FM 8-15

WAR DEPARTMENT

MEDICAL FIELD MANUAL

MEDICAL SERVICE OF THE CORPS AND ARMY

February 25, 1941

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The Surgeon General

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MEDICAL SERVICE OF THE CORPS AND ARMY

CHAPTER 1

CHARACTERISTICS COMMON BOTH TO CORPS AND ARMY

■ 1. PURPOSE AND SCOPE.—This manual deals with the medical service provided in the corps and the army. While the medical services of the corps and of the army differ in scope and in details of organization, the two have some features in common. To avoid repetition, this chapter is devoted to the broad general aspects of the medical service common to both echelons. The special aspects of each will be discussed in succeeding chapters.

■ 2. ECHELONS OF MEDICAL SERVICE.—The echelons of medical service do not correspond with the echelons of command and are not to be confused therewith. A single echelon of command, as for example the army, may include as many as three echelons of medical service. The several echelons of medical service are—

a. First echelon medical service is that provided by attached medical personnel to every unit of every arm and service (except medical) of the size of a battalion or larger, whether such unit be an element of a division, corps troops, army troops, or GHQ Reserve; or whether it be a separate command not a part of a larger tactical or administrative unit. Thus, first echelon medical service is to be found in every echelon of command.

b. Second echelon medical service comprises the collection of casualties from the dispensaries and aid stations of the first echelon and their concentration in one or more clearing stations operated by the second echelon. It is a function of division, corps, and army medical service.

c. Third echelon medical service comprises the evacuation of the clearing stations of the second echelon, with the transfer of the evacuees to, and their hospitalization in, surgical or evacuation hospitals operated by the third echelon. Third echelon medical service is not a normal function either of division or of corps medical service, but is usually reserved to army medical service.

d. Fourth echelon medical service includes the evacuation of the evacuation hospitals of the third echelon with the transfer of the evacuees to, and their hospitalization in, general hospitals. It is a function of the medical service of the theater of operations.

e. If there is further evacuation of casualties to the zone of the interior, such service constitutes a *fifth echelon of medical service,* and is a function of GHQ. See FM 100–10.

■ 3. EVACUATION POLICIES.—*a. Definition.*—The decision habitually to retain for definitive treatment within a command any class or group of casualties is the evacuation policy of that command.

b. Bases upon which evacuation policies are established.—(1) *Duration of treatment.*—(*a*) Expected duration of treatment is the only practicable basis upon which the evacuation policy of a corps or army can ordinarily be established. Such a policy provides that all such cases that may reasonably be expected to be fit for full duty within a specified time shall be retained for definitive treatment, and all other cases evacuated from the command.

(*b*) Obviously such classification cannot be made with exactitude, and some patients retained initially will require reclassification and evacuation later. Even so, the sorting of casualties on this basis will materially lower evacuation requirements.

(2) Other bases are used in higher echelons, but are rarely practicable in the corps and army. In the AEF, for example, the basis was the expected result rather than duration of treatment. Only such cases were evacuated to the zone of the interior as were expected to be unfit for further military service.

(3) Another basis is the class of disease or injury. A policy based upon this provides that only certain types of disease, such as communicable, shall be retained or evacuated; or that only certain types of injuries, such as fractures, head injuries, injuries from chemical agents, etc., shall be retained or evacuated.

c. Nontransportables.—Regardless of any established evacuation policy, there is usually a small proportion of patients who cannot be transported without grave added danger to life or limb. These patients are termed nontransportables—although, obviously, the term is relative. In the absence of a specific directive from the commander, the disposition of nontransportables is a medical decision.

d. Decision.—The establishment of an evacuation policy is a command decision which may, at any time, be modified or abolished by the commander. It is the responsibility and duty of the surgeon to advise the commander in this matter.

e. Factors to be considered in establishing an evacuation policy.—(1) *Mobility of medical service.*—The medical service of a command must, whenever possible, as a whole be kept as mobile as the command. Medical installations of mobile commands should never be permitted to become immobilized through the accumulation of unevacuated patients.

(2) *Mobility of the command.*—Mobility is a relative, not an absolute, quality. The mobility required of the medical service depends upon the mobility of the command; and a corps, as a whole, moves less rapidly than one of its divisions; and the army, as a whole, moves less rapidly than any of its subordinate elements. Corps and army medical installations, therefore, need not be as mobile as those of divisions, although the corps medical service should be more mobile than that of the army.

(3) *Anticipation of movement.*—Because of size and complexity, corps and armies must anticipate movement for longer times than must divisions. Several hours ordinarily are required in the case of corps, and the time may run into days in the case of an army. This allows the medical service time to evacuate retained cases in the higher echelons.

(4) *Transportability of short duration cases.*—The physical condition of short duration cases, excluding those the out-

come of which is fatal, is ordinarily such that they can be moved readily and rapidly whenever complete evacuation of a medical installation is necessary.

(5) *Reduction of turnover in organizations.*—Until he has become familiar with his new organization, and his new commander has come to know his capabilities and limitations, a replacement rarely is as effective as the veteran whose place he takes. This is especially true in corps and army troops in which the proportion of technical specialists is high. Efficiency will be promoted by any practicable means by which the turnover of personnel can be reduced.

(6) *Reduction in replacement administration.*—For every casualty evacuated, two men must be moved—the casualty to the rear and his replacement to the front. Obviously, then, for every casualty that can be returned to his organization within a reasonable time, the movement of two individuals is made unnecessary.

(7) *Reduction in evacuation requirements.*—Every effort must be made to avoid loading the chain of evacuation beyond its peak efficiency through evacuation of patients whose conditions justify returning to duty at an early date. For reduction in evacuation requirements, see (8) below.

(8) *World War experience in short duration cases.*—The sources of error in the following data lie largely on the side of conservatism since frequently cases recovered en route or in intermediate installations where administrative difficulties precluded their immediate return to duty. For this reason many cases were retained on sick report longer than they would have been had they been treated within their own commands. In support of this contention it is submitted that the average duration of treatment of all cases of sickness and nonbattle injuries in the World War was—in the United States, where local treatment was the rule, 20 days; in the AEF, where a considerable proportion was evacuated, 27 days.

Duration of treatment in the AEF			
Percentage of patients			Returned to duty in—
Sick and nonbattle injuries	Gunshot wounds	Gas casualties	
5.35	0.10	1.97	1 day
10.25	.33	3.95	2 days
14.75	.66	5.94	3 days
18.91	1.09	7.94	4 days
22.74	1.60	9.94	5 days
26.28	2.20	11.94	6 days
29.56	2.86	13.92	7 days
32.60	3.59	15.89	8 days
35.42	4.37	17.84	9 days
38.05	5.20	19.77	10 days

■ 4. PREVENTIVE MEDICINE.—*a. Definition.*—Preventive medicine includes all measures directed toward the prevention of disease and injury. The term sanitation is synonymous but common usage has largely restricted it to the control of environment as distinguished from personal hygiene and control of the individual.

b. General considerations.—(1) The conservation of mobilized manpower is one of the basic missions of the medical service. This is accomplished by the prevention of disease and injury, and by the repair of such disability as arises out of failure of prevention.

(2) Physical condition is a critical factor in the combat efficiency of troops. Military history offers numerous examples of battles that were lost and campaigns that failed solely because of sickness among the soldiery. The physical strain in modern warfare has increased the importance of physical condition. Situations will arise in every war in which the health of troops must be subordinated for the time

to military necessity; but consistent disregard of the health of troops will, as it always has in the past, lead to disaster.

c. Responsibility.—(1) *Commanding officers.*—Commanding officers of all grades are responsible for sanitation and for the enforcement of the provisions of sanitary regulations and orders within their organizations and the boundaries of areas occupied by them. Generous use should be made of the technical knowledge and advice of Medical Department officers but commanding officers retain full responsibility for the initiation and enforcement of suitable measures for the correction of sanitary defects.

(2) *Medical Department.*—The Medical Department is responsible for investigating, reporting on, and making recommendations relative to all matters affecting the health of the Army, including the location of camps and stations, the source and methods of purification of the water supply, the methods and efficiency of waste disposal, the food supply and the sanitation of messes, the suitability of clothing and housing of troops, efficiency of training in personal hygiene and sanitation, the elimination of insects, and all other measures for the prevention or control of disease.

d. Scope.—Every contact and every activity of the soldier, which may affect his physical fitness, is a proper concern of the surgeon. In this connection it must be remembered that injury is just as disabling as, and often more easily prevented than, disease.

e. Prevention of disease.—See FM 8–40.

f. Prevention of injury.—(1) *Nonbattle injuries.*—Carelessness in the handling of animals and matériel is productive of a high injury rate. The surgeon should examine the admissions to sick report, by cause by organization, to determine the sources of avoidable injuries; study, in collaboration with organization commanders, the causes of injuries; and advise his commander regarding measures to reduce accidents.

(2) *Battle injuries.*—Battle injuries can be reduced without interfering with the primary missions of troops. One notable example of this type of prevention is the steel helmet. The high proportion of head injuries in the World War, due to

the combined effects of fragmenting missiles and trench warfare, led the medical services of all armies to suggest that measures be taken to protect the head. The gas mask is another example. It is a responsibility of medical service to study this problem.

g. Inspections.—It is a staff responsibility of the surgeon to insure, by inspections and reports, that the directives of the commander in the field of preventive medicine are being enforced in all subordinate echelons.

CHAPTER 2

MEDICAL SERVICE OF THE CORPS

■ 5. DEFINITION.—The term corps is used to designate two entirely different types of military organization—administrative and tactical. When used in connection with administrative organization, it refers to a group of personnel with common characteristics, training, and missions; such as the Coast Artillery Corps, the Air Corps, and the Medical Corps. When used in connection with tactical organization, however, it refers to the highest subordinate echelon of command in an army and is commonly designated as an army corps. Unless specified in each instance, the latter definition obtains throughout this manual.

■ 6. GENERAL CHARACTERISTICS OF THE CORPS.—*a. General functions.*—The corps is primarily a tactical unit of execution and maneuver. It is an agency for the coordination of the tactical operations of such divisions as may be assigned to it, directing their actions and supporting them with additional means at its disposal.

b. Organization and special functions.—(1) The permanent organization of a corps consists of a headquarters and of certain corps troops. Divisions are not permanent components of a corps.

(2) *Corps headquarters.*—The command posts of the chief of artillery and engineer are usually established at or near the forward echelon of corps headquarters.

(3) *Corps troops.*—Permanently assigned to the corps are units of—

(*a*) *Cavalry.*—One regiment of horse and mechanized cavalry for reconnaissance, security, and such other cavalry missions as may be required.

(*b*) *Field Artillery.*—To undertake fire missions associated with the action of the corps as a whole; to engage in counter-battery and interdiction fires, so as to permit the bulk of the division artillery to devote its efforts to direct support of the infantry; and to reinforce the fires of the division artillery.

The corps artillery includes a field artillery brigade composed of a headquarters, a headquarters battery, two regiments of 155-mm howitzers, one regiment of 155-mm guns, and an observation battalion.

(*c*) *Coast Artillery Corps (antiaircraft).*—To provide antiaircraft protection to the divisions and to corps troops and installations. The corps antiaircraft artillery consists of one antiaircraft regiment and one separate battalion of 37-mm antiaircraft guns.

(*d*) *Corps of Engineers.*—Two regiments of combat engineers and one topographic company to perform engineer tasks in the corps area in rear of division boundaries; to undertake in division areas special tasks beyond the capabilities of division engineers; to reinforce division engineers; and for mapping.

(*e*) *Air Corps.*—An observation group of three squadrons for reconnaissance and other observation missions for the corps or its divisions.

(*f*) *Signal Corps.*—A signal battalion to construct, maintain, and operate the signal communications of the corps.

(*g*) *Military police.*—One military police company to control the corps area in rear of division boundaries, and to relieve the divisions of their prisoners of war.

(*h*) *Ordnance Department.*—For the supply and maintenance of the ordnance matériel of corps troops, and for the maintenance of division ordnance. Ordnance troops include a headquarters detachment and three medium maintenance companies.

(*i*) *Quartermaster Corps.*—A service company, a gasoline supply company, a light maintenance company, and two truck companies for the supply of corps troops; for the maintenance of corps and division motor transport; and to supplement division motor transport when necessary.

(*j*) *Medical Department.*—A medical battalion for the second echelon medical service of corps troops. The battalion comprises a battalion headquarters detachment, three collecting companies, and one clearing company.

(4) *Divisions.*—(*a*) Divisions are assigned to and relieved from a corps by the army commander. The number of divisions assigned to a corps varies with the situation and the

mission. The number may be changed during the course of any operation, divisions being added or taken away as the situation indicates.

(*b*) The type army corps is one of three divisions. Because the type corps is used generally in instruction, it must not be inferred that the corps is a fixed unit of this size. The principal characteristic of the organization of a corps is its flexibility with respect to the number of divisions that it controls.

■ 7. ADMINISTRATIVE RESPONSIBILITY OF THE CORPS.—*a. General.*—The corps, when part of an army, is not a link in the chain of supply, evacuation, and replacements for its divisions, except in the supervision of requisitions for and allocations of ammunition and personnel. See FM 100–10. Its trains normally carry no reserve supplies for its divisions. Its administrative functions are limited to those incident to the requirements of corps troops. When a corps is detached from the army for both operations and administration, it becomes in effect a small army with all the administrative functions normally performed by the army. In such a situation it requires a considerable reinforcement in service units. See chapter 3.

b. Personnel.—The strength returns of divisions pass through corps headquarters, since strength is an important limiting factor in tactical operations. Replacements are ordinarily allocated to the corps and the corps indicates the distribution desired among corps troops and the divisions. Except those for corps troops, however, such replacements are not reported in person to the corps, but are reported directly to the divisions in the numbers, grades, and branches indicated by the corps commander.

c. Supply.—Supplies that are intimately associated with tactical operations, such as ammunition and engineer materials, are usually allocated to the corps. The corps indicates their distribution on the basis of the situation and the missions of the several subordinate elements; and, except those destined for corps troops, such supplies are distributed directly to divisions which send their own organic transportation direct to supply points or depots to obtain the desired items.

d. Evacuation.—Unless otherwise arranged by higher authority, or assumed by the corps commander in the interest of tactical success, the responsibility of the corps for medical service is limited to that in connection with corps troops. This includes first echelon service in the units of corps troops, and second echelon service by the corps medical unit.

■ 8. GENERAL ORGANIZATION OF THE MEDICAL SERVICE OF THE CORPS.—The medical service of the corps is organized into two echelons, namely—

a. The *attached medical personnel* comprising the medical detachments of the units of corps troops.

b. The *corps medical service* which, in turn, is composed of—

(1) The *headquarters corps medical service,* which includes the corps surgeon and his commissioned and enlisted assistants through which he exercises his staff and command functions. See paragraph 9*b*.

(2) The *corps medical battalion,* which is an element of corps troops.

■ 9. CORPS SURGEON.—*a. Selection.*—See FM 8–55. The corps surgeon is the senior officer of the Medical Corps assigned to the corps medical unit.

b. Staff responsibilities peculiar to the corps.—For the staff responsibilities common to surgeons of all larger units, see FM 8–55. In addition, the corps surgeon must—

(1) Keep the corps commander advised of the medical situation in all divisions of the corps insofar as it exerts any influence upon tactical operations. The corps commander ordinarily has no responsibility in connection with the administrative functions of his divisions, which includes medical service. However, when administrative matters impose limitations upon tactical plans, they come within the proper scope of interest of the corps commander. The corps surgeon must, therefore, keep himself informed and the corps commander advised of the needs of division medical services to meet problems imposed upon them by corps plans.

(2) Be prepared to elaborate the details involved in the discharge of any responsibility for division medical service

which may be placed upon the corps commander. When the corps is operating independently, this includes all the functions of the army surgeon (see chapter 3). In other situations, certain responsibilities of army service may be decentralized to corps.

(3) Be prepared to arrange and reinforce division medical services from the corps medical service at such times as reinforcements cannot be had from the army medical service. Such action will be of the nature of meeting an emergency since the bulk of the corps medical battalion, in the usual situation, will be occupied with the medical service of corps troops.

c. Command responsibilities.—The corps surgeon commands—not directly as in the case of the division surgeon, but through unit commanders in a subordinate echelon of command—

(1) The corps medical battalion.

(2) All other medical units which may be assigned or attached to the corps and which are not, in turn, assigned or attached to a subordinate element of the corps.

d. The corps surgeon is accounted for on the returns of corps headquarters.

■ 10. RELATIONS OF THE CORPS SURGEON TO DIVISION SURGEONS.—*a.* The relations of the corps surgeon to division surgeons depend upon the administrative organization prescribed in the army. Operating as part of an army, the corps has no responsibility for division medical service.

b. However, when the army decentralizes any of its responsibility for evacuation to the corps, or when, because of its bearing upon tactical operations, the corps commander assumes any control of division medical service, as a staff officer of the corps commander the corps surgeon exercises technical supervision over division medical services to the extent that the corps commander is interested or responsible. In no case does the corps surgeon exercise command authority over division surgeons.

■ 11. HEADQUARTERS CORPS MEDICAL SERVICE.—*a. General.*—(1) The purpose of the headquarters corps medical service being to assist the corps surgeon in the discharge of his staff duties,

it follows that its organization should be based upon the principal functions of the corps surgeon. While no details of this organization have ever been prescribed, the major staff responsibilities of the corps surgeon fall into certain well-defined categories which may be made to serve as the basis of the organization of the headquarters corps medical service.

(2) Listed in succeeding subparagraphs are the general functions and responsibilities that may be allocated to divisions or subordinate sections. Limitations in personnel may require that two or more major functions be consolidated into one division. Furthermore, the importance of certain functions will vary with the location of the theater of operations and the general military situation, and this may require a redistribution of personnel. For these reasons, no fixed organization can, or should be prescribed, and the discussion that follows is intended merely as a guide to the organization of the headquarters corps medical service.

b. Administrative division.—Routine general administration, personnel administration, coordination of other divisions, and all miscellaneous matters that do not come within the scope of another division.

c. Preventive medicine division.—All matters pertaining to the prevention and control of disease, including supervision of sanitation, hygiene of food and water, field investigations, and statistics of diseases and nonbattle injuries. This is an important division under all conditions.

d. Operations and training division.—Medical operations, training of medical troops, evacuation and hospitalization, reports and returns of battle casualties.

e. Dental division.—The corps dental surgeon and his assistants.

f. Veterinary division.—The corps veterinarian and his assistants.

g. Supply division.—Medical supply requirements of corps troops, supply inspection, and, when authorized, the allocation of supplies or supply credits among divisions and corps troops.

■ 12. CORPS MEDICAL BATTALION.—*a. Organization.*—Same as that of the medical battalion of a triangular division. See figure 1 and FM 8–5.

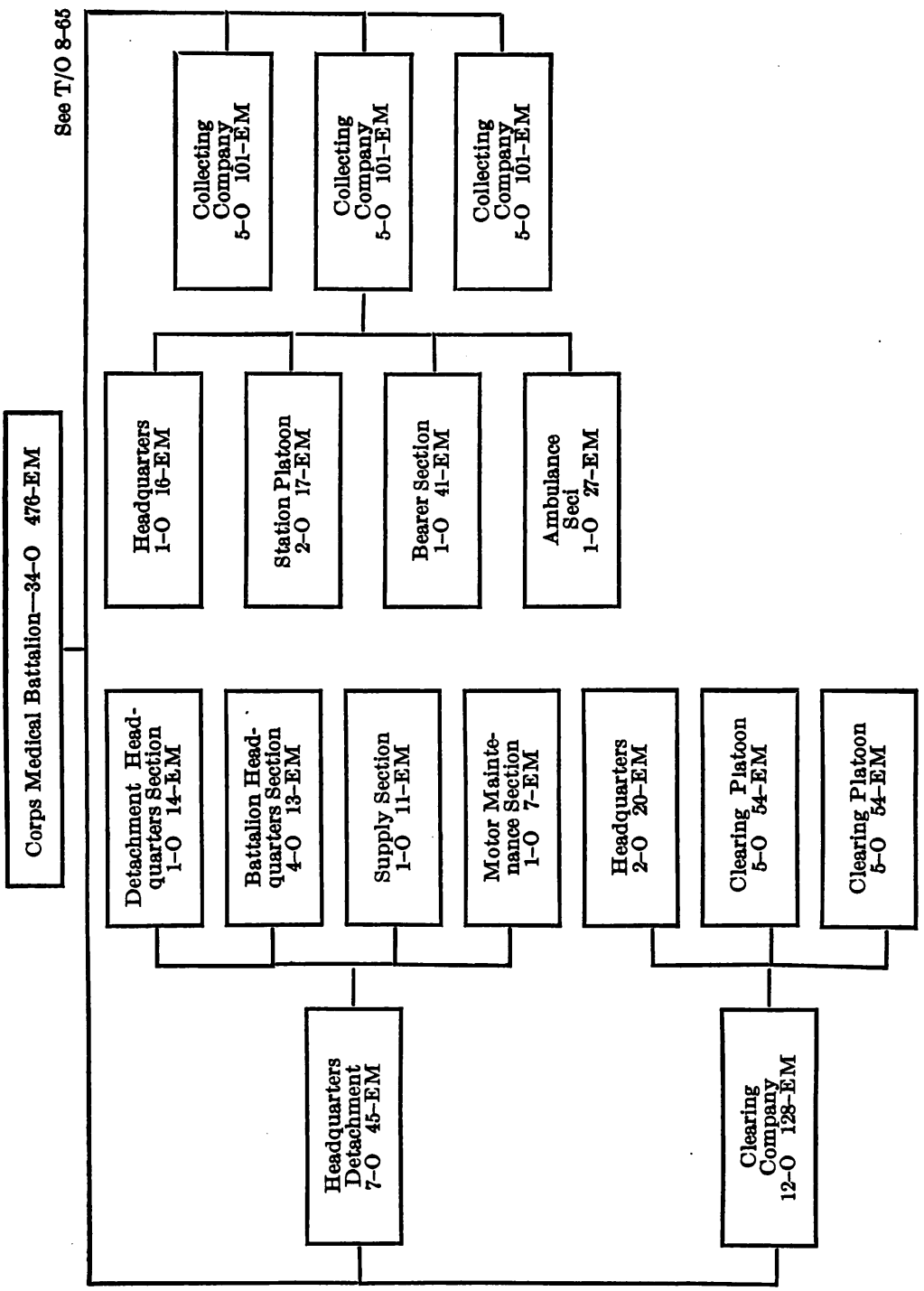

FIGURE 1.—Corps medical battalion.

b. Command.—It is commanded by the senior officer of the medical corps assigned and present for duty therewith. The chain of command is—the corps comander, the corps surgeon, and the medical battalion commander.

c. Functions.—(1) *General.*—The corps medical battalion furnishes to corps troops a medical service similar to that furnished divisions by division medical regiments or battalions. See FM 8–10.

(2) *Second echelon medical service.*—It collects the sick and injured from the aid stations and dispensaries of corps troops and evacuates them to the corps clearing station(s). See paragraph 14.

(3) *Medical supply.*—The headquarters detachment of the corps medical battalion includes the operating agency for the medical supply of all corps troops. See paragraph 20.

(4) *Reinforcement of division medical services.*—See paragraph 9*b*(3).

■ 13. ATTACHED MEDICAL PERSONNEL OF CORPS TROUPS.—The medical detachments of units of corps troops correspond both in organization and functions to their counterparts in the division. When their units are engaged in combat they furnish primary combat medical service. When their units are not engaged actively in combat, and many units of corps troops are employed habitually in rear areas, they furnish a dispensary service. For details, see FM 8–10.

■ 14. MEDICAL SUPPORT OF CORPS TROOPS.—*a. General.*—The general principles governing the medical support of units of corps troops are identical with those governing the medical support of units of the division. For details, see FM 8–10. Casualties are given first aid by unit medical detachments, and collected, sorted, and evacuated by supporting medical troops. The details of the latter operations depend upon the location and nature of employment of the unit.

b. Corps troops employed in division areas.—The establishment of more than one chain of evacuation within a limited area is both uneconomical and productive of confusion. For this reason, whether attached to the division or not, units of corps troops operating within a division area normally are supported by that division medical service. However, particu-

larly when such corps units are not attached to the division, the division surgeon concerned must be informed of the presence of the corps units within his area and instructed concerning his responsibilities therefor.

c. Corps troops employed outside division areas.—(1) *Collection.*—(*a*) Since the aid stations and dispensaries of units of corps troops operating in rear areas ordinarily can be evacuated directly by ambulances, the establishment of collecting stations by the corps medical service for this purpose is rarely indicated. Since, however, ambulance elements are incorporated in corps collecting companies, the responsibility for this evacuation rests with the collecting companies.

(*b*) When collecting stations are established by the corps medical battalion, the same principles of organization and operation govern as in the case of division collecting stations. For details of the employment of collecting units and of evacuation of aid stations and dispensaries by ambulances, see FM 8–10.

(2) *Clearing.*—(*a*) Clearing is an essential function of all second echelon medical service. However, the scope of the functions of a corps clearing station may, under certain conditions, be extended to include the temporary hospitalization of short-duration cases. The corps, as a whole, may be expected to move less rapidly than any one of its divisions. This permits the corps medical service to devote more time to the sorting of casualties and, under average conditions, to retain for definitive treatment for a reasonable time such patients as give promise of early recovery. It must be emphasized, however, that the corps clearing station, no less than that of a division, must not be permitted to lose essential mobility through undue accumulation of patients. It is only that the mobility required of the corps medical services is ordinarily less than that required of division medical service that any accumulation of patients in the corps clearing station can be considered. In some situations it may be as imperative to clear the corps of casualties as it is to clear a division. See paragraph 18.

(*b*) Corps clearing stations should be located so as to be most convenient to the bulk of the troops they support. The

essential characteristics of their sites are the same as those of division clearing stations. For details, see FM 8–10.

■ 15. POSITION OF THE CORPS MEDICAL SERVICE IN THE ARMY CHAIN OF EVACUATION.—The corps medical service and division medical services are in the same medical echelon, which is to say that the casualties of divisions normally are not evacuated through corps medical installations but that the casualties both of divisions and of the corps are evacuated by the army medical service.

■ 16. SPECIAL EMPLOYMENT OF THE CORPS MEDICAL BATTALION.—*a. General.*—It must be remembered that the corps medical battalion is designed primarily to furnish second echelon medical service to corps troops, and that its capabilities ordinarily are exhausted by the discharge of that function. However, situations may arise in which other functions of medical service become of greater importance to the corps commander than the prompt evacuation of his casualties from rear areas. In such cases, he may decide to reduce the second echelon medical service of corps troops, or to arrange with the army to take over a part of that function, and to employ a part of the corps medical battalion on other missions.

b. In support of divisions in reserve.—When divisions of a corps are held in reserve, it may be advantageous to collect and evacuate their casualties with elements of the corps medical unit operating under corps control, thus permitting the division medical services to retain full mobility. When this support is undertaken, reports of casualties evacuated must be furnished the divisions concerned.

c. In support of security detachments.—For a detailed discussion of the medical service of security detachments, see FM 8–10. When a security detachment is operating under corps control, the corps is responsible for its medical service unless the corps commander specifically places such responsibility upon a lower echelon. Division medical services may be reinforced by the corps in order to provide more medical service for division security detachments.

d. In pursuit.—(1) The rapid assembly of an encircling force often presents difficulties, particularly as regards service

elements. The medical elements of an encircling force, other than attached medical personnel, may be furnished from the corps medical unit when withdrawal of such elements from division medical services is not practicable.

(2) As soon as communications are established with the encircling force, it may be advantageous to evacuate this force with ambulance elements of the corps medical unit to a clearing station in rear of the direct pressure force where such casualties can be delivered to the army medical service.

e. In rapid displacements of division clearing stations.—In rapid advances or retrograde movements, clearing elements of the corps medical unit may assist divisions in the establishment of successive echelons of clearing stations. For such purpose they may be attached to divisions as reinforcements; or, when indicated, they may be operated under corps control, but coordinated with division medical services.

■ 17. REINFORCEMENT OF DIVISION MEDICAL SERVICES.—*a. General.*—The normal source of reinforcements for division medical services is the army. The medical needs of the several divisions, as indicated by the situation and their respective missions, are estimated when corps plans are prepared. Any additional medical means required are requested of the army, and, if such medical reinforcements be allocated to the corps, the corps distributes them among the divisions in accordance with their needs as foreseen.

b. In special situations.—When the army is unable to furnish all the medical reinforcements required, or when a necessity arises that could not be foreseen in time for the army to furnish them, parts of the corps medical battalion may be used for this purpose. In this connection, see paragraph 24*a*. However, the corps commander ordinarily is not responsible for the evacuation of divisions, and he may hesitate to assume any such responsibility unless the inadequacy of a division medical service is exerting an adverse influence upon its tactical efficiency. In this latter event, division medical service becomes a tactical consideration and hence a matter of proper concern to the corps commander.

c. Organization of reinforcements.—(1) *Army medical units.*—Medical reinforcements furnished by the army ordi-

narily will be in the form of complete administrative units such as companies. The corps may allocate such complete units to divisions, or may distribute them as indicated in (2) below.

(2) *Corps medical unit.*—Subordinate elements of the corps medical unit may be attached to a division in the form of a complete unit, or a smaller tactical unit such as a platoon or section, or as detchments of mixed units such as one composed of a litter bearer platoon and an ambulance section, or as detchments of individuals. All other considerations being equal, regardless of how small the reinforcement, command control will be facilitated if tactical organization is preserved in attaching reinforcements.

■ 18. EVACUATION POLICY.—See paragraph 3. The proper evacuation policy for a corps depends entirely upon the situation. A safe policy will, in any event, be one which provides for retention for treatment of fewer cases than provided for in the army evacuation policy. But even so conservative a policy as a 2-day policy will appreciably reduce the number to be evacuated.

■ 19. PREVENTIVE MEDICINE AND SANITATION.—See paragraph 4.

a. Extent of responsibility.—The responsibility for prevention and control of disease and injury parallels the responsibility for other aspects of medical service. In general, the responsibility of the corps is limited to corps troops and to such parts of the corps area as lie outside of division boundaries. The army may decentralize to corps the supervision of division sanitation; and when the incidence of disease is reflected in the combat efficiency of a division, it becomes a matter of tactical concern to the corps commander and hence falls within the scope of his responsibilities.

b. Organization.—This phase of medical service is under the direct supervision of the preventive medicine division of the headquarters corps medical service, headed by the corps medical inspector. When not required in combat, the collecting elements of the corps medical unit may be employed in the field work incident to sanitation. For the nature and scope of such employment of collecting units, see FM 8–10.

■ 20. SUPPLY.—*a. Echelons.*—The corps medical service is concerned with two different echelons of supply, namely, the medical supply of all corps troops, and all classes of supply for the corps medical battalion. The fact that all these supply operations center in the supply section of the headquarters detachment of the corps medical battalion must not be permitted to obscure the sharp distinction, both in responsibility and in scope, between these two functions and the important differences in administration.

b. Responsibility.—(1) *Corps medical supply.*—The corps commander is responsible for all supply of corps troops, and the corps surgeon is his staff officer in charge of medical supply.

(2) *Unit supply of the corps medical battalion* is a responsibility of the battalion commander, and his staff includes a battalion supply officer (S–4) who is in direct charge of the details thereof.

c. Organization for supply.—(1) *General.*—All supply operations, as distinguished from planning and control, are centered in the supply section of the headquarters detachment of the corps medical battalion. This section is organized into two distinct groups—one concerned with corps medical supply (see (2) below), and the other with all supply of the medical battalion (see (3) below).

(2) *Corps medical supply.*—The corps surgeon, acting by the authority of the corps commander, plans and controls the medical supply of the corps. His assistant in direct charge of operations is the corps medical supply officer who is, at the same time, the unit supply officer of the corps medical battalion and the commanding officer of the headquarters detachment thereof. Administrative details are handled by the corps medical supply group described in (1) above.

(3) *Unit supply of the corps medical battalion.*—The battalion supply officer (see (2) above) is in direct charge, and administrative details are handled by the unit supply group of the supply section of the headquarters detachment.

d. Procurement.—(1) *Corps medical supply.*—Requisitions for medical supplies are submitted through channels by all unit supply officers of corps troops, including the unit supply

officer of the corps medical battalion. The corps surgeon, by the authority of the corps commander, approves or modifies such requisitions and sends them to the corps medical supply officer. The corps medical supply officer consolidates the requirements and procures the supplies by one of two methods, namely—

(*a*) Submits through channels a consolidated requisition upon the army medical supply officer.

(*b*) If depot credits have been set up in favor of the corps, he draws directly upon such credits.

(2) *Unit supply.*—The unit supply officer of the corps medical battalion consolidates the requirements of the several subordinate elements thereof by procuring branches (quartermaster, engineer, ordnance, medical, supplies, etc.), and submits, through channels, such consolidated requisitions to the proper branch supply officer of the corps. In the case of medical supplies, and for administrative reasons, he submits, as battalion supply officer, through the corps surgeon to himself, as corps medical supply officer, the requisitions for medical supplies required by the medical battalion. The administrative details are, however, handled by the two separate groups of the supply section of his headquarters detachment. (See *c* above.)

e. Distribution.—(1) *Corps medical supply.*—Upon receipt of the supplies, the corps medical supply officer distributes to the several unit supply officers the quantities that they have requisitioned.

(2) *Unit supply.*—Upon receipt of the supplies, the battalion supply officer issues, upon memorandum receipt, to the several subordinate elements of the battalion, the amounts of the several classes of supplies that they have requested.

f. In combat.—The method of distribution of medical supplies in combat is most informal. Every consideration is subordinated to the objective of keeping medical units supplied. The corps medical dump is established in a central location—usually at, or near, the corps clearing station. Requests for supplies are sent there by ambulances or by special messengers, and no formal procedure is required.

■ 21. PLANS AND ORDERS.—*a. Definitions.*—See FM 8–55.

b. The corps medical plan.—(1) *Responsibility.*—The corps surgeon is responsible for the preparation of the corps medical plan.

(2) *Preparation.*—The basis of the plan is the basic decisions of the commander together with supplemental decisions that may be published by, or obtained from, the corps general staff. The plan is drawn by the operations and training division of the headquarters corps medical service. Tentative decisions required during preparation are made by the corps surgeon, who approves the final form in which the plan is submitted for approval.

(3) *Approval.*—The medical plan is tentative until it has been approved by the corps commander. This approval ordinarily is given by G–4 by the authority of the corps commander. When approved and published in administrative instructions, it becomes the basis for all medical dispositions and is equally binding upon all elements of the command.

(4) *Scope.*—The scope of the corps medical plan is governed by the extent of the medical responsibility of the corps commander. In the simplest case it is limited to the details of the medical supply and evacuation of corps troops only, including such other arrangements as may be necessary to carry out these details. If additional medical means be allocated to the corps, the corps medical plan provides for their employment, either under corps control or by further allocation to divisions.

(5) *Form.*—Many forms have been proposed for a medical plan. In this connection, however, it must be remembered that the primary purpose of the medical plan is to furnish a draft of instructions pertaining to the medical service for inclusion in the commander's orders. For this reason, the items of the medical plan should follow the form and general arrangement of the order into which they will be drafted so that each paragraph of the order can be compiled readily by combining, as subparagraphs, the appropriate items of the several staff plans. See FM 8–55.

CHAPTER 3

MEDICAL SERVICE OF THE ARMY

SECTION I

GENERAL CONSIDERATIONS

■ 22. DEFINITION.—The army is the largest tactical unit in the military forces of the United States, the basic organization of which is prescribed and relatively permanent. Larger tactical commands are formed by grouping two or more armies into a combination designated as a group of armies.

■ 23 GENERAL CHARACTERISTICS OF THE ARMY.—*a. General functions.*—The army is the fundamental unit of strategical maneuver. It has territorial, tactical, and administrative functions.

b. Organization and special functions.—(1) The permanent organization of an army consists of a headquarters and of army troops. Two or more corps, consisting of two or more divisions each, complete the organization. While the organization of an army is no more fixed than that of a corps, the strategical nature of its missions ordinarily precludes frequent or important changes in the organic means allotted to it. However, by varying the allocation of divisions to corps to meet changing tactical situations, the army alters its internal organization as the commander sees fit.

(2) Army headquarters includes the commander and his commissioned and enlisted assistants. It is organized into two echelons.

(*a*) The *forward echelon* includes the commander and his aides, the general staff section, field artillery section, antiaircraft artillery section, engineer section, aviation section, signal section, ordnance section, medical section, and a chemical warfare section (for tactical matters).

(*b*) The *rear echelon* includes the adjutant general's section, inspector general's section, quartermaster section, judge advocate's section, and finance section, chemical warfare section (for supply and maintenance), and a chaplain's section.

(3) *Army troops.*—Permanently assigned to the army are units of—

(*a*) *Coast Artillery Corps (antiaircraft).*—One antiaircraft brigade of three regiments for the antiaircraft protection of army installations and to augment the antiaircraft artillery of subordinate echelons.

(*b*) *Corps of Engineers.*—For general engineer tasks in support of the army as a whole and for reinforcing the organic engineers of subordinate echelons; for such special tasks as bridging, map making, camouflaging, and the supply of water and engineer materials.

Army engineer units include—

3 regiments, general service.
6 battalions, separate.
2 companies, dump truck.
2 battalions, heavy ponton.
4 companies, light ponton.
1 battalion, topographic.
1 battalion, camouflage.
1 battalion, water supply.
1 company, shop.
1 company, depot.

(*c*) *Signal Corps.*—For the construction, maintenance, and operation of army signal communications of all types; photography; intercepting enemy radio communications and locating their radio stations; and for the supply of signal materials.

Army signal units include—

2 signal battalions.
1 radio intelligence company.
1 pigeon company.
1 photographic company.
1 depot company.

(*d*) *Air Corps.*—One reconnaissance squadron.

(*e*) *Chemical Warfare Service.*—For the detection and identification of chemical agents; the decontamination of

vital areas and matériel; the impregnation of clothing and other matériel with protective agents; and for the supply and maintenance of chemical warfare materials.

Army chemical warfare units include—

1 chemical field laboratory.
3 chemical decontamination companies.
1 chemical impregnating company.
1 chemical maintenance company.
1 chemical depot company.

(*f*) *Ordnance Department.*—For the supply and maintenance of ordnance matériel, including ammunition.

Army ordnance units include—

1 maintenance battalion, consisting of two medium and one heavy maintenance companies.
2 ammunition battalions, consisting of six companies each.
1 depot company.

(*g*) *Quartermaster Corps.*—For the operation of the general army motor transport, and for the maintenance of all general motor transport in the army; to provide bathing and laundry facilities; and for quartermaster supply.

Army quartermaster units include—

1 regiment, truck.
1 company, car.
3 battalions, light maintenance.
1 battalion, sterilization and bath.
6 battalions, service.
1 battalion, gasoline supply.
1 company, depot (motor transport).
1 company, depot (supply).

(*h*) *Medical Department.*—For the medical service of army troops, and for the evacuation of all subordinate echelons.

Army medical units include —

3 medical regiments.
10 evacuation hospitals.
4 surgical hospitals.
1 convalescent hospital.
1 veterinary company, separate.
1 medical laboratory.
1 supply depot.

(*i*) *Military police.*—One military police battalion to control such parts of the army area as are not controlled by the military police of subordinate echelons, and to relieve subordinate echelons of their prisoners of war.

(*j*) *Infantry, antitank.*—Three antitank battalions.

(*k*) *Headquarters company, field army.*

(4) *Additional army troops.*—Additional troops of any or all arms and services may be assigned from GHQ Reserve. This is almost invariably the practice in the case of Field Artillery, as it will be noted in (3) above, that no field artillery units have been provided. Additional army troops are provided as the mission of the army and the situation indicates, and, when provided, they are controlled by their particular arm or service section in army headquarters.

(5) *Corps.*—To the army may be assigned any number of corps greater than one. The type army, used as a basis of organization and for purposes of instruction, is one of three corps; but this must not be construed as fixing the number of corps in an army.

(6) *Divisions.*—Any number of divisions, greater than three, may be assigned to an army. The type army is one of nine divisions—three corps of three divisions each. The army commander assigns divisions to the corps and relieves them therefrom. He may assign all his divisions to corps, or he may retain some directly under his own control without corps organization.

■ 24. ADMINISTRATIVE RESPONSIBILITY OF THE ARMY.—*a. General.*—The army has full administrative responsibility, including that of supply and evacuation, for all of its component units. It is the next administrative echelon above the division, and it deals directly with divisions in all administrative matters.

b. Personnel.—The army is responsible for all matters affecting the strength, morale, and mobility of its troops. It maintains a replacement depot, or depots, from which it fills the requisitions of its subordinate elements. The strength of replacement depots is maintained at established levels by periodic requisitions on the theater of operations. Replacements are furnished directly to divisions, for units of divisions;

to corps, for corps troops; and to units, for army troops. For the responsibility of corps in the allocation of replacements, see paragraph 7*b*.

c. Supply.—The army is responsible for all classes of supplies, furnished by all arms and services, for its component elements. Each supply arm and service, represented in the army, maintains one or more depots. The army commander determines the levels of stockage to be maintained in army supply depots. The standard unit of measure of stockages is a day of supply. For a definition of a day of supply, see FM 8–55. Levels are maintained in army depots by drawing upon depots in the theater of operations, either by requisition or against established credits. Consolidated requisitions are submitted to the army directly by divisions, for their subordinate elements; by corps, for corps troops; and by units, of army troops. Each such requisition is limited to the supplies furnished by one arm or service, and may further be restricted to one class of supplies. Supplies are distributed through the same channels—delivery ordinarily being made at army depots or railheads. For the responsibility of corps in the allocation of certain supplies, see paragraph 7*c*.

d. Evacuation.—See Section IV.

■ 25. MISSIONS OF ARMY MEDICAL SERVICE.—The basic missions of army medical service are to—

a. Relieve corps and division medical services of continued care and treatment of their sick and injured in such a manner that ther own organic medical services retain full mobility.

b. Furnish direct medical support to the unit medical services of army troops operating outside the zones of responsibility of corps and division medical services.

c. Collect into army installations all evacuees in the army area, there to sort them, continue their care and treatment, and prepare such as require it for further evacuation.

d. Reinforce the medical services of divisions in situations wherein they require greater medical means than are organically provided them.

e. Institute and supervise, through proper channels, all practicable measures that can be directed toward the conservation of the physical fitness of the able-bodied.

f. Discharge all functions, comparable to the foregoing, in connection with the animals of the army.

g. Procure for and distribute to all elements of the army the items of supply furnished by the Medical Department.

■ 26. GENERAL ORGANIZATION OF THE MEDICAL SERVICE OF THE ARMY.—The medical service of the army is organized into two echelons—

a. The *attached medical personnel* comprising the medical detachments of the units of army troops.

b. The *army medical service* which, in turn, is composed of—

(1) The *medical section of army headquarters,* which includes the army surgeon and his commissioned and enlisted assistants, through which he exercises both his command and staff functions.

(2) *Army medical units,* consisting of those units enumerated in paragraph 23*b*(3)(*h*).

SECTION II

THE ARMY SURGEON

■ 27. GENERAL.—*a. Selection.*—The army surgeon is specially selected and appointed to his position. He should be senior to all other medical officers of army troops, but it is not necessary that he be senior to corps and divisions surgeons. See FM 8–55.

b. Status.—The army surgeon is a special staff officer of the army commander, and he also commends certain medical troops. See *c* and *d* below.

c. Command responsibilities.—The army surgeon commands all medical units in the army that are not assigned or attached to a subordinate element. He is not, however, assigned to a tactical unit, but is accounted for on the returns of the medical section of army headquarters. See paragraph 30.

d. Staff responsibilities.—See FM 8–55.

■ 28. RELATIONS WITH SURGEONS OF CORPS AND DIVISIONS.—*a. General.*—The relationship of the army surgeon with the surgeons of lower echelons will depend, in large measure, upon the policies of the army commander. In all cases, how-

ever, the army surgeon directly supervises all medical service for which the army commander is responsible; and this function requires that he exercise full authority over the technical, as distinguished from the command, aspects of the medical service of lower echelons.

b. In preventive medicine.—Policies directed at the prevention and control of disease and injury are command decisions. However, the army surgeon must coordinate and direct the technical activities of this nature which are undertaken in compliance with the policies or specific instructions of the army comander. For example, he may prescribe laboratory methods, criteria for diagnosis, and methods of immunization; but he may not, of his own authority, prescribe measures which involve command responsibility, such as quarantine.

c. In treatment of the sick and injured.—The army surgeon may prescribe methods of treatment and of preparation of casualties for evacuation to be followed in lower echelons, such as the use or avoidance of certain therapeutic agents, appliances for and means of fixation of fractures, and manner of moving certain classes of casualties. He may define the nontransportables to be retained in surgical or other types of hospitals.

d. In evacuation.—While, in strict procedure, arrangements for evacuation are made through command channels—ordinarily by the G–4's of the interested echelons—the details normally are arranged between the army surgeon and the surgeons of lower echelons. This requires close liaison during periods of active operations. See paragraph 51*f* (1) (d).

■ 29. RELATIONS WITH UNIT SURGEONS OF ARMY TROOPS.—The army surgeon exercises technical supervision, but no command control, over the surgeons of units of army troops.

■ 30. RELATIONS WITH COMMANDERS OF ARMY MEDICAL UNITS.—The army surgeon is the immediate superior of each commander of an army medical unit. Each such unit, however, is autonomous in its internal administration and the army surgeon exercises his control through unit commanders. All

orders and instructions from a higher to a subordinate unit are given to the commander thereof, and all orders and instructions for any element or elements of a subordinate unit emanate from the immediate commander of such unit. By this means alone are authority and responsibility definitely fixed and the channels of command definitely established.

■ 31. RELATIONS WITH THE GENERAL AND SPECIAL STAFF OF THE ARMY.—See FM 8–55.

■ 32. RELATIONS WITH THE REGULATING OFFICER.—The regulating officer is the direct representative of the commander of the theater of operations and is responsible only to him. One of the staff assistants of the regulating officer is an officer of the medical corps, called the medical regulator, who is responsible for the coordination of evacuation. While the official channel of communication between the army surgeon and the regulating officer is through the army commander, it is almost essential that there be close, cooperative relations between the army surgeon and the medical regulator. The army surgeon should keep the latter informed of the numbers and location of casualties awaiting evacuation, and pass on to him such information of anticipated developments in the medical situation as is permissible. The medical regulator should be the informal contact of the army surgeon with the regulating station in matters of medical supply as well as of evacuation; for, although the medical regulator is not concerned with the forwarding of supplies, being on the ground he may be able to expedite the shipment of needed medical supplies and, in an emergency, to forward them on hospital trains.

■ 33. RELATIONS WITH THE CHIEF SURGEON, THEATER OF OPERATIONS.—The relations of the army surgeon with the chief surgeon, theater of operations, are similar to the relations of the division surgeon with the army surgeon (see paragraph 28). There must be close liaison between the two, with the army surgeon keeping the chief surgeon fully informed of the medical situation in the army; but there are no direct command relations between them. When a communications zone is established, most of the contacts of the army surgeon

with the medical service of the theater will be with the surgeon, communications zone.

■ 34. MEDICAL SECTION OF ARMY HEADQUARTERS.—*a. Composition.*—The medical section of army headquarters consists of the army surgeon, his commissioned assistants, and a small enlisted clerical and administrative detachment.

b. Functions.—To elaborate the details, and to supervise the execution of the plans and orders of the army surgeon; advise the army surgeon, particularly in specialized technical matters; make such inspections as the army surgeon directs; collect and compile information for the army surgeon; relieve the army surgeon of the burden of routine administration; and assist the army surgeon in any other way he may direct.

c. Organization.—No internal organization of the medical section of army headquarters is prescribed, nor can any rigid rule be laid down that will meet the requirements of all situations in which an army may find itself. However, the major functions of the army surgeon should be reflected in any organization which he adopts for his office. The relative importance of these functions may vary with the location of the theater of operations, the mission of the army, and other factors. These factors should determine in each case the exact organization and the distribution of the personnel among the subdivisions of the medical section of army headquarters. The following outline is intended as a general guide only, which may be expected to satisfy the requirements of the average situation:

(1) *Administrative subsection.*—To be headed by the executive officer. It may be charged with all routine administration of a general nature, with personnel administration, with all other matters which do not fall within the scope of the responsibilities of another subsection, and with the coordination of the activities of the other subsections.

(2) *Operations and training subsection.*—To be headed by a medical officer specially qualified in the military aspects of medical service. Under average conditions this will be the largest of the subsections since, because of interrelationships, it is preferable to group several of the functions of the army

surgeon under one of his principal assistants rather than to divide them among independent operating departments. Furthermore, such an organization is more flexible and more economical of personnel, since operations and training rarely are of equal importance at the same time. The functions of this subsection should include—

(*a*) Training, both of medical units and of all units in hygiene and first aid. Training policies, programs, and inspections.

(*b*) Employment of army medical units; location of army medical installations; assignment of medical tasks; allocation of reinforcements to lower echelons; movements of medical units.

(*c*) Evacuation, both of lower echelons by the army medical service and of army installations by higher echelons; evacuation policies.

(*d*) Hospitalization. Policies governing the care and treatment of the sick and injured. Utilization of existing structures and facilities.

(*e*) Consultants. Because the functions of the consultants assigned to the medical section of army headquarters are largely associated with the care, treatment, and evacuation of the sick and injured, and because experience has shown that it is essential that the activities of the several consultants be coordinated and that their combined activities be harmonized with the military situation, it is preferable that they be assigned to this subsection. Their services, however, must be made available to all other subsections.

(3) *Preventive medicine subsection.*—To be headed by the army medical inspector. All matters pertaining to the prevention and control of disease and injury. Supervision of the army medical laboratory.

(4) *Dental subsection.*—Headed by the army dental surgeon. All matters pertaining to dental service.

(5) *Veterinary subsection.*—Headed by the army veterinarian. All matters pertaining to veterinary service.

(6) *Supply subsection.*—To be headed by an officer of the Medical Department specially qualified in supply, but who is *not* the army medical supply officer. All matters pertaining

to finance and medical supply, and to all supply for the medical section of army headquarters. Supervision of army medical depots. Credits in theater depots. Supply policies. This is a staff subsection, however, and not an operating agency in supply. See also FM 8–55.

(7) *Other subsections.*—The injection of new factors into the medical problem may indicate the creation of additional subsections, either to supervise new functions or to devote more specific attention to old functions, previously allocated to other subsections, which have assumed increased importance. Some examples are—a civil affairs subsection to supervise all medical activities among the civil population of occupied territory; a hospitalization subsection, if definitive hospitalization becomes necessary; and a personnel subsection, if personnel problems assume sufficient importance to warrant their separation from general administration.

SECTION III

ARMY MEDICAL UNITS

■ 35. CHAIN OF COMMAND.—The chain of command of every army medical unit is from the army commander to the army surgeon to the commander of the army medical unit.

■ 36. SUPPLY.—There is a unit supply officer on the staff of the commander of each larger administrative unit, such as a medical regiment or separate battalion, and a mobile hospital. The unit supply officer, governed by decisions or policies of the unit commander, consolidates the requirements of subordinate elements into unit requisitions upon proper army depots, which requisitions normally are forwarded through command channels. Upon receipt of the supplies, the unit supply officer distributes them in accordance with the requirements. He is the only accountable officer in the unit, the subordinate element commanders who receive the supplies being responsible only, and he maintains no reserve stocks other than a small rolling reserve of medical supplies.

■ 37. COLLECTING UNITS.—*a. Organization.*—Collecting units may include ambulance elements, or they may be composed

exclusively of collecting station and bearer elements. Basic collecting units, such as companies, may be incorporated in composite larger administrative units, such as battalions or regiments, or the larger administrative units may be composed exclusively of collecting elements with necessary service elements. For details, see FM 8–5.

b. Employment.—(1) *In other than combat situations.*—When not engaged in combat, collecting units—except ambulance elements; see paragraph 38*b*—may be employed upon interior guard duty, and in the supervision of the sanitation of such portions of the army area as have not been allocated, for sanitary control, to subordinate echelons. Collecting units are not labor units, and their employment in sanitation is limited to instruction and demonstration; to the supervision of the operation of sanitary appliances and installations, such as incinerators, garbage disposal plants, etc.; sanitary surveys; and to furnishing assistance to the medical inspector. Employment of collecting units in other than combat must not be allowed to interfere with combat training and readiness for action.

(2) *In combat.*—(*a*) *In support of army troops.*—Army troops, engaged within corps or division areas, ordinarily will be supported by the local medical service. It will be an unusual situation when ambulances cannot evacuate directly the aid stations of army units in rear areas. For this reason, collecting units rarely will be used in direct support of army troops operating in rear areas.

(*b*) *To reinforce subordinate echelons.*—See paragraph 55.

c. Transport.—Collecting units have sufficient transport to move all of their matériel and part of their personnel. The remainder of the personnel normally is transported by ambulance units.

■ 38. AMBULANCE UNITS.—*a. Organization.*—Ambulance units may consist of platoons within collecting companies or of companies which are incorporated either in composite medical units or into larger administrative units composed exclusively of ambulance companies and service elements. For details, see FM 8–5.

b. Employment.—(1) *General.*—Army ambulance elements routinely provide ambulance service for—

(*a*) Collection of the sick and injured from the aid stations and dispensaries of army troops.

(*b*) Evacuation of army clearing stations, and the local ambulance service that is needed in the evacuation of army mobile hospitals, such as for movements of evacuees from the hospital to the hospital train.

(*c*) Evacuation of the clearing stations of subordinate echelons.

(2) *Allotment of tasks.*—Insofar as practicable, tactical unity should be preserved in the allotment of tasks to ambulance units in order to fix responsibility and insure proper supervision. Two or more tasks may be given to a battalion which it, in turn, should distribute among its companies. A company may allot a task, or a prescribed part of a task, to a platoon or to a section.

(3) *Methods of operation.*—In the collection of casualties from the aid stations and dispensaries of army troops, ambulances ordinarily are operated as single vehicles, or in small groups if more than one be required at one time. In the evacuation of division, corps, and army medical installations, however, it is customary to operate ambulances in convoys.

(4) *Attachment to other army medical elements.*—Ambulance elements may be attached to other elements, either to constitute a composite detachment of medical troops for a special purpose, or to assist another medical element in performing a mission, such as the attachment of ambulances to an evacuation hospital to assist in loading hospital trains.

(5) *To reinforce subordinate echelons.*—See paragraph 55.

c. Transport.—Ambulance units have sufficient organic transport to move their personnel and matériel and can, in addition, transport the bulk of the personnel of a comparable collecting unit.

■ 39. CLEARING UNITS.—*a. Organization.*—Army clearing companies may be incorporated into composite medical battalions or regiments, or may be organized into larger administrative units composed exclusively of clearing companies with the necessary service elements. The basic tactical unit

is the clearing company. Each company is self-sustaining, and the functions of larger units are limited to administration, training, and the control of clearing stations operated by two or more companies.

b. Functions.—Army clearing companies may be employed to operate clearing stations in support of army troops; reinforce the medical services of subordinate echelons; and in emergencies, to substitute for surgical and evacuation hospitals.

c. Army clearing stations.—(1) *Location.*—The primary consideration in the location of an army clearing station is convenience to the units that it serves. The number of army clearing stations required will depend upon the distribution of army troops. Under ordinary circumstances, all dispensaries and aid stations of army troops should be within 10 miles of an army clearing station. Ordinarily these stations will be located in that part of the army area that lies in rear of corps rear boundaries; but the situation and distribution of army troops may indicate locations within an area allocated to a corps.

(2) *Site.*—Distance from the front makes protection from artillery fire of relatively minor importance in most situations; otherwise the requirements in site are the same as those for a division clearing station (see FM 8–10). The large extent of the army area usually will include a number of suitable locations from which choices can be made, thus permitting local facilities to exercise considerable weight in the selections. Because of this, tentage rarely will be used.

(3) *Organization.*—Each army clearing station may be operated by the clearing company, or two or more companies may be united under one command to operate one clearing station. Additional companies may be added to a station at any time.

(4) *Control.*—Regardless of location, all army clearing stations are controlled by the army surgeon. This control may be direct, or it may be exercised through an intermediate medical commander.

(5) *Operations.*—(*a*) *Source of patients.*—Army clearing stations admit patients from dispensaries and aid stations of units of army troops for which the army medical service

is responsible, and receive others by direct admission from the vicinity.

(*b*) *Technical functions.*—To sort all patients admitted, returning to duty such as are fit; to retain for definitive treatment such as fall within the evacuation policy; and to prepare all other patients for further evacuation.

(*c*) *Disposition of patients.*—Patients fit for duty are disposed of—

1. By return to their organization whenever this be feasible.
2. By return to duty in an army replacement battalion of casuals separated from their organizations.
3. Patients requiring no further active treatment, but who are not yet ready for full duty, are transferred to an army convalescent hospital.
4. Patients requiring further treatment are evacuated by army ambulances to an evacuation hospital.

d. Transport.—Clearing units have sufficient organic transport to move their personnel and matériel.

e. Mobility.—A well-trained company will be able to establish station and be ready to receive patients within 3 hours of arrival at the site. It will require an average of 2 hours, after all patients have been evacuated, to close the station and pack and load the matériel.

■ 40. SURGICAL HOSPITALS.—*a. Organization.*—Each surgical hospital is an independent, self-supporting unit under the direct command of the army surgeon. They are rarely grouped either for administration or operations.

b. Functions.—(1) Surgical hospitals are mobile units designed primarily to furnish, as far forward as practicable, facilities for major surgical procedures for a limited number of cases of serious injury, and to relieve division clearing stations of nontransportable casualties. Its facilities are reserved for—

(*a*) Cases in which immediate surgical intervention of considerably greater scope than first aid is necessary to save life or limb.

(*b*) Cases in which immediate movement to an evacuation hospital would gravely endanger life or limb.

(2) Surgical hospitals may be used in emergencies to substitute for evacuation hospitals.

(3) Detachments of technical personnel of surgical hospitals, such as operating teams, may be used to reinforce other medical units at station.

c. Employment.—(1) *Allocation.*—Corps plans set forth requirements for support and reinforcement by the army, including support by surgical hospitals. Surgical hospitals ordinarily are allocated in accordance with the requirements of the several corps as approved by the army commander. As in the case of other administrative requirements (see par. 1), however, the allocation is made by the army directly to divisions rather than through the corps medical service.

(2) *Location.*—Whenever possible, surgical hospitals are established immediately adjacent to the clearing station of the division which they support. This is to reduce to the minimum any delay in the transfer of serious cases and the facilities for effecting such transfer. They are equipped with tentage and require no more local facilities than a clearing station.

(3) *Control.*—Regardless of their location in the area of a division or a corps, surgical hospitals normally operate directly under the control of the army surgeon, and the responsibility for patients admitted thereto passes from the lower echelon to the army. In special situations, their attachment to subordinate elements of the Army, may be indicated.

d. Operations.—(1) *Source of patients.*—Surgical hospitals receive patients—

(*a*) From the clearing station of which they are in direct support.

(*b*) From other clearing stations conveniently located. In this case, the movement of the patient is a local responsibility and not an army responsibility.

(*c*) In emergencies, directly from aid and collecting stations. In such case the records of the patient must be cleared through the proper clearing station.

(2) *Technical functions.*—See *b* above. The facilities of a surgical hospital are inadequate for the care of any great proportion of the battle casualties of a division severely engaged, and admissions must be limited to cases urgently in need of these special facilities. Definitive treatment, as such, is not to be undertaken in a surgical hospital although the emergency measures may have definitive value. Treatment of shock, control of stubborn hemorrhage, and the reconstitution of blood following hemorrhage are of the greatest importance. Fixation of fractures that are too complex to be handled in a clearing station is another function. But it must be clearly realized that treatment in a surgical hospital must be limited to emergency measures, regardless of their scope, if that hospital is to accomplish its mission. Measures not of immediate importance should be postponed until the patient reaches an evacuation hospital.

(3) *Disposition of patients.*—Since patients who will recover promptly rarely will be admitted to a surgical hospital, the great bulk of survivors are evacuated by army ambulances to an evacuation hospital as soon as their conditions permit. For obvious reasons, the case fatality rate will be relatively high.

e. Closing a surgical hospital.—Under ordinary circumstances a surgical hospital suspends admission of new cases when the clearing station(s) it is supporting move(s) to new location(s); and, if required, other surgical hospitals are established at the new location(s). Evacuation of a closed surgical hospital proceeds as rapidly as possible. Personnel and matériel may be, and should be, withdrawn piecemeal as the patient population decreases, if there is danger of the unit being caught in a fluctuation of the lines. However, so long as any nontransportables remain, personnel and matériel necessary for their care must remain in position, even though this may result in capture.

f. Transport.—No surgical hospital is entirely motorized, since its headquarters and hospitalization units have only sufficient transport for their internal economy. The mobile surgical unit contained in each surgical hospital, however, possesses sufficient integral transport for its own personnel and matériel. In some instances, this organic transport may

consist of ordinary trucks; in others it may consist of special bus type motor vehicles, in which are permanently installed the necessary functional elements of this unit.

g. Mobility.—The mobility of the mobile surgical unit is comparable to a clearing company. The headquarters and two hospitalization units require approximately the time to open and close as an evacuation hospital.

■ 41. EVACUATION HOSPITALS.—*a. Organization.*—Each evacuation hospital is an independent, self-supporting unit under the direct command of the army surgeon. However, two or three units frequently are grouped together at station to form one large hospital. In such cases it is usually preferable to place all units at station in the same location under one command—either under the senior unit commander or under an assistant of the army surgeon who is senior to all unit commanders at that station.

b. Functions.—Evacuation hospitals are mobile units designed to—

(1) Provide, as near the front as practicable, facilities for major medical and surgical procedures in the care and treatment of all casualties.

(2) Provide facilities for the concentration of evacuees in such numbers and at such locations that mass evacuation by common carrier can be undertaken economically.

(3) Provide opportunity and facilities for the beginning of definitive treatment as early as practicable.

(4) Continue the sorting of casualties, under conditions more favorable for observation, and to remove from the chain of evacuation such as are, or soon will be, fit for duty.

(5) Prepare evacuees for extended evacuation to general hospitals at some distance to the rear.

c. Employment.— (1) *Allocation.*—Evacuation hospitals normally are not allocated to subordinate echelons. They are usually echeloned laterally in order to reduce distances from flank units, and this echelonment may correspond to the tactical or territorial organization of the army, that is, one or more evacuation hospitals may be established in rear of each corps or independent division, but such arrangement should not be regarded as a rule or a principle. It

must always be remembered that the corps is not an administrative echelon—army evacuating divisions without regard to any tactical control by corps—and that flexibility is an essential characteristic of medical service. For these reasons, corps and division boundaries must not be considered as limiting the sources of patients for evacuation hospitals.

(2) *Location.*—Whenever possible, evacuation hospitals should be located at established loading points on common carriers, such as railroads and canals or other waterways. This is not always possible, and the next best location is on an improved highway where further evacuation can be undertaken with motor buses and heavy de luxe ambulances.

When further evacuation is to be by rail, siding capacity sufficient for a hospital train is essential if the trackage is to be used for any other traffic. Loading platforms of proper height are highly desirable. Comparable dock facilities are to be sought when evacuation is to be by water.

The equipment of an evacuation hospital includes tentage, but, if suitable existing buildings are available, they are usually preferable.

With respect to the front line, the location of an evacuation hospital depends upon the situation, the road net, and the rail net. No evacuation hospital should be located within the range of enemy artillery, and all should be near enough the front that casualties can be evacuated promptly from divisions and without undue discomfort or danger. Good motor roads increase the permissible distance from the front; poor ones decrease it. If there be danger of enemy penetration, the distance should be increased. While there is no rule, under ordinary circumstances evacuation hospitals should be located somewhere between 12 and 30 miles behind the front line.

(3) *Grouping.*—The general principle is that the number of locations of evacuation hospitals should be kept to the minimum consistent with effective support of the medical services of subordinate echelons. Adequate capacity is provided by grouping two or more evacuation hospital units at one station. The individual units in such a group may be specialized if the situation warrants—each unit admitting designated types of cases. Such specialization, however, re-

quires additional sorting of cases prior to admission since division clearing stations cannot be expected to sort their evacuees in such a manner. Under normal circumstances, it is preferable to place all units in such a group under one command. See *a* above.

(4) *Control.*—Evacuation hospitals are under the control of the army surgeon—exercised directly over the unit commander when the unit is operating independently—and through the group commander when groups are formed.

d. Operations.—(1) *Source of patients.*—Evacuation hospitals receive patients—

(*a*) From the clearing stations of divisions, corps, and army; usually via army ambulances.

(*b*) From surgical hospitals; usually via army ambulances.

(*c*) From dispensaries and aid stations of units in the vicinity; usually by army or unit ambulances.

(*d*) By direct admission.

(2) *Technical functions.*—See *b* above. While definitive treatment should be instituted in evacuation hospitals, it must be remembered that these are mobile units and that no treatment should be undertaken therein which will immobilize the patient for a considerable period unless it be absolutely necessary. Involved procedures, requiring elaborate after-treatment, should be postponed whenever possible until the patient reaches a general hosptial. Evacuation by air of selected cases will aid in solving this problem.

(3) *Disposition of patients.*—Evacuation hospitals dispose of their patients by—

(*a*) Returning to duty such as are fit for duty, direct to their organizations when feasible, or to an army replacement unit when contact with the organization has been lost.

(*b*) Transfer to a convalescent hospital of such cases that require no further active treatment but are not yet fit for duty.

(*c*) Further evacuation of all others to a general hospital to the rear. See FM 100–10.

e. Closing an evacuation hospital.—The first step in the closing of an evacuation hospital is the suspension of admission of new cases. Evacuation is continued and, as the patient population decreases, wards and departments are closed

and the equipment packed. Adequate personnel and matériel are kept in service until all patients have been disposed of. If more than one unit be at station in one location, one unit may be closed rapidly by the transfer of patients to another. In such case there may be an exchange of equipment so that patients do not have to be moved.

f. Transport.—The organic transport of evacuation hospitals is insufficient to move their personnel and matériel. They are ordinarily moved by common carrier to their destination, and their matériel requires so much time to load that, whenever possible, evacuation hospitals in reserve are kept loaded on trains or other carriers, in readiness to move upon short notice. The army is responsible for their movement.

g. Mobility.—After arrival at its location, an evacuation hospital should be unloaded and set up ready to receive patients in from 4 to 6 hours. After evacuation, it should be closed, packed, and loaded in from 8 to 12 hours.

■ 42. CONVALESCENT HOSPITAL.—*a. Organization.*—One convalescent hospital is included in the medical service of a type army. It is so organized, however, that its capacity may be expanded without serious difficulty to meet unusual requirements.

b. Function.—The convalescent hospital is a mobile unit designed to care for such short-duration cases as require no further active treatment but that are not yet ready for duty. It is an expansion tank for the evacuation policy of the army.

c. Employment.—(1) *Location.*—It is usually located centrally but well to the rear of the army area, in a place that is convenient both to evacuation hospitals and to army replacement units. It may even be located at a distance in rear of the army rear boundary, although remaining under army control.

(2) *Control.*—The convalescent hospital is under the direct control of the army surgeon.

d. Operations.—(1) *Source of patients.*—The convalescent hospital receives patients—

(*a*) From evacuation hospitals; usually via army ambulance.

(*b*) From army clearing stations; usually via army ambulances.

(*c*) It may admit patients directly from units in the vicinity, especially from replacement units with which it should operate in close liaison.

(2) *Technical functions.*—Except in the case of active cases admitted from local sources, its technical functions are limited to the rapid restoration of convalescent patients to full physical fitness.

(3) *Disposition of patients.*—The convalescent hospital disposes of its patients by—

(*a*) Returning to duty such as are fit for duty, usually to an army replacement unit; although local admissions may be returned directly to their organizations.

(*b*) Returning to an evacuation hospital such as relapse and require further active treatment.

e. Closing a convalescent hospital.—The convalescent hospital normally remains active throughout the campaign. When it is necessary to move it, however, it is moved by echelon. A proportion of the personnel and matériel are withdrawn from service and moved to the new location to establish the new hospital. When the new hospital is ready to receive patients, the old one suspends admissions. The movement proceeds gradually from the old to the new location as the patient population decreases in the former and increases in the latter.

f. Transport.—The organic transport of a convalescent hospital is insufficient to move its personnel and matériel. It is ordinarily moved by common carrier to a point convenient to its location, and thence by motors. The army is responsible for its movement.

g. Mobility.—The convalescent hospital has approximately the mobility of an evacuation hospital.

■ 43. MEDICAL LABORATORY.—*a. General.*—The medical laboratory is a mobile unit designed to provide the army medical service with facilities that are immediately and constantly available for laboratory examinations and investigations. It is organized into one stationary and three mobile laboratory sections.

b. Control.—The medical laboratory is under the direct control of the army surgeon. However, for reasons that appear in *c*(2) below, it usually will be preferable for the army surgeon to place it under the immediate control of the army medical inspector.

c. Employment.—(1) *Location.*—The stationary section is located well to the rear of the army area where it will not become involved in minor movements and where it is readily accessible. While it can establish and operate in any location, an existing civil laboratory is highly desirable, such as that of a school, a public health agency, or a commercial organization. The mobile sections are designed to be sent into corps or division areas and are especially useful in epidemiological investigations. When not so employed, the mobile sections remain with the stationary section.

(2) *Technical functions.*—Because of the limited capacity and the location of the medical laboratory, it is not contemplated that it engage in routine clinical examinations required by the several army hospital units, and these hospital units all include an organic laboratory section for this function. However, special examinations may be referred by army hospitals, and the army medical laboratory routinely prepares special reagents for distribution to the clinical laboratory sections of the hospitals. Its principal technical functions are associated with preventive medicine, such as the examination of food and water and epidemiological investigations.

■ 44. MEDICAL DEPOT.—*a. Organization.*—The army medical depot is a mobile unit organized into three subordinate sections, each of which may, when indicated, operate an independent depot.

b. Functions.—This unit is the operating agency of the medical supply of the army. It procures, stores, and issues all medical supplies required by the army.

c. Employment.—(1) *Location.*—Depending upon the situation and the rail and road net, the army medical depot may be operated in one, two, or three different locations (see (3) below). Each location must be on a line of communications to the rear—rail, water, or highway—and should

be readily accessible to all subordinate elements to be served. Existing structures should be fully utilized; preferably warehouses on railroad sidings, docks, or improved highways. Such sites should be far enough to the rear to be safe from enemy ground action without being inaccessible.

(2) *Control.*—Army medical depots are controlled by the army surgeon, ordinarily through the supply subsection of his office.

(3) *Echelonment.*—In the usual situation, when it is necessary to establish more than one army medical depot, they are echeloned laterally for convenience to units served. In special situations, it may be advisable to echelon them in depth, with one or two advanced depots close behind divisions and another well to the rear. Stockages of the advanced depots will be determined by the situation, but will invariably be less than that of the rear depot, and will be maintained by the rear depot at prescribed levels.

d. Operations.—(1) *Procurement.*—The depot commander procures medical supplies from the next higher medical supply echelon, ordinarily the communications zone, by one of three methods—

(*a*) By formal requisition, which must be approved by the higher echelon.

(*b*) In emergencies, by informal request, which must also receive the approval of the higher echelon.

(*c*) By drawing against credits established in its depots by the higher echelon. Requisitions against credits require no individual approval. When exhausted, credits must either be renewed or other means of supply substituted.

(2) *Storage.*—Depot stocks are maintained at prescribed levels so that the requirements of corps and divisions may be met promptly. Subordinate medical echelons maintain only a small rolling reserve of medical supplies and are unable to tolerate the delay incident to procuring their requirements from the communications zone.

(3) *Issue.*—Issue is made at the medical depot, either directly to subordinate supply officers who bring their own transport or by shipment by common carrier to the railheads of divisions and corps.

e. Transport.—The organic transport of medical depot units is insufficient to move its personnel and matériel. They are moved by common carrier, if practicable, and if their movement by motor be necessary, the transport must be obtained from other sources.

■ 45. VETERINARY COMPANY, SEPARATE.—*a. Organization.*—The veterinary company, separate, is a mobile unit organized into a headquarters and five evacuation platoons, each of which is capable of functioning alone.

b. Functions.—This unit is to veterinary service what army ambulances are to medical service. It is primarily an evacuation unit designed to conduct animal evacuees from subordinate echelons to veterinary evacuation hospitals, veterinary convalescent hospitals, army remount depots, or to railheads for evacuation to veterinary installations in the communications zone.

c. Employment.—(1) *Control.*—Depending upon the nature of the tasks, the company may be employed as a pool of means of evacuation, or each platoon may be assigned to operate one chain of veterinary evacuation. Insofar as practicable, tactical unity should be preserved in the allotment of tasks.

(2) *Operations.*—When divisions are provided with a second echelon of veterinary service, as in the case of (horse) cavalry divisions, elements of the veterinary company, separate, take over the animal evacuees at the division veterinary clearing station. Otherwise, evacuees must be taken over at unit veterinary aid stations. The veterinary company, separate, conducts such animal evacuees by means of lead lines and veterinary ambulances to the rear, disposing of them as set forth in *b* above.

(3) *As reinforcements to subordinate echelons.*—Platoons may be attached to subordinate echelons when their operation by the army veterinary service is impracticable, or when reinforcement of the veterinary service of subordinate echelons is indicated.

d. Transport.—The veterinary company, separate, is equipped with sufficient organic transport to move its personnel and matériel.

■ 46. VETERINARY EVACUATION HOSPITALS.—*a. General.*—Veterinary evacuation hospitals are units of the GHQ Reserve and are not included organically in the army medical service. When, however, the animal strength of the army justifies it, they may be attached to the army in the numbers required; and in this event, control passes to the army medical service.

b. Organization and functions.—Veterinary evacuation hospitals are mobile units designed to relieve lower echelons of their animal casualties and to treat definitively short duration cases.

c. Employment.—(1) *Control.*—When attached to the army, veterinary evacuation hospitals are under the direct control of the army veterinarian who is, in turn, responsible to the army surgeon for their operation.

(2) *Location.*—They are located as far forward in the army area as the situation will permit, and with regard to the centers of animal population and to the operations of animal units. If possible, they should be located on a railroad with siding capacity sufficient for one stock train; and near enough to a remount depot that stock trains bringing remounts forward may be used to evacuate the animal casualties. An abundant water supply is essential, and shade and pasturage are desirable.

(3) *Allocation.*—The normal allotment of veterinary evacuation hospitals is one per corps and per cavalry division.

d. Operations.—(1) *Source of patients.*—Veterinary evacuation hospitals receive patients—

(*a*) From the veterinary clearing stations of divisions and corps, when such are in operation.

(*b*) From the veterinary aid stations of such units as are not supported by division veterinary services.

(*c*) From the veterinary dispensaries of army remount depots.

(*d*) By direct admission from units in the vicinity.

(2) *Technical functions.*—In the chain of animal evacuation, the veterinary evacuation hospital occupies a location midway between those of a surgical and an evacuation hospital in the chain of evacuation of human casualties. An economic limit is reached in the care and treatment of animal casual-

ties beyond which extended evacuation is not justifiable until the cost of remounts rises accordingly. For this reason, the functions of a veterinary evacuation hospital contemplate more definitive treatment with fewer evacuations than is practiced in its counterpart for human casualties.

(3) *Disposition of patients.*—The veterinary evacuation hospital disposes of its patients by—

(*a*) Return to duty with their organizations, when such disposition is feasible.

(*b*) Return to duty in an army remount depot.

(*c*) Transfer to the army veterinary convalescent hospital of such as require no further active treatment but which are not yet ready for full duty.

(*d*) Evacuation to a veterinary general hospital farther to the rear.

(*e*) Destruction of such animals as are not economically salvageable.

e. Closing a veterinary evacuation hospital.—(1) *When its services can be suspended.*—Admissions are suspended and the patients on hand are evacuated as rapidly as possible. As the matériel is released, it is loaded on the organic trucks of the unit.

(2) *When it must continue to function during movement.*—A detachment is withdrawn, with a portion of the matériel, to open station at the new location. As soon as patients can be received at the new location, admissions are suspended at the old and the patients on hand are disposed of as rapidly as possible. A greater proportion of salvageable animal casualties are ambulant than is the case with human casualties, and some patients may be transferred from the old to the new location. Personnel and matériel are moved by echelon as the situation indicates.

f. Transport.—The unit is equipped with sufficient organic transport to move its personnel and matériel.

■ 47. VETERINARY CONVALESCENT HOSPITAL.—*a. General.*—The status of this unit is identical with that of the veterinary evacuation hospital. See paragraph 46*a*.

b. Organization and functions.—The veterinary convalescent hospital is a mobile unit designed to furnish care for such

salvageable animals as require no further active treatment in a veterinary hospital but that are not yet ready for full duty.

c. Employment.—(1) *Control.*—Same as that of a veterinary evacuation hospital. See paragraph 46c(1).

(2) *Location.*—The veterinary convalescent hospital is conveniently located both with regard to the veterinary evacuation hospitals and to the army remount depot. Rail facilities are not so essential as in the case of the veterinary evacuation hospital, but other desiderata in the selection of a site are the same for both installations.

d. Operations.—(1) *Source of patients.*—The veterinary convalescent hospital receives patients from—

(*a*) Veterinary evacuation hospitals.

(*b*) Veterinary dispensary of the army remount depot.

(*c*) Veterinary dispensaries of units in the vicinity.

(2) *Technical functions.*—The technical functions of a veterinary convalescent hospital include—

(*a*) Care and treatment of convalescent animals that require little active treatment.

(*b*) Careful sorting of patients, with destruction of such as will either never be fit for full duty or whose ultimate recovery will be delayed beyond the economical limit of care. The final results of treatment ordinarily can be determined with greater accuracy in this installation than in a veterinary evacuation hospital.

(3) *Disposition of patients.*—A veterinary convalescent hospital disposes of its patients by—

(*a*) Return to duty with their organizations, when such disposition is feasible.

(*b*) Return to duty with the army remount depot.

(*c*) Return for further treatment to a veterinary evacuation hospital.

(*d*) Destruction.

e. Closing a veterinary convalescent hospital.—Same as in case of a veterinary evacuation hospital. See paragraph 46e.

f. Transport.—The organic transport of a veterinary convalescent hospital is insufficient to move its personnel and matériel. The army is responsible for its movement.

SECTION IV

MEDICAL OPERATIONS

■ 48. ARMY CHAINS OF EVACUATION.—*a. For evacuees of corps and divisions.*—The clearing stations of divisions and of corps are in the same echelon of evacuation so far as army medical service is concerned. The responsibility for evacuees passes from corps and divisions, when the evacuees are turned over at these stations, to the army medical service. Such of the evacuees as are transportable are moved at once, normally to an evacuation hospital. Army ambulances, operated in convoys, are the usual transport; but in special situations, other means of transport may be either necessary or desirable. If a surgical hospital be in direct support, nontransportables are transferred from the clearing station to it; but since surgical hospitals are operated under army control, the responsibility for such cases passes to the army just as in the case of evacuees. If no surgical hospital, or substitute therefor, be in support, nontransportables must remain in clearing stations until they may be moved safely, even though this immobilizes a portion of the unit. As soon as any nontransportables can be moved safely, they are placed in the same chain of evacuation as other evacuees, although they may be moved individually by special means.

b. For evacuees of units of army troops.—(1) Units of army troops operating within corps or division areas ordinarily will be supported by the medical service of such units, and their casualties will be placed in the chains of evacuation of such corps or divisions. If for any reason this is not desirable, such units as are organically equipped with ambulances may, when practicable, send their casualties to an army clearing station; but the army medical service ordinarily does not furnish direct support to army units operating within the zone of responsibility of a lower medical echelon.

(2) The army medical service, normally with its ambulances, collects the casualties in the dispensaries and aid stations of all small units in rear of corps rear boundaries, including elements of subordinate echelons that may be cas-

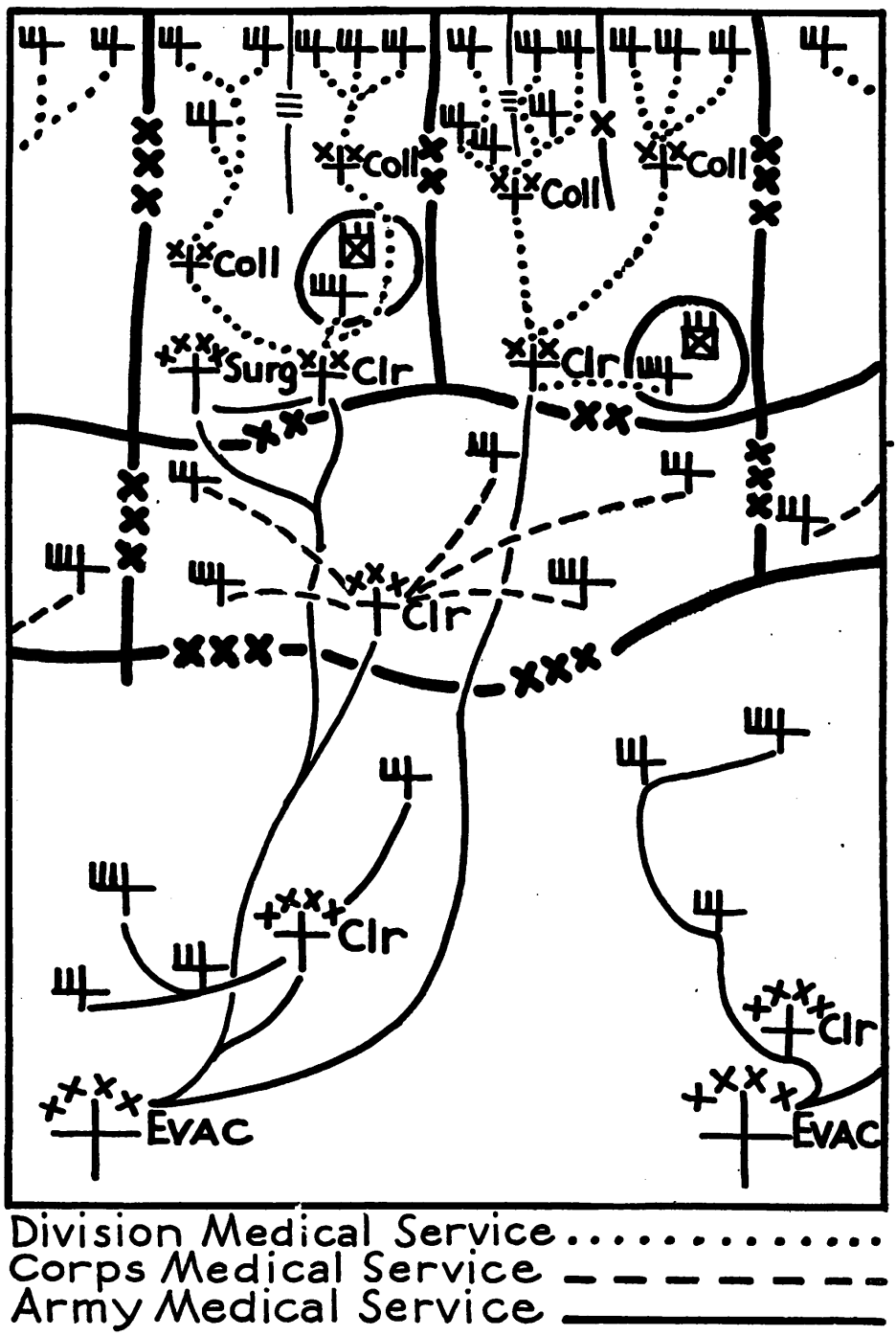

FIGURE 2.—Chains of evacuation within the army.

ually there, and transports them to an army clearing station. The evacuees of an army clearing station for the most part enter the army chain of evacuation and are taken to an evacuation hospital, although certain short duration cases may be transferred directly to the army convalescent hospital.

c. Rear termini of the army chain of evacuation.—Evacuation hospitals normally are the rear termini of the army chain of evacuation. At these installations, the responsibility passes to the next higher echelon, usually the communications zone, which evacuates the evacuation hospitals by means of hospital trains, boats, or other bulk transport.

d. Veterinary evacuation.—Veterinary chains of evacuation in the army are comparable to those of human evacuation. Insofar as the army veterinary service is concerned, the forward termini are at unit veterinary aid stations when there is no second echelon of veterinary service, and at veterinary clearing stations when there is; and rear termini are as set forth in paragraph 45*b*.

■ 49. EVACUATION OF CORPS AND DIVISIONS.—*a. Arrangements.*—In strict procedure the arrangements for the evacuation of corps and divisions are instituted by the lower echelon and are effected through command channels. The details are usually worked out through direct medical channels. The arrangements should include an estimate of the number of casualties to be evacuated, the location of the clearing station, the hour when such evacuation should begin, and the schedule that will be followed, that is, whether subsequent convoys will arrive on a time schedule or whether the army will send for evacuees only when request is made or, as such an arrangement has come to be called, "evacuation on call."

b. Technique.—(1) *Receiving evacuees from corps and divisions.*—Army medical transport, under the command of a commissioned officer, is sent to the clearing station to be evacuated. The evacuation officer delivers the evacuees to the officer in charge of the convoy, and with them a check list, in duplicate, upon which is entered the name, Army serial number, grade, and organization of each evacuee, together with the diagnosis and any other information essential to

his identification, treatment, or disposition. For a model of such a check list, see appendix I. The officer in charge of the convoy receipts for such evacuees by signing the triplicate of the check list, which receipt is retained by the evacuation officer. The officer in charge of the convoy should check each evacuee against the check list as he is loaded, and insure that to each evacuee is securely attached a properly accomplished emergency medical tag (EMT). See FM 8–45.

(2) *Loading of evacuees.*—The evacuation officer of the clearing station is responsible for the loading of evacuees on the army medical transport. He determines the position, sitting or prone, in which each evacuee shall ride.

(3) *Property exchange.*—The army medical convoy carries forward sufficient equipment to effect property exchange. The clearing station is responsible for the property exchange, which is usually checked by a noncommissioned officer.

(4) *Transfer of responsibility.*—Responsibility passes to the army when all evacuees have been loaded and receipt therefor has been signed by the officer in charge of the convoy.

(5) *Care and treatment en route.*—It is a responsibility of the evacuation officer to inform the officer in charge of the convoy of any special attention that may be required by any evacuee en route, such as the adjustment of a splint, observation for secondary hemorrhage, or the administration of a narcotic or a stimulant, regardless of whether such information or warning appears on the check list or on the emergency medical tag of the individual evacuee. And it is a responsibility of the officer in charge of the convoy to see that proper investigations are made en route, although the measures to be taken are matters which he must decide in each case at the time.

(6) *Delivery of evacuees.*—Upon arrival of the convoy at the proper evacuation hospital, or other designated delivery point, the officer in charge delivers the evacuees to the admitting officer, who retains for his records the original copy of the check list and who returns the duplicate copy, signed as a receipt, to the officer in charge of the convoy. The latter makes special reports of any deaths en route, but the dead

are admitted and disposed of as any other evacuee, since the convoy unit is not an office of record. The admitting officer is responsible for the unloading of evacuees, and the officer in charge of the convoy is responsible for the property exchange.

c. Veterinary technique.—The general principles set forth in the two preceding subparagraphs apply also to veterinary evacuation. Elements of the veterinary company (separate) perform functions comparable to those of army ambulances. Similar records are maintained with modifications to adapt them to the requirements of animal evacuation.

■ 50. EVACUATION OF ARMY CLEARING STATIONS.—The general rules of the evacuation of army clearing stations are the same as in the cases of divisions and corps (see par. 49). Any differences in method arise out of the facts that army clearing stations are controlled by the army medical service, and that ordinarily they have fewer evacuees. Hence arrangements for evacuation are made through medical channels and may be quite informal although by no means indefinite. Because of the fewer evacuees and the irregularity with which they accumulate, the customary arrangement will be for evacuation "on call."

■ 51. PLANS AND OPERATIONS IN EVACUATION.—*a. Responsibility.*—All medical plans and operations are responsibilities of the army surgeon which he cannot delegate to subordinates. However, the details ordinarily are too voluminous for him to arrange without assistance, and he must depend upon his assistants for the amplification and execution of his basic decisions. See FM 8–55.

b. Continuity of evacuation.—The only entirely new plan of a chain of evacuation will be the first one drawn for the concentration of the army. After this initial plan, each new one will be but a modification of an existing plan, and will necessarily be limited by the existing disposition of medical units, and by the necessity of maintaining medical service throughout the period of transition.

c. Subsections of army surgeon's office involved in planning.—All subsections of the army surgeon's office contribute

to the development of the plan of the army chain of evacuation, but the bulk of the task will fall upon the operations and training subsection. The preventive medicine subsection is interested in the evacuation and hospitalization of cases of communicable disease—units in which they may be encountered, estimated numbers, and the isolation required. The dental subsection is interested in any special arrangements to be made for maxillo-facial injuries, and in the evacuation policy governing dental patients. The supply subsection is interested in the locations of army hospitals, and in the estimated numbers and types of casualties. The veterinary subsection has its own problems of the chain of animal evacuation.

d. Development of plan.—The key to the plan of the army chain of evacuation is the disposition of the evacuation hospitals. Suitable locations ordinarily will be few in number, and all other considerations must be subordinated to the proper location of these units. The next most important consideration is the means of transporting evacuees. The type of transport required will depend upon the situation and the road net, and the amount upon the number of evacuees and the time-distance of movement. Linear distance is only one factor in time-distance.

e. Disposition of evacuation hospitals.—It is a most important principle that evacuation hospitals must be kept as mobile as is possible under the circumstances. This is achieved by closing, and loading when practicable, all units not required for the care of casualties and for which no need in the immediate future can be foreseen.

When a change in the medical plan is necessary, the army surgeon can look only to his reserve evacuation hospitals for movement to new locations. Those at station are immobile until they can be evacuated and loaded for movement.

What might be termed a standard plan for a normal situation—without implying that it is a fixed rule—is to dispose of evacuation hospitals in groups of three each. When a change in disposition becomes necessary and all three are in operation, two are closed and moved immediately to the new group location, where only one is established initially,

and the other held in reserve, still loaded if possible. As soon as the unit established in the new location is receiving patients, the unit in operation at the old location is closed, evacuated, and loaded. Its further disposition depends upon the situation—it may be moved at once to the new location, held in reserve elsewhere, or moved to and established in a third location if necessary. When a group of evacuation hospitals are placed in one location, individual units are established at station only as the need is foreseen; and one unit in each group being in reserve at all times will be a great source of comfort to the army surgeon.

The so-called standard method of disposing of evacuation hospitals, just outlined, must be modified to meet the special requirements of any situation.

f. Transportation of evacuees.—(1) *Standard means.*—Army ambulances are the standard means of transporting evacuees within the army area.

(*a*) *Control of ambulances.*—The evacuation of clearing stations should be controlled by the operations and training subsection of the army surgeon's office, with either the chief of that subsection or one of his principal commissioned assistants in direct charge. For many reasons, among which is the necessity of coordinating this task with other phases of army medical service, this responsibility should not be delegated to the commander of an army medical unit.

(*b*) *Allocation of ambulances.*—All ambulances required for the evacuation of clearing stations should be placed in a pool controlled by the officer in charge of such evacuation. Insofar as practicable, however, tactical unity should be preserved in this allocation.

(*c*) *Restriction of responsibility.*—The responsibility for the evacuation of a designated clearing station should be exclusive to a particular unit.

(*d*) *Liaison.*—Prompt and accurate information is essential. Whenever possible, wire communications should be established between the stations to be evacuated and the army surgeon's office. Equally certain communications should be maintained with the rear termini of the chain at evacuation hospitals. Regardless of the means of communication, a

liaison agent from the army surgeon's office at each critical point will prove most helpful.

(*e*) *Operations.*—The officer in charge of evacuation coordinates tasks with means. He forms and dispatches convoys in accordance with demands. Upon completion of a mission, each convoy returns to the pool to await further missions.

(*f*) *Records.*—The officer in charge of evacuation maintains a log which shows the disposition of all ambulances at all times—mission, number in convoy, times of departure and return, distances traveled, and numbers of evacuees transported. He also, from the check lists of convoy commanders, maintains a consolidated record of the numbers and classes (litter or sitting) of evacuees and their origin and disposition. He does not maintain individual records of evacuees. For forms for these records, see appendix II.

(2) *Other means of transporting evacuees.*—In certain situations, the exclusive use of army ambulances in the evacuation of divisions and corps may be impracticable or even impossible and other types of transport must be employed.

(*a*) *Other types of transport.*—Other types of transport that have been used are—railroads, both of standard and of narrow gage; cargo trucks, either used exclusively for the purpose or only on their return trips to the rear; airplanes, specially built as ambulances or standard transport planes; aerial cable or tramways; and animals and other beasts of burden equipped with cacolets, travois, or other special carriers.

(*b*) *Operations of other types of transport.*—The operation of any type of transport depends largely upon its characteristics and must be accordingly modified. The general principles of evacuation by ambulances are followed so long as they are applicable. In certain instances, such special types of transport may be turned over to the medical service for its exclusive use. However, in all cases where the control of such transport remains with an arm or another service, considerable coordination is required. In general, it will prove more efficient if instructions are issued by the army commander (G–4) defining the responsibilities and the authority of each branch involved.

g. Veterinary evacuation.—The principles set forth above in connection with human evacuation apply, in general, to the evacuation of animals. These are—

(1) The army veterinarian is directly responsible to the army surgeon for plans and operations.

(2) Veterinary evacuation is continuous and problems of preventive veterinary medicine and of supply are involved.

(3) The key to the plan is the location of veterinary evacuation hospitals. However, since knotty problems in the transportation of evacuees and failing of economical solution can always be solved by the destruction of casualties, this aspect is of lesser importance than in human evacuation.

(4) Veterinary evacuation hospitals should be kept as mobile as circumstances will permit and, whenever possible, at least one should be held in reserve ready for movement. They are not ordinarily, however, established in groups.

(5) Lead lines for the readily ambulant, and veterinary ambulances for others, are the standard means of movement of animal casualties within the army area. Cargo trucks may also be used.

(6) The operations of the second and third echelons of veterinary service should not be confused. Third echelon service should be controlled by the veterinary subsection of the army surgeon's office. Second echelon service may be decentralized to the veterinary company (separate).

(7) Liaison is essential to prompt and effective evacuation.

(8) Complete records are maintained.

■ 52. MEDICAL SUPPORT OF ARMY TROOPS.—*a. Definition.*—The collection of casualties from the dispensaries and aid stations of units of army troops, and their removal to an army clearing station, is not to be confused with the evacuation of clearing stations, even though both are functions of the army medical service. The former function is one of second echelon medical service—the first echelon being the unit medical service of attached medical personnel (see par. 2)—while the latter is one of third echelon medical service.

b. Responsibility.—The medical support of units of army troops is a responsibility of the army surgeon. However, to prevent duplication of effort, a standing operating procedure

should ordinarily be established providing for this support to be rendered by local medical services for such army units as are located or operating within the areas of divisions or corps. The army medical service, in turn, should render this support to all units in the army area in rear of corps boundaries regardless of the tactical or administrative affiliations of such units.

c. Chain of evacuation.—In the usual case, the forward termini of this chain of evacuation are at the dispensaries and the aid stations of the units where the army medical service assumes the responsibility, and the rear termini are at army clearing stations.

d. Control.—In sharp distinction to the control of the third echelon of evacuation, it will usually be preferable to assign this task to a tactical unit, or a composite detachment, of army medical troops. Control may be better, under certain conditions, if two or more chains of evacuation in the second echelon are established, with the zones of responsibility of each defined, and each chain assigned to a different army medical unit. The commanding officers of such units or detachments are then directly responsible to the army surgeon.

e. Installations.—Under normal conditions, army clearing stations are the only installations in the second echelon of evacuation in the army rear area. Collecting stations rarely will be established.

f. Operations.—The administrative instructions of the army will inform each unit of army troops of the medical support allotted to it. Unit surgeons may request evacuation of their aid stations and dispensaries by the army medical unit in support. Certain units of army troops, notably antiaircraft artillery, are organically equipped with ambulances. When practicable, and especially in emergencies, these should be used by unit surgeons to send their evacuees to the army clearing stations.

■ 53. MEDICAL SUPPORT OF ARMY WITH CAVALRY.—*a. Organic medical service.*—Each cavalry division is provided organically with first and second echelon medical and veterinary service. The army medical service provides third echelon service.

b. General considerations.—The standard system of evacuation in forward areas is predicated upon two essential premises—supporting medical echelons must be at least slightly more mobile than those supported; and lines of communication (evacuation) must be secure. If either of these basic requirements are lacking, the system breaks down.

The essentiality of the second premise may be, at first glance, more obvious than that of the first. However, because of the great mobility of army ambulances, the army medical service is more mobile than division clearing stations despite the lesser mobility of evacuation hospitals. This permits the army medical service to keep clearing stations ready to move on short notice; but army medical support has failed when a division clearing station is unable to move because of the accumulation of casualties.

The essential quality of the mobility of medical units is time, and time is a function of distance as well as of speed. Thus, while army ambulances may be sufficiently mobile to evacuate division clearing stations some 30 miles in front of evacuation hospitals, this does not imply that they are mobile enough to evacuate the clearing station of a cavalry division some 50 or 60 miles away.

c. When lines of communication are secure.—The principal problems in the evacuation of the clearing station of a cavalry division arise out of the distance involved. The greater mobility of cavalry requires prompt evacuation if the mobility of its organic medical service is to be maintained, and this, in turn, may require the decentralization of this task to an army ambulance commander, giving him adequate means and charging him with this sole responsibility. When the distance becomes too great for this to solve the problem, the cavalry division should be reinforced with an army clearing unit thus permitting it to "leap-frog" its clearing station and maintain contact with combat elements.

d. When lines of communication are not secure.—It is futile to attempt to employ the standard system in evacuating a cavalry division because at best, evacuation under such circumstances can proceed only intermittently. The first step in the solution is the reinforcement of the cavalry division with additional means to care for their casualties until they

can be evacuated. This will require one or more army clearing units. Subsequent steps in the solution will depend upon the situation. If the cavalry division is responsible for replenishing its ammunition and other supplies, army ambulances should be attached to it and the division commander made responsible for the evacuation of his casualties, which he may do by protected convoy at the same time that he obtains supplies. If, however, the army retains the responsibility for the distribution of supplies to the cavalry division, it should also retain the responsibility of evacuation, and accomplish both tasks by the same protected convoys.

■ 54. MEDICAL SUPPORT OF RECONNAISSANCE AND SECURITY DETACHMENTS.—*a. General principles.*—(1) Detachment commanders are responsible for first and second echelon medical service. Each component of the detachment should bring with it its proper proportion of attached medical personnel. Elements of second echelon medical service may be taken from division, corps, or army medical units.

(2) Detachments larger than a regiment should be provided with second echelon medical service.

(3) Local commanders are responsible for providing suitable medical means for local reconnaissance and security detachments. When necessary, the army medical service may furnish reinforcements for this purpose.

(4) Reconnaissance and security detachments operating under conditions that prevent ready evacuation by supporting medical elements should be given sufficient medical means to care for their casualties properly until communications can be established.

b. Support by the army medical service.—The army is responsible for the third echelon medical service of all reconnaissance and security detachments, and it may furnish the elements of the second echelon. The general principles governing this medical support are the same as those governing the medical support of cavalry. See paragraph 53.

■ 55. REINFORCEMENT OF SUBORDINATE ELEMENTS.—*a. General.*—All tactical and administrative organization is based upon average requirements. To provide for each organiza-

tion, organic means adequate to cope with extreme situations would prove to be most uneconomical during the greater part of the time. Since all elements of the army rarely, if ever, exert a maximum effort at the same time, pools of additional means are included in the organization of the army for the purpose of reinforcing such of its subordinate elements as are faced with unusual demands.

b. How initiated.—After estimating the situation and formulating plans, lower echelons ordinarily will request the reinforcements for which they can foresee the needs. The approval of all such requests is a decision of the army commander. In the case of medical reinforcements, the army surgeon examines the plans of subordinate echelons and makes suitable recommendations upon which the army commander may base his decision. The responsibility of the surgeon is not confined to requests submitted. If, in his opinion, sufficient medical reinforcements have not been requested, he so advises the army commander and submits his own estimate of the additional medical means required. The army surgeon must keep informed of the medical situations within all echelons at all times, and he should initiate the reinforcement of subordinate medical services whenever it is indicated during the course of an action.

c. Allocation of means.—All probable demands must be considered before the army surgeon recommends the allocation of the limited means at his disposal. The future needs of divisions not committed initially must not be overlooked. In general, preference should be given to elements having decisive missions. Insofar as practicable, tactical and administrative unity should be preserved in the allocation of reinforcements. This principle may have to be violated upon occasion.

d. Control.—Control passes from the army when the attachment to the lower unit becomes effective. This time is prescribed in the order, and usually will be fixed as the time that the reinforcement arrives at a designated point within the area of the unit to which it is destined. The duration of the attachment may or may not be stated in the original order, and control returns to the army only after the attachment has been discontinued by the army commander.

SECTION V

INFLUENCE OF TACTICAL OPERATIONS UPON MEDICAL SERVICE

■ 56. CONCENTRATION.—*a. General plan.*—The principal limiting factors of a concentration plan are the location of the concentration area, particularly with regard to the location of the enemy; the requirements of security during concentration; the scheme of maneuver of the army; and the rail and road net. The concentration plan is developed in detail before concentration is begun, and it is of the greatest importance that both the medical plan be developed concurrently and that the general plan provide for adequate medical service during all phases.

b. Covering force(s).—When there is any threat of enemy interference with concentration, the first provision is for a covering force. Such a force ordinarily includes cavalry and may include other arms. Antiaircraft protection is also among the first priorities.

c. Medical service.—(1) *General.*—The following fundamental considerations should be observed in planning the medical service for the concentration of the army:

(*a*) All units, including those of the covering force, may be expected to arrive in the concentration area with casualties requiring immediate evacuation and hospitalization.

(*b*) Medical installations must be located to conform to the disposition of the various units in the concentration area.

(*c*) No more medical units should be employed in medical service in the concentration area than are necessary, thus permitting as many as possible to continue training and other preparations for combat. The medical service must be suitably disposed and kept sufficiently mobile to support future movements of the army without delay.

(*d*) The physical facilities of existing civil institutions should be used as far as practicable without seriously interfering with the medical requirements of the civil population.

(*e*) Close cooperation with, or military control of, existing civil public health agencies is essential to the preservation of the health of the troops.

(2) *Priorities.*—In general, the concentration of essential medical units should precede, whenever practicable, that of the units which they are to serve, in order that they may be fully established and ready to function when other units arrive in the area.

Essential functioning elements of division and corps medical services should receive high priorities within their units; and it is the duty of the army surgeon to examine subordinate concentration plans and to inform the army commander when such plans do not provide for an adequate medical service. Other medical elements, not required for service in the concentration area, require no special consideration.

At least one evacuation hospital and an army ambulance unit will be required by the covering force and should be given a very early priority in the plan. Other evacuation hospitals are given priorities in accordance with the medical needs that can be foreseen. Surgical hospitals will not be required during concentration, and the convalescent hospital may be given a very low priority. The medical laboratory and medical depot will be needed early, and the priorities of other army medical units, such as collecting and clearing units, will depend upon the extent of their contemplated employment during concentration.

Priorities of veterinary units are governed by similar considerations.

■ 57. MARCHES.—*a. Army troops.*—For the medical service of marching columns, see FM 8–10. The great majority of units of army troops being either motorized or mounted, march collecting posts rarely will be required for their columns. Army ambulances may be attached to such units as are not organically provided with them, and all units may either carry with them, or evacuate, their own march casualties. Routes for such evacuation should be arranged in the army medical plan in order to minimize interference with other movements. The services of army clearing stations frequently may be dispensed with during marches—the march casualties of army units being evacuated either directly to evacuation hospitals or to second echelon installations of corps and divisions.

b. Third echelon medical service.—No great proportion of an army will be engaged in combat during a march, which will permit the bulk of the evacuation hospitals being held ready to move forward to establish nearer the front as the situation indicates. The clearing stations ordinarily will move daily and must be evacuated in time to permit such movement. However, movements of ambulances should be reduced to a minimum during the hours of marching, and, except for the units engaged in combat, it may prove advisable to limit routine evacuation to the hours in which the columns are in bivouac, directing lower echelons either to call upon army for evacuation of emergency cases or to evacuate them with their own ambulances.

■ 58. ATTACK.—*a. General.*—The casualty rate is higher than average in attack, and may be expected to be highest in divisions making strong attacks against resistance. Movement is an essential characteristic of most types of attack, and for medical units to maintain contact, the accumulation of casualties must be prevented by prompt evacuation.

b. Surgical hospitals.—These should be allocated in accordance with the tasks of the several divisions, preference being given to those making the main and principal efforts. When not all divisions can be so supported, the divisions not expected to advance rapidly may be reinforced with operating teams so that their own clearing stations may care for nontransportables. It must always be remembered that divisions initially in reserve may urgently require the support of surgical hospitals when they are committed. However, surgical hospitals should not be established at station, because of their limited mobility, until stiff resistance is encountered.

c. Evacuation hospitals.—The necessity for secrecy may prohibit the proper disposition of evacuation hospitals prior to the launching of the attack. In such cases, as many evacuation hospitals as is possible should be initially in reserve, loaded and ready for early movement to attack positions. An adequate reserve, ready for movement at any time, is essential if the attack progresses rapidly.

d. Reinforcement of subordinate echelons.—The medical services of divisions making major efforts may require reinforcement. See paragraph 55.

e. Supply.—The heavier casualty rate and the wastage resulting from rapid movement will consume supplies at a higher than average rate.

■ 59. PURSUIT.—*a. Planning.*—In every attack situation particularly, the possibility that the commander will exploit success should be uppermost in the mind of the army surgeon. The medical plan for a pursuit must be prepared in advance because, once the decision to pursue is made, no time is lost in inaugurating the pursuit.

b. Direct pressure force.—The medical service of the direct pressure force is that of any fast-moving attack. Speed of movement increases the difficulty of collection and evacuation, and every effort must be made to keep first and second echelon medical service in close contact with their units. Reinforcement of lower medical echelons may be required, particularly with litter bearer and clearing elements—the latter to enable clearing stations to be "leap-frogged" frequently.

c. Encircling and harassing forces.—Third echelon medical service ordinarily is impossible with forces that operate in the enemy's rear. This lack may be partially compensated by reinforcing the second echelon medical services of such forces so that they may care for their casualties properly until satisfactory contact can be reestablished. The source of the second echelon medical service of such forces depends upon the situation and the size, composition, and source of the force. It may be provided from division or corps medical services, or by attaching elements of the army medical service.

■ 60. ATTACK OF A RIVER LINE.—The special problems arising in an attack of a river line are in the field of division medical service more than in that of corps and army medical service. Insofar as the army is concerned, the medical problems are largely those of any attack. Considerations of secrecy may delay the disposition of medical installations, but evacuation hospitals should be pushed as near the river line as possible as soon as corps bridgeheads have been secured. Their exact

locations will depend upon the bridges as well as the rail net. Surgical hospitals will prove to be of great value, especially when evacuation is delayed by congestion on bridges, and they should be pushed up to divisions whenever practicable. Delay in extending rail lines across the river may raise the question as to whether evacuation hospitals should be pushed across the river before rail communications are established. The answer to this question lies in each situation; but a general principle may be stated that, when surgical hospitals are able to afford adequate emergency service to the seriously injured, evacuation hospitals should not be moved away from common carrier lines without compelling reasons.

■ 61. DEFENSE.—*a. General.*—The medical service of the defense depends so much upon the type of defense that it is unsafe to prescribe fixed rules applicable to all types. A fortified position, for example, ordinarily will include fixed, protected sites for medical installations, and the scheme of evacuation will depend upon the means arranged. A mobile defense implies considerable offensive operations, and a defensive-offensive is really an attack. Only broad general principles are stated in succeeding subparagraphs.

b. Evacuation hospitals.—These usually are located farther to the rear than in attack, and well within protected flanks, where they will escape being involved in minor enemy successes. No more units should be established at station than necessary, and a reserve should be available for either a counteroffensive or a retirement.

c. Surgical hospitals.—These will be particularly useful to divisions since, so long as the defense is maintained, there will be little movement of division rear installations.

■ 62. RETROGRADE MOVEMENTS.—The principles of third echelon medical service of retrograde movements are—

a. As few evacuation hospitals are established at station as will meet the needs and, when so established, only so much of the unit is set up as is necessary.

b. Evacuation hospitals are moved toward the rear by "leap-frogging."

c. Second echelon medical service must be kept highly mobile through prompt evacuation.

d. Surgical hospitals ordinarily are impracticable in this operation, but their personnel may be employed to advantage in other service.

SECTION VI

SUPPLY

■ 63. CLASSIFICATION OF SUPPLIES.—See FM 8–55.

■ 64. ARMY MEDICAL SUPPLY.—*a. Responsibility.*—The surgeon is responsible to the army commander for the procurement, storage, and issue of all items of special supply allocated to the Medical Department. To assist him in these duties are the army medical supply officer and the supply subsection of the medical section of army headquarters.

b. Army medical supply officer.—The commanding officer of the army medical depot is the army medical supply officer. He heads and is responsible for the operations of medical supply as distinguished from planning and the formulation of policies. Under such policies as may be established, he procures such supplies as are required to maintain depot stockages at prescribed levels, and issues supplies upon requisitions approved by the army surgeon and upon any other request that may be authorized. He is directly responsible for the army medical depot.

c. Supply subsection of the medical section of army headquarters.—This subsection provides the army surgeon with assistance in all the details of medical supply that he would have personally to attend to if he had no other assistance than an operating agency. In other words, it relieves the army surgeon of the details of the discharge of such of his responsibility, and the exercise of such of his authority as he would not ordinarily delegate to an operating agency. This subsection studies supply requirements, compiles supply experience, drafts supply plans, formulates supply policies for the surgeon to recommend to the army commander, drafts recommendations for the establishment of credits, examines all requisitions for supplies and recommends action

for the surgeon to take in connection therewith, and assists the army surgeon in all other staff aspects of supply matters. It should refrain from invading the sphere of responsibility of the army medical supply officer in the operations of procuring, storing, and issuing of medical supplies, although the army surgeon may, in his discretion, delegate to this subsection the technical supervision of the army medical depot.

■ 65. DEPOT STOCKAGE.—See FM 8–55.

■ 66. SUPPLY CREDITS.—See FM 8–55.

APPENDIX I

FORM FOR CHECK LIST OF EVACUEES

EVACUATED:
From: Clr. Sta., 5 Div.
Located at: Shippensburg.
(signed:) Edward F. Bly,[1]
Capt., M. C.
Date and hour: 17 June 19—, 6:15 PM.

Medical section
Headquarters First Army
By:
Convoy No. 987,
First Army Med. Serv.

Received:
At Evac. Hosp. No. 617.
Located at: Carlisle.
(signed:) James C. Smith,[2]
Major, M. C.
Date and hour: 17 June 19—, 7:40 PM.

Evacuee				S or P[3]	Diagnosis	Remarks
Name	Army Serial No.	Grade	Organization			
Brown, Henry I	6534278	Pvt	A, 17 Inf	P	GSW: fract, comp, rt. tibia	
Lowe, James F	0–19785	1st lt	19 FA	S	GSW, penetrating, mid. third, left arm.	Observe for sec hemorrhage.
Crook, William P	8485722	Sgt	Hq, 14 Inf	S	Nonbattle fract, left radius and ulna.	
Langley, Oliver C	7959631	Pvt	D, 21 Inf	P	Obs for measles	Isolate.
Johnson, Frank W	7644781	Corp	H, 14 Inf	P	GSW, perforating, right thorax	May require more morphine. Died en route.[4]
Perry, Jonathan (none)	0–4589	Col	22 FA	S	GSW: Lacerations, rt. forearm	

[1] One copy signed by officer in charge of convoy and left with the evacuation officer of the Clr. Sta., 5 Div., as a receipt.
[2] One copy signed by the receiving officer of Evac. Hosp. No. 617 and given to the officer in charge of the convoy as a receipt.
[3] Sitting or prone.
[4] "May require more morphine" entered at Clr. Sta., 5 Div. "Died en route" entered later by officer in charge of convoy.

APPENDIX II

FORM FOR AN EVACUATION LOG

Medical Section, Headquarters First Army, 17 June 19—

Mission: To evacuate—	Convoy			Itinerary						Number evacuated		
	Number	Composition	Commander	Left pool	Distance traveled, in miles				Returned to pool	P	S	Total
					Out	Loaded	In	Total				
Hosp. Sta., IV Corps	979	1st Plat., Co. D, 458 Med. Regt.	1st Lt. John P. Jay, MC	12:15 AM	6	11	9	26	3:35 AM	22	49	61
Clr. Sta., 16 Div	980	Co. E, 458 Med. Regt., with Ambs. Nos. 5 and 6 of 364 Amb. Co. (Sep.) atchd.	Capt. James E. Blue, MC	12:40 AM	9	16	12	35	5:15 AM	59	63	122
Hosp. Sta. No. 2, First Army (Emergency).	981	Amb. No. 2, 364 Amb. Co. (Sep.).	Pvt. 1cl. Clarence Jackson	12:45 AM	3	7	9	19	2:05 AM	1	0	1
Clr. Sta., 5 Div	987	Co. D, with 1st Plat, Co. E, atchd, 458 Med. Regt.	Capt. Edward F. Bly, MC	4:55 PM	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)

[1] Convoy not yet returned; these entries not made until convoys return to pool.

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