

CHAPTER 1

INTRODUCTION

Section I. SUPPORTING THE BATTLE

1-1. General

a. Warfare has changed significantly since World War II (WW II). The range, accuracy, and lethality of the modern tank gun makes it about ten times as effective as the tank gun of WW II. The antitank-guided missile has appeared on the modern battlefield in large numbers. Its accuracy and range of up to 5,000 meters make it a lethal weapon. Today's artillery ammunition is five to ten times more lethal than that used in WW II. Helicopters armed with antitank-guided missiles are common. Highly accurate, long-range mobile air defense gun missile systems have also appeared in great numbers to dominate the space above the battlefield. The long-range, high-velocity tank cannon and long-range antitank missile systems control the modern battlefield. With this sophisticated weaponry, anything that can be seen can be hit and killed.

b. Medical commanders must effectively use their resources to treat, evacuate, and, when possible, return to duty (RTD) sick, injured, and wounded soldiers. In the initial phases of battle, the soldiers who are treated and returned to duty provide the tactical commanders with the only source of trained combat replacements.

c. The term *return to duty soldiers* denotes the sick, injured, or wounded soldiers who have been medically treated within the theater and returned to active service. These soldiers have not been evacuated out of the communications zone (COMMZ). The majority of patients able to RTD within the stated theater evacuation policy will be disease and nonbattle injuries (DNBIs) rather than combat wounded.

d. The Army's basic operational concept is the AirLand Battle. It emphasizes success on the modern battlefield centered around four basic tenets—initiative, depth, agility, and synchronization. Refer to FM 100-5 for a detailed discussion.

1-2. General Threat Situation

a. The threat to medical evacuation units and other medical assets varies according to the intensity and location of the conflict. A European or Southwest Asian scenario would most likely be a high-intensity environment characterized by broad frontages, deep targets, and enemy penetrations of varying depths. Low intensity conflict (LIC), usually associated with the Third World, is characterized by poorly defined frontages, semiautonomous dismounted operations conducted at varying depths, and rear area security problems. Each environment stresses friendly logistics—including medical—in terms of distances and quantities required. Each environment also provides opportunities for deep strikes, long-range unconventional operations, and terrorism. Prepared airfields, permanent bases, and fixed support facilities (some hospitals) can be expected to become primary targets for threat forces. In the high-intensity conflict environment, such facilities may not survive. In the LIC environment, logistical and command centers may have to be highly centralized for defense, thus lengthening already long lines of communication (LOC).

b. Medical evacuation units operating in a TO will be exposed to a hostile environment of multiple threats including—

- Air defense weapons.
- Directed-energy (DE) weapons.
- Conventional artillery.
- Armored combat vehicles.
- Radio-electronic combat (REC).
- Fixed- and rotary-wing tactical

aircraft.

- Nuclear, biological, and chemical (NBC) weapons.
- Unconventional warfare (UW).
- Environmental conditions.

c. Air defense, REC, and tactical aircraft will present continuous hazards for air ambulance crews. Long-range fire support systems including tube artillery, multiple rocket launchers, and armored cavalry vehicles threaten ground support operations in the forward areas. Nuclear, biological, and chemical weapons constitute a threat throughout the battle area, while UW operations are expected to be concentrated in the rear areas. Lasers and other DE weapons are anticipated on future battlefields.

d. For a discussion of medical operations in LIC, refer to FM 8-42.

1-3. Medical Evacuation

Medical evacuation is the timely, efficient movement and en route care by medical personnel of the wounded, injured, or ill persons from the battlefield and other locations to MTFs. The gaining MTF is responsible for arranging for evacuation of patients from the lower echelon of care. For example, Level (Echelon) II HSS units are responsible for evacuating patients from Level (Echelon) I HSS units. Evacuation begins when medical personnel receive the injured or ill soldier and continues as far rearward as the patient's medical condition warrants or the military situation requires.

1-4. Theater Evacuation Policy

a. The theater evacuation policy is established by the Secretary of Defense, with the advice of the Joint Chiefs of Staff, and upon the recommendation of the theater commander. The policy establishes, in number of days, the maximum period of noneffectiveness (hospitalization and convalescence) that patients may be held within the theater for treatment. This policy does not mean that a patient is held in the TO for the entire period

of noneffectiveness. A patient who is not expected to be ready for RTD within the number of days established in the theater evacuation policy is evacuated to the continental United States (CONUS) or some other safe haven. This is done providing that the treating physician determines that such evacuation will not aggravate the patient's disabilities or medical condition. For example, a theater evacuation policy of 60 days does not mean that a patient is held in the theater for 59 days and then evacuated. Instead, it means that a patient is evacuated as soon as possible after the determination is made that he cannot be returned to duty within 60 days following admission.

b. To the degree that unplanned for increases in patients occur (due perhaps to an epidemic or heavy combat casualties), a temporary reduction in the policy may be necessary. This reduction is used to adjust the volume of patients being held in the TO hospital system. A reduction in the evacuation policy increases the number of patients requiring evacuation out-of-theater, and it increases the requirement for evacuation assets. This action is necessary to relieve the congestion caused by the patient increases. A decrease in the theater evacuation policy increases the evacuation asset requirements.

c. The time period established in the theater evacuation policy starts on the date the patient is admitted to the first hospital (combat zone [CZ] or COMMZ). The total time a patient is hospitalized in the theater (including transit time between MTFs) for a single, uninterrupted episode of illness or injury should not exceed the number of days stated in the theater evacuation policy. Though guided by the evacuation policy, the actual selection of a patient for evacuation will be based on clinical judgment as to the patient's ability to tolerate and survive the movement to the next level of hospitalization.

1-5. Planning for Health Service Support

a. In the AirLand Battle, the extended battlefield stretches HSS capabilities to the maximum. It presents an unprecedented challenge to the HSS planner as well as to the tactical commander. While the *responsibility* for what is or is not done is the tactical commander's alone, he

must rely on his staff and his subordinate commanders to execute his decisions. It is imperative that the HSS planner be involved in the initial stages of the planning process. A thorough understanding of the tactical commander's plan is necessary for medical commanders to maintain HSS to sustain the tactical commander during the absence of orders and communications. Health service support planning is an intense and demanding process (FM 8-55). The planner must know—

- do.
 - What each supported element will do.
 - When it will be done.
 - How it will be done.
 - What the organic medical capability is of the supported units.

b. The planner must foresee actions beforehand to be able to plan for positive and responsive support to each element supported. He must be prepared to meet the requirements for—

- Evacuation.
- Hospitalization.
- Health service logistics.
- Laboratory services.
- Blood management.
- Dental services.
- Veterinary services.
- Preventive medicine (PVNTMED) services.
- Combat stress control.
- Command, control, and communications.

c. Planning must be proactive rather than reactive. Commanders must be able to allocate medical resources as the tactical situations change.

d. On the integrated battlefield, medical units can anticipate situations in which large numbers of patients are produced in a relatively short period of time. These mass casualty situations will exceed local HSS capabilities.

(1) Key factors for effective mass casualty management are on-site triage and emergency medical treatment (EMT), effective communications, and skillful evacuation by ground and air resources.

(a) The objective of providing the greatest good for the greatest number is achieved by medical units maximizing the use of available resources and prioritizing missions.

(b) To free medical personnel from nontreatment duties, nonmedical personnel may have to serve as litter bearers, perform rescue operations, or other nonmedical tasks, as required.

(2) Mass casualty situations require that all personnel *unite their efforts* to bridge the gap between casualties and medical capabilities. Effective self-aid, buddy aid, and combat lifesaver functions are critical factors that enhance the survivability of the wounded soldier.

1-6. Focus of Health Service Support

The successful execution of the AirLand Battle offers significant challenges to the commander and the planner. As the battlefield becomes increasingly lethal, sustaining the health of the fighting forces becomes a critical factor in the success or failure of the mission. Comprehensive planning enhances the capability of medical units to provide effective HSS and ultimately increases the chances for survival of the wounded soldier. Forward support characterizes the role that HSS must assume. The thrust of HSS is to maximize the RTD rate. This conserves the human component of the tactical commander's weapons system.

Section II. HEALTH SERVICE SUPPORT

1-7. General

a. A TO is that area of land, sea, and air necessary to conduct and sustain combat operations. United States forces deployed to the TO may range from a relatively small task force to a full array of large land, sea, and air forces. The theater is normally divided into a CZ and a COMMZ. The CZ begins at the corps rear boundary and extends forward to the extent of the corps commander's area of influence. The COMMZ begins at the corps rear boundary and extends rearward to include areas necessary to provide support to forces in the CZ. Those units situated within the COMMZ sustain the fighting base of troops by providing administrative and logistical support to the CZ and area support to the forces in the COMMZ.

b. The HSS mission—to conserve the fighting strength—dictates that patients be collected, triaged, treated, and returned to duty as far forward as possible.

c. The multifunctional HSS system operates as a single integrated system that extends from the forward areas of the CZ to the zone of interior (ZI) or CONUS. This system is dependent upon effective medical regulating and the evacuation of sick, injured, and wounded soldiers in the shortest possible time. The patients are evacuated to MTFs capable of providing the required treatment.

1-8. Modular Medical Support

a. Health service support in the division is provided by a modular support system that standardizes all medical subelements. The HSS modular design enables the medical resources manager to rapidly tailor, augment, reinforce, or reconstitute the HSS units as needed. This system is designed to acquire, receive, and triage patients, and to provide EMT and advanced trauma management (ATM). Health service support originates in the forward areas with the combat lifesaver and combat medic

(aidman) supporting each combat team. From this point, the patient is evacuated to the battalion medical platoon or section treatment squad (battalion aid station [BAS]), and then to the medical company treatment platoon (division clearing station).

b. The modular medical support system is built around six modules. These modules are oriented to casualty collection, treatment, and RTD or evacuation.

(1) *Combat medic.* The combat medic module consists of one combat medical specialist and his prescribed load of medical supplies and equipment. Combat medics are organic to the medical platoons or sections of combat and combat support (CS) battalions and are attached to the companies of the battalions.

(2) *Ambulance squad.* An ambulance squad is comprised of four medical specialists and two ambulances. This squad provides patient evacuation throughout the division and provides en route care. Ambulance squads are organic to the medical platoons or sections in maneuver battalions, and to the medical companies of the division support command (DISCOM). Medical company ambulance squads are located in both the brigade support area (BSA) and the division support area (DSA). The medical platoon's ambulance squads are collocated with the BAS and further attached to the companies of the maneuver battalions.

(3) *Treatment squad.* This squad consists of a primary care physician, a physician assistant (PA), and six medical specialists. The squad is trained and equipped to provide ATM to the battlefield casualty. Advanced trauma management is physician- or PA-directed emergency medical care designed to resuscitate and stabilize the patient for evacuation to the next level of medical care, or to treat and RTD. Advanced trauma management provides maximum benefit if received within 60 minutes of injury. To maintain contact with the combat maneuver elements, each squad has two emergency treatment vehicles. Each squad can split into two treatment teams. These

squads are organic to medical platoons or sections in maneuver battalions and designated CS units, as well as being the basic building block of the medical company.

(4) *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 is organic to the medical companies within the BSA and DSA.

(5) *Patient holding squad.* This squad consists of two practical nurses and two medical specialists. It is capable of holding and providing minimal care for up to 40 RTD patients. This squad is organic to the medical companies within the BSA and DSA.

NOTE

When a treatment squad, an area support squad, and a patient holding squad are collocated, they form an *area support section*. This section provides HSS on an area basis to all forces within a geographical area of responsibility (clearing station). The area support section normally operates in the BSA and the DSA. The area support and patient holding squads are incapable of independent operations.

(6) *Surgical squad/detachment.* This module is comprised of two surgeons, two nurse anesthetists, two operating room specialists, one medical/surgical nurse, and two practical nurses. It is organized to provide early resuscitative surgery for seriously wounded or injured patients, to save life, and to preserve physical function. Early surgery is performed whenever a likely delay in the evacuation of a patient threatens life or the quality of recovery. Postsurgical patients awaiting evacuation are held by the patient holding squad. This squad collocates with the surgical modules. The surgical squad provides the required nursing care. Surgical squads are organic to the medical battalions of the airborne and air assault divisions. All

other surgical modules are called detachments. These detachments are not organic to divisions. They normally are employed in the DSA but may be employed in the BSA during brigade task force operations.

1-9. Levels of Health Service Support

There are four levels of HSS that have a direct impact on patients as they are treated and evacuated from the forward line of own troops (FLOT) to the CONUS base.

a. *Level I.* Care is provided by designated individuals or elements organic to combat and CS units, and elements of the area support medical battalion (ASMB). Major emphasis is placed on those measures (maintain airway, stop bleeding, prevent shock) necessary to stabilize the patient and allow for evacuation to the next level of care.

(1) *Individual.* Immediate far forward care consists of those lifesaving steps that do not require the knowledge and skill of a physician. Three different skill levels of personnel provide the care required in the forward area and form a major source of RTDs.

(a) *Self-aid and buddy aid.* The individual soldier is trained to be proficient in a variety of specific first-aid procedures with particular emphasis on lifesaving tasks. This training enables the soldier, or a buddy, to apply immediate care to alleviate a life-threatening situation.

(b) *Combat lifesaver.* Enhanced medical training is provided to selected individuals who are called *combat lifesavers*. These individuals are *nonmedical* unit members selected by their commander for additional training to increase medical skills beyond basic first-aid procedures. A minimum of one individual per squad, crew, team, or equivalent-sized unit is trained. All combat units and some CS and combat service support (CSS) units have combat lifesavers. The primary duty of these individuals does not change. The additional duties of combat lifesavers are performed when the tactical situation permits. These individuals assist the combat medics by providing immediate care for

injuries. The training is normally provided by medical personnel assigned or attached to the unit. The training program is managed by a senior medical person designated by the commander.

(c) *Combat medic.* This is the first individual in the HSS chain who makes medically-substantiated decisions based on medical military occupational specialty (MOS)-specific training.

(2) *Treatment squad (battalion aid station).* Personnel are trained and equipped to provide ATM to the battlefield casualty. Like elements provide this level of care in the division, corps, and COMMZ. Level I care for units not having organic Level I capability is provided on an area basis by the organization responsible in the sector.

b. *Level II.* At this level, care is rendered at the clearing station (division or corps). Here the casualty is examined and his wounds and general status are evaluated to determine his treatment and evacuation precedences, as a single casualty among other casualties. Emergency medical treatment, including beginning *resuscitation*, is continued, and, if necessary, additional emergency measures are instituted, but they do not go beyond the measures dictated by the immediate necessities. The division clearing station has a whole blood capability and limited x-ray and ambulatory services. Division-level HSS also includes PVNTMED and combat stress control. Those patients who can RTD within 1 to 3 days are held for treatment. These functions are performed typically by company-size medical units organic to brigades, divisions, and ASMBs.

c. *Level III.* At this level, the patient is treated in an MTF staffed and equipped to provide resuscitation, initial wound surgery, and post-operative treatment. Patients who are nontransportable due to their medical condition may receive immediate surgical care in a hospital in the division rear area (mobile army surgical hospital [MASH]). Those patients whose injuries permit further movement without detriment to their condition receive surgical care in a hospital farther to the rear. Those patients who are expected to RTD are regulated to a facility that has the capability for reconditioning and rehabilitation.

d. *Level IV.* In Level IV of medical care, the patient is treated in a hospital staffed and equipped for general and specialized medical and surgical care and reconditioning and rehabilitation for RTD.

e. *Continental United States Base Support.* Although the CONUS base is not a level of medical care, further HSS is found in CONUS hospitals. Mobilization requires expansion of military hospital capacities and the inclusion of Veterans Administration and civilian hospital beds in the HSS system to meet the increased demands created by the evacuation of patients from the TO. The CONUS-based hospitals represent the most definitive medical care available within the HSS system.

1-10. 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 operational plan (OPLAN) can the HSS planner ensure adequate HSS at the right time and place.

b. *Continuity.* Health service support must be continuous since an interruption of treatment may cause an increase in morbidity and mortality. Procedures are standardized at each organizational level to ensure that all required medical treatment at that level is accomplished. *No patient is evacuated any farther to the rear than his physical condition or the military situation requires.*

c. *Control.* Control of medical resources must rest with the medical commander. Health service support staff officers must be proactive and keep their commanders apprised of the impact of future operations on HSS assets. The HSS system must be responsive to a rapidly changing battlefield and must support the tactical plan in an effective manner. The medical commander must be able to tailor medical organizations and direct them to focal points of demand throughout his area of operations (AO). For this reason, HSS units normally maintain unit integrity for command and control. Treatment performed at each level of the HSS system must be commensurate with available HSS resources. Since these resources are limited, it is essential that their

control be retained at the highest HSS level consistent with the tactical situation.

d. Proximity. The location of HSS assets in support of combat operations is dictated by the tactical situation (mission, enemy, terrain, troops, and time available [METT-T] factors), the time and distance factor, and the availability of evacuation resources. The speed with which medical treatment is initiated is extremely important in reducing morbidity and mortality. Medical evacuation time must be minimized by the efficient allocation of resources and the judicious location of MTFs. The MTF cannot be located so far forward that it interferes with the conduct of combat operations or is subjected to enemy interference. Conversely, it must not be located so far to the rear that medical treatment is delayed due to the lengthened evacuation time.

e. Flexibility. Since a change in tactical plans or operations may require redistribution or relocation of medical resources, the HSS plan must be flexible. The medical commander must be able to shift medical resources to meet the changing requirements. No more medical resources should be committed nor MTFs established than are required to support expected patient densities. When the patient load exceeds the means available for treatment, it may be necessary to give priority to those patients who can be returned to duty the soonest rather than those who are more seriously injured. This ensures the manning of the tactical commander's weapons systems.

f. Mobility. Since contact with supported units must be maintained, HSS elements must have mobility comparable to that of the units they support. Mobility is measured by the extent to which a unit can move its personnel and equipment with organic transportation. When totally committed to patient care, a HSS unit can regain its mobility only by immediate patient evacuation. When the mobility of the unit is jeopardized by the accumulation of patients, it may be necessary to leave a small holding element with the patients.

1-11. Capabilities of Health Service Support

a. The HSS capabilities of each level are designed to meet the characteristics of the opera-

tional environment. They play a specific part in the phased treatment, hospitalization, and evacuation of the sick, injured, or wounded soldier. Each successive level of HSS has the capability to perform functions of the lower level and has additional capabilities that cannot be located farther forward. This allows higher HSS levels to reconstitute lower levels and to provide HSS on an area basis.

b. Prevention begins with the individual soldier's awareness of the means to protect himself against disease through health and personal hygiene education, stress management, proper nutrition, physical fitness, and other similar measures. This awareness is further enhanced through—

- Expanded self-aid, buddy aid, and combat lifesaver training programs.
- Continuous interface with unit- and division-level medics.
- Preventive medicine programs.
- Combat stress control training.
- Leadership emphasis at all levels of command.

NOTE

Prevention is the most effective, least expensive method of providing the commander with sustained combat power.

c. Medical elements within the division require flexibility and responsiveness if they are to provide effective and timely HSS. Effective HSS enables rapid treatment and RTD for those casualties who are either sick or suffering from minor wounds or injury. More seriously wounded patients can be provided with prompt stabilizing treatment and evacuated to a hospital equipped to provide for their needs.