

## CHAPTER 1

**THE HEALTH SERVICE SUPPORT SYSTEM****1-1. Health Service Support**

The health service support (HSS) system represents a continuum of successive echelons (levels) of care beginning at the forward line of own troops (FLOT) and ending at the continental United States (CONUS) base. The effectiveness of the system is measured by its ability to return to duty (RTD) those soldiers who are wounded, sick, or injured. The system is functionally aligned to prevent/minimize noneffectiveness and to collect, assess, evacuate, and rehabilitate the sick and injured; it also provides for the general health maintenance of the soldier.

**1-2. Basic Doctrine of Health Service Support**

a. The objective of the HSS system is to—

- Reduce the incidence of disease and nonbattle injury (DNBI) and battle fatigue (BF) through sound preventive medicine and combat stress control (CSC) programs.
- Provide care and treatment of acute illness, injury, or wounds.
- Return to duty as many soldiers as possible at each echelon.

b. The major tenets of this doctrine are—

- Emphasis on prevention.
- Far forward medical treatment including advanced trauma management (ATM).
- Patient evacuation that is timely and efficient within the evacuation policy time frame.
- Selectivity of RTD and nonreturn to duty (NRTD) patients at lowest possible level.
- Standardized Echelons (Levels) I and II HSS units under the modular medical support system.

- Standardized air and ground evacuation units integrated under a single manager (the medical battalion [evacuation]).

- Flexible and responsive Echelons (Levels) III and IV systems provided by four modularly designed hospitals and patient holding units (see FM 8-10).

- Enhanced ancillary and functional support systems with advanced technologies.

- A medical system that provides continuous medical management throughout all echelons (levels) of care and evacuation.

**1-3. Principles of Health Service Support Operations**

a. *Conformity.* Conformity with the tactical plan is the most fundamental element for effectively providing HSS. Only by participating in the development of the commander's plan of operation can the medical planner ensure adequate HSS at the right time and place. Foremost in all planning is the forward orientation and full use of the HSS system. Additionally, a plan for the rapid reinforcement or replacement of the forward echelon (level) of the medical structure is essential. For additional information, refer to FM 8-55.

b. *Continuity.* The medical system is a continuum from the FLOT through the CONUS. It serves as a primary source of trained replacements during the early stages of a major conflict. The medical structure is organized into a modular system and procedures are standardized for increased flexibility, rapid reinforcement by like or identical modules, and simplification in tailoring a force for varying situations. The patient evacuation system (integrated ground/air) is an integral part of the HSS system and organized to optimize resource utilization. It is staffed to provide continued care and maintain the physiology of the patient while being transported between medical treatment facilities (MTFs).

c. *Control.* This principle ensures that the scarce HSS resources are efficiently employed to support the tactical plan and that medical units are under the technical control of a single medical manager. Centralized control with decentralized execution permits the medical commander and his staff to rapidly tailor and promptly adjust health service assets. Assets can be realigned in response to major shifts in the location and volume of casualties, changes in supported unit composition and mission, and changes in the intensity of conflict. The modular medical support system provides the flexibility to task-organize for any situation, or replace like units; however, optimum benefits are only derived through centralized control of all medical functions and subsystems.

d. *Proximity.*

(1) The location of medical assets in support of combat operations is dictated by the—

- Mission, enemy, terrain, troops, and time available (METT-T) factors.
- Requirements for far forward stabilization of patients which help maintain the physiology of the wounded or severely injured soldiers.
- Early identification and forward treatment of RTD category patients.
- Management of mild and moderate BF within soldiers' units, and heavy BF at the closest MTF (see Appendix A).
- Forward orientation of evacuation resources, thereby reducing response time.
- Other logistical units/complexes.

(2) Medical commanders and staffs, through continuous coordination, ensure that treatment elements/facilities are not placed in areas that interfere with combat operations, or that are subject to direct intervention by enemy forces. Conversely, tactical commanders must realize the fact that fully committed medical resources with a forward orientation will optimize the effectiveness of the HSS system.

e. *Flexibility.* Standardized-like modules provide medical support from the FLOT to the rear boundary of the theater of operations (TO). The ability to rapidly shift medical resources to areas of greatest need is a cornerstone of the modular medical support system.

f. *Mobility.* The mobility of medical units organic to maneuver elements should equate to the forces being supported. Major medical headquarters in the TO (medical group, medical brigade, medical command [ME DCOM]) continually assess and forecast echelons of medical units and, through collective utilization of all organic subelement transportation resources, rapidly move units to best support combat operations.

#### 1-4. Health Service Support System Design

The HSS system is designed to acquire, triage, and provide medical care for all personnel operating in the division's sector. Medical support to the division is influenced by many considerations such as—

- Mission, enemy, terrain, troops, and time available.
- The nature of operations, including the intensity of combat.
- The type of threat force to be encountered.
- The geographical area of operations (AO).
- The potential for nuclear, biological, and chemical (NBC) attack and directed-energy devices.
- The climatic conditions, endemic disease health hazards, and current health of the division.
- Air superiority.

#### 1-5. Echelons of Health Service Support

Health service support is arranged in echelons (levels) of care (Figure 1-1). Each echelon of care reflects an increase in medical capabilities while retaining capabilities found in preceding echelons of care. The division contains two echelons of care: unit

level and division level. Echelon I (unit level) HSS (includes ATM, sick call, and evacuation) is provided by the medical platoon/section organic to combat maneuver battalions and some combat support (CS) battalions (see Chapter 3, Section III). It includes first aid in the form of self-aid, buddy aid, and the combat lifesaver. Echelon II (division level) HSS is provided by medical companies of the main support battalions (MSBs) and forward support battalions (FSBs) of the division support

command (DISCOM) (see Chapter 3, Section II). This echelon provides an increased medical treatment capability plus emergency and sustaining dental care, x-ray, laboratory, and optometry services, patient holding facilities, preventive medicine, mental health and CSC, and management of Class VIII (medical) supplies, equipment, repair parts, and blood. Nondivisional units operating in the division sector receive medical support on an area basis from the nearest MTF.

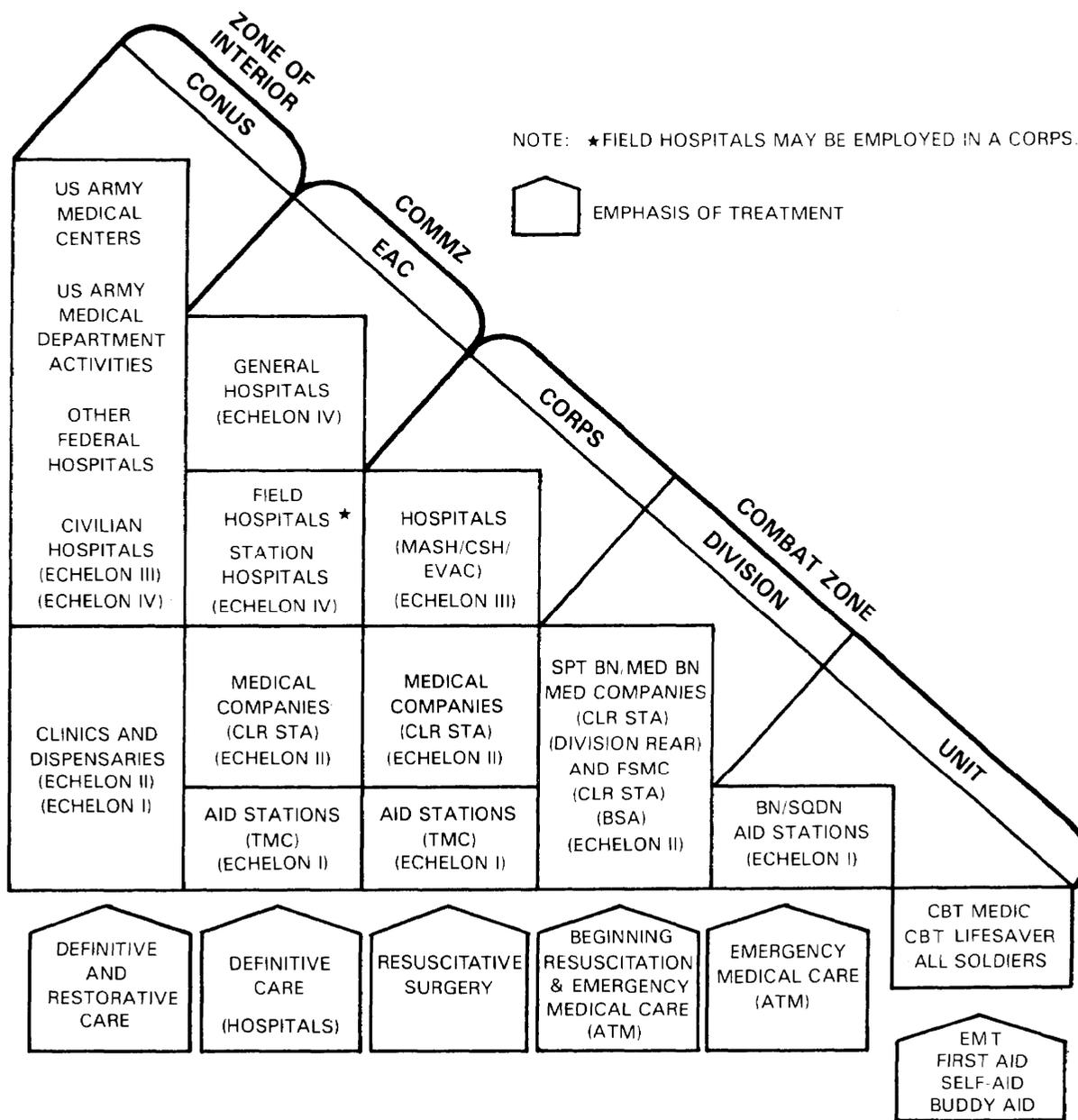


Figure 1-1. Echelons of medical treatment.

**1-6. Health Service Support Challenge**

The HSS planner must be “proactive” rather than reactive to changing situations. He must shift medical resources as the tactical situation changes. Only in this way can the AMEDD achieve its mission. The challenges for HSS planners at the medical platoon level include—

*a. Planning.*

(1) *Mission.* Health service support planners must understand the tactical commander’s plans, decisions, and intent, Health service support planning is an intense and demanding process. The planner must know—

- will do.
- What each supported element
  - When it will be done.
  - Where it will be done.
  - How it will be done.

(2) *Requirements.* The HSS planner must plan to meet the requirements of—

- patients.
- Acquisition and treatment of
  - Evacuation.
  - Health service logistics.
  - Dental services (available at supporting medical company).
  - Single-vision lens optometry services (available at supporting MSB medical company or Headquarters and Company A of the medical battalion).
  - Veterinary services (corps assets).
  - Preventive medicine services (available at supporting MSB medical company or Headquarters and Company A of the medical battalion).

- Mental health, limited neuropsychiatric (NP), and CSC preventive triage and treatment services (available at supporting MSB medical company or Headquarters and Company A of the medical battalion).

- Command, control, and communications.

*b. Prevention.* The most effective and least expensive method of providing the commander with sustained combat power is prevention. Prevention begins with the individual soldier’s awareness of the means to protect himself through health and personal hygiene, stress management, nutrition, physical fitness, and similar measures (soldier health maintenance programs). The best tool available to raise soldiers’ awareness of personal protection is an effective field hygiene and sanitation training program. Prevention is enhanced by the application of self-aid and buddy aid training programs, the combat lifesaver, continuous interface with unit- and division-level medics, divisionwide preventive medicine programs, CSC programs, and leadership emphasis at all levels of command. Ultimately, whether it is individual or collective, prevention is the unit commander’s responsibility.

*c. Far Forward Care.* Far forward care is the process of identifying and treating battlefield casualties as close to the forward edge of the battle area (FEBA) or FLOT as the tactical situation permits. This includes first aid, in the form of self-aid/buddy aid and the combat lifesaver, and unit-level HSS. The combat lifesaver, found in each squad, crew, section, or team, is responsible for the application of first-aid measures with a higher degree of skill than self-aid and buddy aid. However, the combat lifesaver’s primary role is the performance of his duties as a member of the squad, crew, section, or team, and his first-aid duties are performed as the mission permits. Far forward care is provided to the frontline soldier by the combat medic attached to the maneuver platoon or company. More comprehensive care is provided by a physician-directed treatment squad battalion aid station (BAS) capable of administering initial resuscitation and stabilization (ATM) to battlefield casualties.

*d. Medical Evacuation.* Medical evacuation starts with the collection of the wounded soldier from the point of injury and continues with his rearward movement through the HSS system. An important element of the evacuation system is the medical care provided en route. Ground ambulances are used in the division area and, where indicated, are assisted by corps air evacuation assets. Normally, ground evacuation will be used for slightly wounded, ill, or injured soldiers who are expected to RTD. Air evacuation is used, when feasible, for seriously wounded, sick, or injured soldiers who are not expected to RTD. In a combat situation, air evacuation assets will fly as far forward as the METT-T permits. The responsibility for medical evacuation rests with the next higher echelon of HSS. For example, the medical platoon is responsible for the evacuation of patients out of the forward maneuver company, battery, or troop area to the BAS. The medical company is responsible for evacuation from the BAS to the division clearing station. Plans for the use of nonmedical vehicles should be established and supplemented when casualties exceed the capability of medical evacuation assets.

## 1-7. Modular Support System

Health service support to the division is provided by a modular support system (Echelons I and II) that standardizes all medical subunits within the division. The modular design provides duplicate systems at each echelon of care enabling the medical resources manager at the appropriate level to rapidly tailor, augment, or reinforce the battlefield in areas of most critical need. The system is derived by recognizing those common medical functions which are performed across the division and designing like subunits (modules) to accomplish those tasks. The modular medical support system is built around several modules. The modules are oriented to casualty assessment, collection, evacuation, treatment, and initial surgical intervention. When effectively employed, they provide greater flexibility and mobility, and the ability to rapidly tailor the medical force to meet changes in patient work loads and locations.

*a. Combat Medic Module.* The combat medic module consists of one medical specialist and his basic load of medical supplies and equipment. The combat medic is organic to the medical platoon

or section of combat and CS battalions or squadrons and is attached to platoons, companies, batteries, or troops.

*b. Ambulance Squad.* An ambulance squad is comprised of four medical specialists and two ambulances (two teams). The squad provides evacuation of patients throughout the division and ensures continuity of care en route. Ambulance squads are organic to the medical platoon or section in combat battalions, selected CS battalions, and to medical companies of the MSBs and FSBs. Medical company ambulance squads are positioned to best support the maneuver battalions/surgeons. The medical platoon ambulance squads are likewise positioned to support the companies, batteries, and troops.

*c. Treatment Squad.* This squad (BAS) consists of the medical platoon leader (field surgeon), a physician assistant (PA), two emergency medical treatment (EMT)-qualified noncommissioned officers (NCOs) and four medical specialists. The squad is trained and equipped to provide ATM to the battlefield casualty; it provides sick call when time permits. To maintain contact with the combat maneuver elements, each squad has two emergency treatment vehicles (such as M577s). Each squad can split into two trauma treatment teams. The treatment squad is organic to medical platoons or sections in maneuver battalions and designated CS units. It is the basic building block in the medical company. The treatment squad (treatment teams) may be employed almost anywhere on the battlefield.

*d. Area Support Squad.* This squad is comprised of one dentist trained in ATM, a dental specialist, an x-ray specialist, and a medical laboratory specialist. The squad employs lightweight specialized equipment which can be quickly and easily moved. The squad is organic to the medical company.

*e. Patient Holding Squad.* This squad consists of two practical nurses and two medical specialists. The squad is capable of holding and providing minimal care for up to 40 RTD patients; however, in the light division, this squad can only hold and care for 20 RTD patients. This squad is organic to the medical companies.

**NOTE**

A treatment squad or team, an area support squad, and a patient holding squad are collocated to form the area support section (division clearing station).

*f. Medical Detachment (Surgical) and Surgical Squads.* The medical detachment (surgical) is a corps asset. It deploys forward as necessary to support division/task force operations. This detachment must collocate with a patient holding squad for support. Each airborne and air assault division has two surgical squads which are organic to the Headquarters and Company A, medical battalion. Both the medical detachment (surgical) out of the corps and surgical squads organic to divisions have the same basic design. They are organized to provide early resuscitative surgery for seriously wounded or injured casualties, to save lives, and to preserve physical function. Early surgery will be performed whenever a likely delay in the evacuation of a patient threatens life or the quality of recovery. The task force medical detachment (surgical) will normally be employed in the division support area (DSA) but may be employed in the brigade support area (BSA) during brigade task force operations. Normally, it is attached to a treatment platoon and collocated with a division clearing station.

(1) The mission of the medical detachment (surgical) and organic surgical squads is to provide a rapidly deployable initial surgical service to stabilize nontransportable patients forward in the division area of operations.

(2) The capabilities of the medical detachment (surgical) and surgical squads are as follows:

- Provide life- and limb-saving (initial) surgery in the combat zone (CZ).
- Provide initial surgery forward in support of division-level health services for a period up to 48 hours.
- Provide initial surgery for up to 40 critically wounded/injured patients with its organic medical equipment set.

- Provide personnel augmentation to CZ hospital when not task-organized to support division-level health service.

- Provide preoperative and post-operative care to patients with assistance of the patient holding squad when attached to division-level medical units.

(3) Personnel assigned to the medical detachment (surgical) or surgical squads organic to airborne and air assault divisions include—

- General surgeon (one).
- Orthopedic surgeon (one).
- Medical-surgical nurse (one).
- Nurse anesthetist (two).
- Operating room specialist (two).
- Practical nurse (two).

**1-8. Health Service Logistics in the Combat Zone**

*a. Medical (Class VIII) Resupply.*

(1) Resupply of the combat medic is the responsibility of the BAS. This mission is handled and supervised by medical personnel. The combat medic requests his supplies from the BAS. This action is not a formal request so it can be oral or written. The requests are delivered to the BAS by whatever means available. Usually this will be accomplished by the driver or the medic in the ambulances returning to the BAS with patients. Ambulances will then transport the requested supplies forward from the BAS to the combat medics. This system is referred to as backhaul.

(2) Resupply of forward deployed BASS in a heavy division is the responsibility of the medical company of the FSB. In those divisions not under the MSB/FSB design, resupply of the BAS is the responsibility of the forward support medical company (FSMC) of the medical battalion. Medical supply personnel operate a resupply point for the BAS of the maneuver battalions based on supply

point distribution for normal operations. Backhaul transportation of medical supplies using ambulances returning to forward facilities, both air and ground, is the preferred method of moving medical supplies to the maneuver battalions. If the backhaul method is not used, coordination for forward movement is the responsibility of the medical platoon leader of the maneuver battalion.

(3) Resupply of the medical companies in all divisions is performed by the division medical supply office (DMSO). The DMSO has the responsibility to provide medical supply support to all units within the division area, to include blood (Group O packed red blood cells), to all Echelon II MTFs. In contrast to the formal procedures normally associated with support between the CZ medical supply, optical, and maintenance (MEDSOM)/medical logistics (MEDLOG) battalion and the DMSO, requests submitted to the DMSO by division medical treatment elements are informal. Requests may come by message with returning ambulances (ground or air), by land line, or through existing frequency modulated (FM) administrative logistics or command nets within the division. Requests for medical supplies from BASS and medical companies are filled or forwarded to the supporting CZ MEDSOM/MEDLOG battalion. The line of medical supply flow back to the requesting units will follow the principle of backhaul. Vacant medical evacuation vehicles returning to the forward areas will be tasked with the transport of medical materiel. The DMSO uses supply point distribution at a site that is easily accessible to ground ambulances. This concept must be used to maximize the benefits associated with the backhaul philosophy.

(4) Resupply of the DMSO is provided by the CZ MEDSOM/MEDLOG battalion.

(a) The DMSO, located in the division's medical battalion (divisions not under MSB/FSB design) or the MSB (divisions under MSB/FSB design), is responsible for providing medical supply, blood, and medical maintenance support to the medical treatment element within the division. The DMSO executes health service logistics plans. He exercises his responsibilities by—

- Developing and maintaining prescribed loads of contingency medical

supplies and medical repair parts for division medical elements.

- Coordinating with the supported elements to determine requirements for Class VIII materiel.

- Maintaining prescribed loads of contingency medical supplies. These loads should be based upon transportation and storage constraints as well as characteristics of the AOs.

- Managing the division's health service logistics quality control program.

- Supervising the unit-level medical equipment maintenance program.

- Monitoring the division medical assemblage management program.

- Coordinating logistical planning for preconfigured Class VIII packages.

(b) The reconstitution duties of the DMSO include—

- Reconciling by brigade the shortages in each medical company and treatment platoon as reported by the commander or platoon leader or the battalion headquarters element.

- Coordinating with the medical battalion commander or the MSB commander to obtain the number of modular medical systems required to field an operationally ready treatment facility.

- Coordinating with the CZ MEDSOM/MEDLOG battalion to monitor the status and number of modular systems due in.

- Coordinating with the division movement control center to move supplies from the MEDSOM/MEDLOG battalion. (The DMSO directs quick fixes using available assets and controlled exchanges for medical equipment to maximize the capability of returning trained soldiers to duty.)

- Alerting the appropriate company when modular systems are arriving.

- Allocating modular medical systems to the unit based on the commander's priorities. (The DMSO coordinates through the division medical operations center [DMOC] with the division movement control center to identify transportation assets to transport modular assemblages to the unit being reconstituted.)

- Preparing the critical items listing and consolidating the critical shortages by brigade.

(5) Resupply of the CZ MEDSOM/MEDLOG battalion is received through the communications zone (COMMZ) MEDSOM/MEDLOG battalion or by direct shipments from CONUS. The CZ MEDSOM/MEDLOG battalion is normally under the direct command and control (C2) of the CZ medical brigade headquarters. It provides medical supply, medical equipment maintenance, and optical fabrication services for units in the CZ area. The CZ MEDSOM/MEDLOG battalion establishes the Class VIII supply point in the corps area. Shipment of medical supplies and blood forward is coordinated with the corps movement control center or accomplished by backhaul on medical vehicles (air or ground). Emergency resupply can be accomplished by air ambulances in the medical battalion (evacuation).

*b. Medical Maintenance.* Division medical maintenance services are provided by organic personnel.

- *Operator/user maintenance.* Medical personnel will exercise their responsibilities by—

- Performing operator preventive maintenance checks and services (PMCS) to include—

- Maintaining equipment by performing routine services like cleaning, dusting, washing, and checking for frayed cables and loose hardware.

- Performing equipment operational testing.

- Replacing operator-level spares and repair parts that will not require

extensive disassembly of the end item, critical adjustment after replacement, nor the extensive use of tools.

- Coordinating maintenance services beyond their capability with unit maintenance specialist.

(2) *Unit-level maintenance.* Divisional biomedical equipment personnel will exercise their responsibilities by—

- Scheduling and performing their PMCS functions; electrical safety inspections and tests; and calibration, verification, and certification services.

- Performing unscheduled maintenance functions with emphasis upon the replacement of assemblies, modules, and printed circuit boards.

- Operating a medical equipment repair parts program to include Class VIII as well as other commodity class parts.

- Maintaining a technical library of operator and maintenance technical manuals (TMs) and/or associated manufacturers' manuals.

- Conducting inspections for new or transferred equipment.

- Maintaining documentation of maintenance functions in accordance with (IAW) the provisions of Technical Bulletin (TB) 38-750-2 or DA standard automated system.

- Collecting and reporting data for readiness reportable medical equipment.

- Notifying the CZ MEDSOM/MEDLOG battalion of requirements for maintenance support services, reparable exchange, or medical standby equipment program (MEDSTEP) assets.

(3) *Maintenance support services.* Divisional biomedical equipment personnel will provide limited area support to units without organic capability. In addition, these personnel will be deployed forward as necessary to repair critical

medical equipment. Maneuver BASs will turn in medical equipment requiring maintenance services to the FSMC. The FSMC in turn will send this equipment to the DMSO when forward deployment is not feasible.

(4) *Direct support maintenance.* The MEDSOM/MEDLOG battalion of the CZ is responsible for—

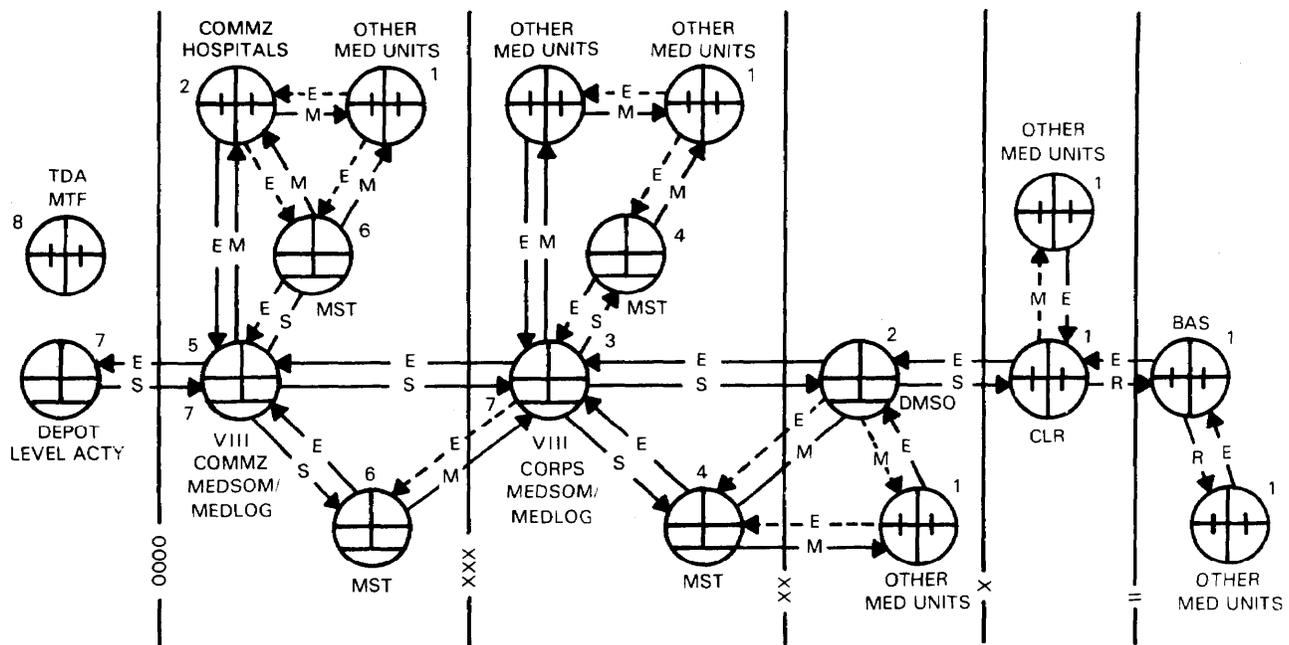
- Providing forward maintenance support services with mobile support teams.

- Maintaining reparable exchange and MEDSTEP assets for use by supporting units.

- Providing “repair and return” maintenance services.

- Fabricating minor parts when necessary.

(5) *Medical maintenance flow.* Figure 1-2 depicts the flow of medical maintenance in the TO.



1. NO ORGANIC MEDICAL MAINTENANCE CAPABILITY.
2. ORGANIC UNIT LEVEL MEDICAL MAINTENANCE CAPABILITY.
3. PERFORMS DIRECT AND GENERAL LEVEL SUPPORT MEDICAL MAINTENANCE SERVICES, INCLUDING MEDSTEP PROGRAMS.
4. PERFORMS DIRECT AND GENERAL LEVELS OF MEDICAL MAINTENANCE SERVICES ON-SITE FOR SUPPORTED UNITS.
5. PERFORMS DIRECT AND GENERAL LEVELS OF MEDICAL MAINTENANCE SUPPORT. MEDICAL MAINTENANCE SERVICES INCLUDING MEDSTEP PROGRAMS.
6. PERFORMS UNIT, DIRECT, AND GENERAL LEVELS OF MEDICAL MAINTENANCE SERVICES ON-SITE FOR SUPPORTED UNITS.
7. DEPOT LEVEL MEDICAL MAINTENANCE ACTIVITY.

8. ORGANIC, UNIT LEVEL, AND COMMAND-DIRECTED IDS LEVEL MEDICAL MAINTENANCE FUNCTION SERVES ABOVE IDS.

- E - EVACUATION OF UNSERVICEABLE EQUIPMENT/COMPONENTS
- M - MAINTENANCE SUPPORT
- R - REPLACEMENT OF UNSERVICEABLE EQUIPMENT BY THE SUPPLY SYSTEM
- S - SHIPMENT OF MEDSTEP ASSETS
- MST - MOBILE SUPPORT TEAM
- PRIMARY LINE OF SUPPORT
- - - EMERGENCY LINE OF SUPPORT

Figure 1-2. Medical maintenance flow.

*c. Blood Management.*

(1) Blood management is a separate activity within the theater. Availability of blood to the division is determined by the corps surgeon. It consists of blood collecting companies, processing detachments, and blood banking activities at different levels in the force structure. Only Group O liquid red blood cells are expected to be available to the division. Blood products to Army MTFs in the division will be provided by the DMSO. The DMSO coordinates through the DMOC with the division movement control center to identify backhaul ambulances to transport blood to the requesting unit. The DMSO obtains Group O liquid red blood cells from a supporting blood supply unit located at the corps level. Shipment of blood forward is either coordinated by the corps blood supply unit with the corps movement control center or accomplished by backhaul on medical vehicles (air and ground). Emergency resupply can be accomplished by air ambulances from the medical battalion (evacuation).

Demands come from medical companies of the MSB, FSB, or division medical battalion.

(2) The emerging blood management program is incorporated into MEDLOG units because of the similarities in storage and distribution to other Class VIII items. This new organizational structure provides for a single blood management network throughout the theater while ensuring responsive support to blood transfusing activities. Blood support is a combination of four systems (medical, technical, operational, and logistical) and must be considered separate from laboratory support. The distribution of all resuscitative fluids (including albumin) is managed by the MEDLOG units. Liquid blood resources are also made available to division-level medical units through medical logistical channels. At the division level, medical field refrigerators allow the DMSO to provide blood as far forward as the FSMC. The DMSO obtains liquid blood from the blood platoon assigned to the corps MEDLOG battalion (forward).