE-PROJECTION ARMY

The CHS system sustains and protects the health of the soldier in war and in MOOTW. Combat health support is a seamless integrated system. It operates across the range of military operations from the forward line of own troops to the CONUS sustaining base. The CHS system provides continuous medical management throughout all echelons of care. The goals of the Army's CHS system are to-

- Reduce the incidence of disease and nonbattle injuries through sound preventive medicine programs.
- Provide medical and surgical treatment for acute illnesses, injuries, or wounds.
- Evacuate patients to the appropriate medical treatment facility (MTF).
- Maintain soldiers on duty or promptly RTD those who have recovered.
- Maintain a science and technology base to enhance all capabilities related to health and the delivery of health care.

The challenge facing the CHS system is to simultaneously provide CHS to deploying forces; provide CHS to the CONUS base; and establish fictional area CHS operating systems within the theater. The CHS

system also provides CHS to redeployment and demobilization operations.

Involvement at all levels of command ensures proper management of critical CHS resources. The following principles apply in planning and executing CHS of the force-projection Army:

- Rapid reinforcement of forward deployed medical units by mobile medical treatment squads and forward surgical teams (FSTs).
- Rapid mobilization and deployment of critical CHS capabilities.
- Rapid reinforcement/replenishment of medical personnel and Class VIII supplies and equipment.
- Rapid replenishment of patient evacuation resources.
- Rapid employment and expansion of hospital resources.

FORCE PROJECTION

Combat health support units must be able to mobilize, deploy, and support a crisis-response force. Commanders tailor the CHS force on the

basis of an analysis of METT-T, strategic lift, propositioned assets, and HNS. The modular medical system enhances the commander's ability to tailor CHS forces.

With adequate communications capabilities, medical personnel may provide support from a third country support base, a lodgment area, CONUS installations, or facilities afloat. Enhanced medical communications will eventually permit a split operations capability. Army medical centers will be able to provide real-time diagnostic consultative services to forward deployed MTFs. Also, an enhanced telecommunications capability will reduce the requirement to employ the most critical skilled physicians in forward deployed facilities. It will permit strategic managers to centralize critical professional skills and services.

STRATEGIC CONSIDERATIONS

National strategic CHS and supportive services include activities under the control of DA, DOD, and the National Command Authorities. These include the US Army Medical Materiel Agency (USAMMA), the DLA, NICPs, military hospital systems, and Department of Veterans Affairs (DVA) and civilian hospital systems (National Disaster Medical System). Strategic CHS focuses on--

- Support of force deployment by ensuring soldier medical readiness.
- Industrial-base mobilization.
- Requirements determination and acquisition of medical equipment, supplies, and blood and biological to support force projection.
- Stockpiling and propositioning of medical materiel (propositioning of medical materiel configured to unit sets and afloat propositioning).
 - Host nation support.
 - Medical regulating, patient evacuation, and hospitalization.
 - Mobilization.
 - Reconstitution of the strategic force by returning injured soldiers to full health.
 - Demobilization.

OPERATIONAL CONSIDERATIONS

Operational CHS encompasses all of the medical activities to support the force employed in campaigns, major operations, and MOOTW. Operational CHS focuses on--

- Support of deployment operations (reception and onward movement).
- Medical facilities in the theater.
- Distribution management of medical materiel and blood.
- Support of forward deployed forces.
- Reconstitution of medical units in theater.
- Support of redeployment operations.

At the operational level, managers balance current requirements with the need to extend capabilities along the LOCs and buildup support services for subsequent major operations. Whenever possible, planners take advantage of available HNS (infrastructure and contracted services).

TACTICAL CONSIDERATIONS

Tactical planning is proactive rather than reactive. CHS must be thoroughly integrated with tactical plans and orders. Commanders reallocate medical resources as tactical situations change. Combat health support commanders tailor medical units to adapt to the flow of battle and to meet reinforcement or reconstitution requirements. Elements to reconstitute attrited medical units normally come from the next higher echelon of CHS.

Due to the mass destructive and disabling capabilities of modern conventional and NBC weapons systems, medical units can anticipate large numbers of casualties in a short period of time. These mass casualty situations will probably exceed the capabilities of local medical units. Medical units are flexible. They alter their normal scope of operations to provide the greatest good for the greatest number. Key factors for effective mass casualty management are on-site triage, emergency resuscitative care, early surgical intervention, reliable communications, and skillful evacuation by air and ground resources.

Medical personnel may also have to defend themselves and their patients within their limitations. In certain situations, CHS units in rear areas must be able to defend against Level I threats and to survive NBC strikes while continuing to support the operation.

MILITARY OPERATIONS OTHER THAN WAR

In MOOTW, the provision of CHS and health education play a more direct role in countering both the medical threat and the general threat. Combat health support in MOOTW encompasses all military health actions taken and programs established to further US national goals, objectives, and missions. These actions and programs may differ to some degree from the traditional CHS role of delivery of quality care for US forces in war. For example, CHS operations can play a significant role in nation assistance by---

- Assisting with the development of the host nation medical infrastructure.
- Providing basic necessities of life for general populations through host nation civilian medical programs.
- Providing assistance in establishing, repairing, or improving basic health and sanitation services.

HOST NATION SUPPORT

Host nation support agreements can greatly assist in the areas of fixed facilities, utilities, maintenance, and patient evacuation. Maximum use is made of host nation transportation resources as they become available, especially rail and waterways. Conversion kits can be used to modify buses, trains, and barges for patient evacuation.

MASS CASUALTIES

Triage is the evaluation and categorization of patients for treatment and evacuation to facilitate the

efficient use of available resources. Primary considerations for conducting triage include where it will take place and who is available to do it. Triage is best accomplished at the incident site where large numbers of patients are located. This ensures that patients requiring immediate evacuation to MTFs receive priority of care.

Medical personnel who are qualified in trauma treatment sort mass patients. These personnel identify each patient by a category that indicates the priority of his treatment and the likelihood of his survival. The four categories are minimal, immediate, delayed, and expectant.

Rapid sorting assures that personnel direct available treatment first toward the patients who have the best chance of survival and earliest RTD. In a rapidly changing battlefield environment, medical personnel separate NBC-contaminated patients from uncontaminated patients, as the situation dictates. They conduct triage in the same manner for contaminated and uncontaminated patients; however, individual protective equipment encumbers the patient and medical treatment personnel. Medical treatment requires more time because of decontamination procedures. FMs 3-5, 8-10-4, and 8-285 discuss the requirements for supported units to provide manpower for patient decontamination.

ENEMY PRISONERS OF WAR

In accordance with the Geneva Conventions of 1949, enemy prisoners of war (EPWs) receive the same medical care as US personnel. A specific hospital may be designated to treat EPWs; however, all Army MTFs in the theater treat EPWs when required. FM 8-10 has additional information on CHS for EPWs.

ECHELONS OF COMBAT HEALTH SUPPORT

Combat health support consists of echelons of care. They extend rearward throughout the theater to the CONUS base. Each echelon reflects an increase in capability, with the functions of each lower echelon being within the capabilities of higher echelon.

ECHELON I

The first medical care a soldier receives is at this level. The emphasis at this echelon is on measures necessary to stabilize a patient for evacuation to the next echelon of care. These include maintaining the airway, stopping bleeding, and preventing shock. Soldiers receive training in first-aid procedures which emphasize lifesaving tasks. Selected individuals in nonmedical units receive enhanced training. They are called combat lifesavers. All combat units and some combat support and CSS units have combat lifesavers. Their primary duty does not change. They perform the additional duties of combat lifesavers when the tactical situation permits. The combat medic is the first individual in the CHS chain who makes decisions based on medical military occupational specialty training. The treatment squad provides advanced trauma management to battlefield casualties and routine sick call when not engaged in combat. Effective medical evacuation is critical for the survival of seriously wounded casualties stabilized at this level. There is no patient-holding capacity at this echelon.

ECHELON II

Medical companies and troops of divisions, separate brigades, ACRs, and area support medical battalions (ASMBs) render care at this echelon. They examine the casualty and evaluate his wounds and general status to determine his treatment and evacuation precedence. This echelon of care duplicates Echelon I and expands

services available by adding limited dental, laboratory, optometry, preventive medicine, health service logistics, mental health services, and patient-holding capabilities.

ECHELON III

This echelon is the first with hospital facilities. Within the combat zone, the mobile army surgical hospital (MASH) and the combat support hospital (CSH) provide resuscitation, initial wound surgery, and postoperative treatment. Although the MASH is an Echelon III facility, it is designed to locate within the division area. At the CSH, personnel stabilize patients for continued evacuation or RTD. Medical regulators coordinate movement of patients expected to RTD within the theater evacuation policy to a facility with the capability for reconditioning and rehabilitating.

ECHELON IV

At this echelon, the patient may receive treatment at the general hospital (GH) or the field hospital (FH). The GH provides general and specialized medical and surgical care. It stabilizes patients not expected to RTD within the theater evacuation policy for evacuation to an Echelon V (CONUS base) facility. The FH provides reconditioning and rehabilitating services for patients who will be RTD within the theater evacuation policy.

ECHELON V

Definitive care to all categories of patients characterizes Echelon V care. CONUS-based DOD and DVA hospitals provide this care. During mobilization, the National Disaster Medical System may be activated. Under this system, civilian hospitals care for patients beyond the capabilities of DOD and DVA hospitals.

FORWARD SURGICAL TEAMS

The FST is a corps augmentation for divisional and nondivisional medical companies. It will be organic to the airborne and air assault divisions and the light ACR. The FST provides emergency/urgent initial surgery. It

also provides nursing care after: surgery for critically wounded/injured patients until they are stable enough to evacuate to a theater hospital. The FSTs not organic to divisions and the light ACR will be assigned to a medical

brigade or group. Normally commanders will attach them to a corps hospital when not operationally

employed, and further attach them for support to a divisional/nondivisional medical company.

PATIENT CARE AND MOVEMENT

Patients with wounds of lesser severity may not need to pass through all echelons of care. They return to duty from the lowest echelon that meets their needs. The patient's condition, evacuation policy, and METT-T are important factors in selecting the evacuation platform. Centralized management and matching of the

patient's condition and urgency of movement with the available evacuation assets ensure the effective and efficient usage of scarce medical resources. In the main battle area, patients do *not* normally bypass Echelon I or Echelon 11 MTFs. This ensures that they have a better chance to be stabilized for further evacuation.

MEDICAL FUNCTIONAL AREAS

To meet the requirements for force projection, the Army employs a single seamless health care delivery system that integrates the medical functional areas discussed below.

return to full health within the established time are evacuated to definitive care facilities in CONUS or other designated locations. FM 8-10-6 has more details on evacuation.

PATIENT EVACUATION AND MEDICAL REGULATING

Patient evacuation is the timely, efficient movement and en route care of sick, injured, or ill persons from the battlefield or other locations to MTFs. It is the responsibility of the gaining echelon of CHS to evacuate or coordinate the evacuation from the lower echelon. The attending physician determines the mode and precedence of evacuation. Air evacuation is the primary means of medical evacuation.

Medical regulating is the coordinated movement of patients to MTFs which are best able to provide timely and required care. The corps medical brigade/group medical regulating office (MRO) provides medical regulating in the combat zone. In the COMMZ, the medical command (MEDCOM)/medical brigade MROs and the joint medical regulating office (JMRO) provide support. The JMRO provides both intratheater and intertheater medical regulating. For example, if hospitals of other services within the theater have the necessary capabilities, the JMRO regulates Army patients to them. It also coordinates intertheater evacuation with the Armed Services Medical Regulating Office. The JMRO coordinates patient movement with the USAF aeromedical evacuation control center or, if air evacuation is not available or advisable, with the Military Sealift Command.

In the combat zone, ground ambulance squads organic to medical companies evacuate patients within their areas of operations. Medical evacuation battalions evacuate patients from Echelon II MTFs to Echelon III hospitals. The battalion also evacuates patients laterally from hospital to hospital within the corps area, and from hospitals to USAF staging areas for evacuation out of the combat zone. Strategic evacuation is a function of the USAF aeromedical evacuation system. The theater surgeon recommends a theater evacuation policy through the CINC for approval by the Secretary of Defense. The policy establishes the number of days an injured or ill soldier may be allowed to remain in the theater to return to full health. Soldiers who will not

HOSPITALIZATION

Hospitalization is part of the theaterwide system for managing sick, injured, and wounded patients. It provides patients with surgical and medical resuscitative, definitive, and specialty treatment. Hospitals also provide specialized treatment for patients with rare and unusual or complex conditions.

There are four types of hospitals that may be employed in the theater. The GH and FH locate in the COMMZ. They support patients from the COMMZ and those received from hospitals in the combat zone. The MASH and CSH locate in the combat zone and support patients originating in that zone. The GH, FH, and CSH can handle all categories of patients. Hospitals consist of modules that allow for tailoring.

HEALTH SERVICE LOGISTICW/BLOOD MANAGEMENT

The health service logistics system encompasses all activities of medical supply, medical equipment maintenance, optical fabrication and repair, and blood management. The MEDCOM theater medical materiel management center (TMMMC) provides centralized theater-level management of Class VIII materiel for all US Army forces. It may also serve as executive agent (single integrated medical logistics manager) for supply of medical materiel for other services in theater.

Initially, resupply to a theater consists of preplanned, time-phased shipments of medical resupply sets from CONUS. As the theater stabilizes, normal replenishment based on theater demand replaces preplanned resupply. The medical logistics (MEDLOG) battalion (rear) supports units in the COMMZ and the MEDLOG battalion (forward). The corps MEDLOG battalion (forward) provides support in the combat zone. It coordinates with the corps movement control center for distribution of bulk medical materiel. It coordinates with the medical evacuation battalion for air movement of emergency resupply of blood products and other critical items. Medical supply offices in the division, brigade, and regiment provide Echelons I and II Class VIII resupply.

The TMMMC coordinates logistics data flow with the USAMMA in CONUS. It coordinates with the theater-level movement control agency for movement of medical materiel assets in theater.

The MEDLOG battalion (forward) provides DS maintenance on medical equipment for units in the corps, as well as area support for units without organic capability. The MEDLOG battalion (rear) provides

GS maintenance on medical equipment for the MEDLOG battalion (forward), as well as DS on an area basis for units in the COMMZ.

Blood support is a combination of four systems: medical, technical, operational, and logistics. The management and distribution of all resuscitative fluids (including albumin) is a health service logistics function. Theater blood support depends on resupply from the CONUS base. Liquid blood products enter the theater through USAF blood transshipment centers for further shipment to Army blood bank platoons located at MEDLOG battalions. Army hospitals acquire necessary blood products from these blood bank platoons. Blood support for Echelon II MTFs consists of a limited number of Group 0 liquid red blood cell units. All hospitals have blood banking capabilities that allow them to store blood products.

The unified command establishes a single blood management program. The program is theaterwide and interfaces with the CONUS blood banking system. The theater and CONUS blood programs are a combined DOD effort. All components within the unified command maintain blood programs. The TMMMC manages the Army's blood program. The Army blood program office interfaces with the joint blood program office. The joint office interfaces with the Armed Services Blood Program Office in CONUS.

DENTAL SERVICES

Dental services within the theater return personnel to duty as soon as possible. Initially, dental personnel organic to Echelon II MTFs provide emergency/preventive care. In a mature theater, the dental service battalion of the medical brigade provides definitive dental care. Hospitals perform specialized dental (maxillofacial) surgery. FM 8-10-19 has additional information on dental support.

VETERINARY SERVICES

The Army is the DOD executive agent for military veterinary support to all services and other US agencies in the theater (DOD Directive 6015.5). The veterinary

headquarters detachment and its subordinate veterinary medicine detachments and veterinary service detachments provide support. They inspect food (FM 8-10-7), monitor incidence of zoonotic disease, and provide veterinary (animal) medical care. They may also provide training in these areas. The headquarters detachment consolidates all veterinary resources and ensures uniform and equitable support throughout the theater.

PREVENTIVE MEDICINE SERVICES

In many past conflicts, disease and nonbattle injuries rendered more soldiers ineffective than combat action. Preventable cases of disease and cold and heat injuries have greatly affected military operations. The prevention of disease and nonbattle injuries is the most effective, least expensive means of providing commanders with the maximum number of healthy soldiers. The Armed Forces Medical Intelligence Center conducts area studies on diseases for all regions. Main support battalion, separate brigade, ACR medical companies and troops, and ASMBs provide preventive medicine services. They receive additional support from the sanitation and entomology detachments of the combat zone/COMMZ medical brigade.

COMBAT STRESS CONTROL

Combat stress control (CSC) preserves the fighting strength by minimizing losses due to battle fatigue and neuropsychiatric disorders. The focus of Army CSC is on--

- Promotion of positive mission-oriented motivation.
- Prevention of stress-related casualties.
- Treatment and early RTD of soldiers suffering from battle fatigue.
- Prevention of harmfield combat stress reactions such as misconduct stress behaviors and post-traumatic stress disorders.

Main support battalion, separate brigade, ACR medical companies and troops, and ASMBs provide CSC support. They receive further support from CSC companies or detachments assigned to the combat

zone/COMMZ medical brigade. FMs 8-55 and 22-51 have in-depth discussions of CSC.

AREA MEDICAL SUPPORT

Medical companies of the DISCOM and the ASMB of the medical brigade provide area medical support. These companies provide Echelon I and II medical care throughout the division, corps, and EAC areas. They employ medical squads/teams to establish clearing stations and aid stations, and to reinforce medical treatment elements of maneuver battalions. The ground ambulance platoons of these companies provide medical evacuation on an area basis from Echelon I MTFs and from supported units to clearing stations (Echelon II treatment facilities).

MEDICAL LABORATORY SERVICES

The COMMZ-based MEDCOM area medical laboratory includes capabilities in anatomic pathology, biochemistry, entomology, epidemiology, microbiology, and veterinary medicine. Its focus is the total health environment of the theater, not individual patient care. Its facility conducts studies in forensic pathology and toxicology, pest identification and the efficacy of pesticides, frequency and distribution of infectious agents and diseases, identification of microorganisms and monitoring for immune response, and transmission of zoonotic diseases. Its personnel also function as consultants to hospital clinical laboratory services within the theater. It may task organize teams and employ them forward to troubleshoot a particular problem.

All Echelon II MTFs provide basic medical laboratory services. They perform basic procedures in hematology, urinalysis, and serology. Echelon II MTFs also receive, maintain, and transfuse blood products. Echelon III MTFs (CSH) perform procedures in biochemistry, hematology, urinalysis, microbiology, and serology. The CSH also provides blood bank services. Echelon IV MTFs (general and field hospitals) provide a greater variety of medical laboratory procedures. If there is no area medical laboratory, the general hospital has the capability to provide a base for extending consultative services to other hospitals in the theater.

**COMMAND, CONTROL,
COMMUNICATIONS, COMPUTERS,
AND INTELLIGENCE**

The proper management of medical information is critical to providing medical support. Decisions such as those on where to treat casualties and when to evacuate to hospitals depend on knowing what medical resources are available at all times. An effective automated medical management information system provides the capability to track resources, requirements, and patients in support of theater operations. In particular, health service logistics relies heavily on automation. Communications link medical units and supporting MEDLOG battalions.

Dependent on the size of the deployed force, a MEDCOM, medical brigade, or medical group controls medical information management. Arriving with the lead element, units with an automated capability to manage medical information orchestrate both the arrival of medical units in the AO and the interface with other information systems (such as movement and personnel) at all levels.