

CHAPTER 5

ASSESSMENT AND CONCLUSIONS

INTRODUCTION

In World War I, the Army Medical Department matured into a modern medical service. The system developed has survived with minor modifications down to the present. The ability to implement a successful health care system for a mass army overseas challenged the Medical Department. Through effective preparation and skillful adaptation of doctrine, it succeeded. A brief analysis of the achievements and failures during the war helps to understand how that success evolved.

MEDICAL PREPARATION AND ORGANIZATION

Before the war, the Medical Department prepared to support the Army by building on the experiences of the Civil War, the Spanish American War, and the Indian Wars. It allowed for rapid expansion by using the civilian medical community and a Medical Reserve. For the battlefield, the medical planners developed a comprehensive medical doctrine, which established levels of care from front to rear and had systems for handling medical supplies, and infectious disease. After the United States entered the war, it adapted its doctrine to the changing conditions overseas. This allowed the Medical Department to furnish excellent medical care to the A. E. F., which was the largest force ever fielded by the United States up to that time.

MOBILIZATION

The Medical Department had to raise, equip, and send overseas a larger medical force than any previous one in its history. World War I was the first major overseas conflict that the United States fought, so there was no existing doctrine on how to create and move such a force. Despite this, by the end of the war, the A. E. F. Medical Department had 17,487 officers, 8,951 nurses, and 137,403 enlisted men.¹

To raise this force was one of the Medical Department's successes. However, the inexperience in medical mobilization caused undue reliance on those units that the Army organized early in the conflict, while other units remained either unformed or in the United States. The greatest successes lay in the area of civilian-military cooperation that led to the formation of the Red Cross Base Hospitals and in the Medical Officers Reserve Corps. The worst failures were the neglect by the Army to raise any non-divisional medical units in peacetime.

CIVILIAN-MILITARY COOPERATION

One of the most important developments was the close relationship between the Medical Department and the American National Red Cross, which provided a link between the Army and the civilian medical community. The Red Cross helped coordinate the civilian volunteer efforts for the Army. When war came, this proved of incomparable value in enabling the Medical Department to expand.

Medical volunteers, such as George Crile, went to France to work with the French and British in Red Cross hospitals. The civilians who worked as

¹Joseph H. Ford, *The Medical Department of the United States Army in the World War, Volume II, Administration American Expeditionary Forces*, (Washington, D.C.: Government Printing Office, 1927), 93, (Hereafter referred to as *Administration, A.E.F.*).

volunteers in France supplied the impetus for the civilian medical community to mobilize in support of the military. In particular, Crile proposed organizing hospitals from university hospitals. These units eventually became Red Cross Base Hospitals. Brigadier General Jefferson R. Kean who served as the director of military affairs at the Red Cross had responsibility for raising these units. He raised fifty hospitals, forty-nine of which served overseas. At Kean's retirement, Surgeon General Merritte W. Ireland remarked that these hospitals made up "one leg of the tripod forming the foundation of the Medical Department in the World War."²

Why were these Red Cross hospitals such an essential aspect of the medical care? First, they represented a reserve of medical units that the Army could rapidly mobilize and deploy. For example, Base Hospital No. 4 mobilized and departed for Europe ten days after receiving orders. These were the only units other than the Regular Army that could respond that quickly. Rapid response meant that when the initial calls came for hospitals overseas, these hospitals went.³

Second, base hospitals were the source for many of the augmentation teams and units formed in Europe. The only medical units in France that could spare personnel were base hospitals. This borrowing from base hospitals occurred even more dramatically in forming units that were not in the *Manual for the Medical Department*. For example, of the first six mobile hospitals formed, five came from the companies of the first six base hospitals in France.⁴

²James A. Tobey, *The Medical Department of the Army Its History, Activities and Organization* (Baltimore: Johns Hopkins Press, 1927) 37.

³George W. Crile, *An Autobiography*, edited with sidelights by Grace Crile, 2 Vol., (Philadelphia and New York: Lippincott, 1947), 273-75.

⁴Harvey Cushing, *From a Surgeon's Journal: 1915-1918*, (Boston: Little, Brown, and Company, 1936), 402-03. Crile, *Autobiography*, 348. U.S. Army, A.E.F. Base Hospital No. 4,

The vast majority of surgical, shock, and splint teams that reinforced the evacuation and field hospitals came from base hospitals as well. Without these teams, the evacuation hospitals could not have handled the demands placed on them during battles such as the Aisne-Marne campaign or the Meuse-Argonne offensive. Base hospitals supplied these teams at the same time that increased fighting placed heavier demands on their own staffs.⁵

The A. E. F. Chief Surgeon's office did not limit its borrowing of base hospital personnel only to staff medical units. It also depended heavily on base hospitals to supply administrative help as well. When the first base hospitals arrived in France, the adjutants all went to the Chief Surgeon's office to expand that office. When the A. E. F. established a professional service to supervise specialty care, all the men who served as consultants initially served with one of the base hospitals. The consultant system and base hospitals gave the A. E. F. the finest medical expertise available.⁶

The third reason that base hospitals were important to the A. E. F. and the Medical Department was that they were organized and functioned as units. All other Army Reserves were individuals. Base hospitals, in contrast, worked together, trained together, and knew each other before they went to war. This allowed them to start work immediately on mobilization, avoiding lengthy train-up.⁷

Album de la Guerre, (Cleveland: Scientific Illustrating Studios, 1919), 19-24 U.S. Army, A.E.F. Base Hospital No. 10, *History of the Pennsylvania Hospital Unit (Base Hospital No. 10, U.S.A.) in the Great War*, (New York: P. B. Hoebner, 1921), 94-95.

⁵War Department, *Report of the Surgeon General, 1919*, (Washington, D. C.: Government Printing Office, 1919), 1487. Historical Division, Department of the Army, United States, *United States Army in the World War, 1917-1919*, Vol. 15, *Reports of the Commander-in-Chief, A.E.F., Staff Sections and Services*, (Washington, D.C.: Government Printing Office, 1948), 417 (Hereafter referred to as Historical Division, *Reports*).

⁶Joseph H. Ford, *The Medical Department of the United States Army in the World War, Volume II, Administration American Expeditionary Forces*, (Washington, D.C.: Government Printing Office, 1927), 351-358, (Hereafter referred to as *Administration, A.E.F.*).

⁷Crile, *Autobiography*, 276.

MEDICAL RESERVE CORPS

The Medical Department was the first branch of the Army to have a Reserve Corps. The founding of the Medical Officers Reserve Corps in 1908 proved the forerunner for the entire Army Reserve system. The reserves had two important benefits for the Army and the Medical Department. First they furnished a pool of at least partially trained officers to staff the rapidly forming units. Second, the system allowed an administrative way to recruit, commission, and promote medical officers during the rapid expansion of 1917 and 1918. This prevented much of the confusion and disorder that occurred in 1898 when the Army tried to mobilize doctors for the Spanish-American War.⁸

LACK OF NECESSARY HOSPITAL UNITS

The dependence on base hospitals points out one of the failings of the pre-war planning. The Medical Department failed to establish many of the units that it needed to support an army. When the United States declared war, the only medical units formed with personnel assigned were base hospitals, field hospitals, and divisional and regimental sanitary trains. All the evacuation hospitals, medical supply depots, evacuation ambulance companies had to form, organize, and train before they could get overseas. This led to an imbalance in the medical support units in the A. E. F., with the divisions with their full complement of medical support and little behind them.⁹

⁸Charles Lynch, Frank W. Weed, and Loy McAfee. *The Medical Department of the United States Army in the World War, Volume I, The Surgeon General's Office*, (Washington, D.C.: Government Printing Office, 1923), 60, (Hereafter referred to as *The Surgeon General's Office*).

⁹*Surgeon General's Office*, 65-66.

The Medical Department failed to raise many units required by the *Manual for the Medical Department* even after the declaration of war. No camp hospitals, convalescent camps, and similar units formed in the United States. All these units formed in Europe using casual medical personnel and officers, nurses, and men from other units. The failure to organize these necessary medical units weakened the hospitals that supplied personnel. The camp hospitals and other new units struggled, because they never worked or trained as a unit.¹⁰

ALLIED EXPERIENCE

The Army also learned from the experience of the Allies. The lessons learned helped the United States coordinate its medical effort as part of the Allied. The lessons also stimulated the Americans to change their medical doctrine to adapt to changes that the French and British had made. Before the United States entered the war, the Medical Department sent officers to Europe to observe the medical support that the combatants used. These men became leaders in the A. E. F. Brigadier General Alfred E. Bradley, a liaison officer with the British, became the first Chief Surgeon. Colonel Sanford H. Wadhams, who worked with the French, served as the deputy to the Chief Surgeon. The close relationship that Wadhams established with the French helped him coordinate medical support with them.¹¹

The Allies fought for three long years before the United States entered the war. They developed a system that handled the casualties generated in the trench warfare. It relied on triage stations near the front to send patients

¹⁰Sanford H. Wadhams and Arnold D. Tuttle, "Some of the Early Problems of the Medical Department, A.E.F.," *Military Surgeon* 45 (December, 1919), 640-44. *Administration, A.E.F.*, 19-23, 39.

¹¹Wadhams and Tuttle, "Early Problems," 640-44. *Administration, A.E.F.*, 19-23, 39.

to the appropriate facility. Behind these were field and evacuation hospitals. The Allies used mobile surgical hospitals to supplement surgical capability at the front. From these and evacuation hospitals, patients returned to base hospitals for definitive care.¹²

The Americans adjusted their pre-war doctrine to approximate that of the Allies. The French *Auto-chir* became the American mobile hospitals.¹³ American medical officers toured French and British facilities to learn first hand about wartime medical care. French and British doctors lectured at the medical training school at Langres. Similarity in doctrine allowed the medical services of the Allies to work well together. It also enabled the American medical units to minimize their learning time by profiting from the Allied experiences.¹⁴

The medical system they developed worked well for both the French and the British. The static conditions of the trench warfare made it easy to establish hospitals near the front lines with set evacuation routes for the wounded. The general staff planned offensive operations well in advance, so medical planners could easily make sufficient hospitalization available. The lines never moved more than a few kilometers at a time, which spared the medical services from long evacuation distances or having to move hospitals.

PROBLEMS WITH THE ALLIES

All was not perfect, however. Allied doctrine's reliance on fixed facilities impaired medical care in 1918. The nature of the war changed from

¹²*Report of the Surgeon General, 1919*, 1464-68. Historical Division, *Reports*, 418-19, *Administration, A. E. F.*, 284-85. Wadhams and Tuttle, "Early Problems," 659-61.

¹³The *Auto-chir*, or *Ambulance Chirurgicale Automobile* was the French mobile surgical hospital.

¹⁴*Report of the Surgeon General, 1919*, 1464-68. Historical Division, *Reports*, 418-19, *Administration, A. E. F.*, 284-85. Wadhams and Tuttle, "Early Problems," 659-61.

trench stalemate to mobile and fluid warfare. As the French and British retreated in the face of the German assault, they left behind many of their fixed hospitals. The French alone lost 45,000 beds. When the Americans started in combat, they attached their divisions to the French, with the French to supply hospitalization for the Americans. The loss of so many hospital beds prevented the French from providing this care. American hospitals had to rush to the front to care for the wounded.¹⁵

Another problem that affected medical support was the great distance back to the United States, compared with the shorter distances to England or the rest of France. Neither American nor Allied doctrine made allowance for holding soldiers while they convalesced. Both the British and the French sent them home to heal. The long distance across the Atlantic prevented the Americans from using that method. The Medical Department had to construct and staff convalescent camps. The requirement for unplanned medical facilities stressed the system by using personnel and equipment needed elsewhere. Again, lessons learned by the Allies misled the medical planners in the A. E. F.¹⁶

HOSPITALIZATION

The A. E. F. Medical Department established a complete hospitalization system in France. By the Armistice, the American Army had 276,347 hospital beds in France, 192,844 normal and 83,503 emergency capacity beds. It had 153 base hospitals, 66 camp hospitals and 12

¹⁵J. R. Kean, "Evacuation of the American Wounded in the Aisne-Marne Battles, June and July, 1918," *Military Surgeon* 56 (April 1925): 473-77. Derby, "Wade in Sanitary!," 49-51. Charles Lynch, Joseph H. Ford, and Frank W. Weed, *The Medical Department of the United States Army in the World War, Volume VIII, Field Operations*, (Washington, D.C.: Government Printing Office, 1925) 320-29 (Hereafter referred to as *Field Operations*).

¹⁶*Administration, A. E. F.*, 286.

convalescent camps. At the front, thirty-nine evacuation hospitals worked (nine of these arrived in November 1918). The Medical Department furnished this massive hospitalization capability through an aggressive construction program, modification of existing buildings, and addition of emergency beds. This hospitalization capacity was barely enough. During the Meuse-Argonne offensive, the influenza pandemic struck the A. E. F. The number of patients overloaded the medical system, by 23 October 1918, there were 20,000 more patients than normal bed capacity in the A. E. F. The Medical Department handled the emergency well by rapidly expanding the bed capacity through emergency beds and accelerated construction of new hospitals. The staffs of these expanded hospitals often stretched to dangerous levels. At Base Hospital No. 45, each ward physician had 250 patients under his care, more than were in the largest hospital in Richmond, Virginia, where it had formed, at the time.¹⁷

The shortage of Medical Department personnel and units caused medical units constantly to work over their expected capacities. The Medical Department had estimated that fourteen per cent of the force needed to be medical to supply adequate medical care. Instead, it received authorization for only 7.65 per cent and it did not reach this percentage until October 1918. Infantry and machine gun units had displaced the medical units on the ships from the United States. This shortage in medical units and personnel forced the Chief Surgeon's office to move hospitals constantly to provide help where the situation was worst. Units in France constantly expanded their bed space

¹⁷*Report of the Surgeon General, 1919*, 1341, 1343. [Geisinger, Joseph F.], ed., *History of U.S. Army Base Hospital No. 45 in the Great War (Medical College of Virginia Unit)*, (Richmond, VA: William Byrd Press, 1924) 71.

without significant increase in their staffs. Base Hospital No. 6, originally designed for 500 patients, had 4,319 at the Armistice.¹⁸

SLIGHTLY WOUNDED

The inability to handle the slightly wounded and sick increased overcrowding in hospitals. There was no place to care for these soldiers closer to the front than base hospitals. Often these patients filled the ambulance services and evacuation hospitals; both of which were designed for and needed by the more seriously wounded. The soldiers were lost to their units for weeks, instead of the few days that their conditions merited. The number of these soldiers needlessly sent to the rear ran as high as 50,000. This added to the bed shortage in the A. E. F. Major Roger I. Lee wrote about this problem in *Military Surgeon*, in March 1918. He recommended establishing an "out-patient" department for each hospital, to hold patients until they were able to return to their units. The situation worsened in the Meuse-Argonne offensive. During this operation, corps hospitals and rest camps formed to hold and treat these patients close to the front and their units.¹⁹

MOVING HOSPITALS

The inability of hospitals to move further complicated the shortage. Hospitals designed for trench warfare could not move rapidly where needed. When they did move, it took days and required finding new buildings to use in a crowded combat zone. This relative immobility led to casualties

¹⁸[George Clymer], ed., *The History of U.S. Army Base Hospital No. 6 and Its Part in the American Expeditionary Forces*, (Boston: Privately published, 1924), 8.

¹⁹Roger I. Lee, "The Case for More Efficient Treatment of Light Casualties in Military Hospitals," *Military Surgeon* 42 (March 1918) 283-86. Report of Evacuation Branch G-4 Argonne-Meuse Operation, TMs. File 191-41.6 Army War College Historical Section, Carlisle, PA. Lyle, "Evacuation in the Meuse-Argonne," 587-88. Stark, "Hospitalization for St. Mihiel Operation and ARGONNE-MEUSE Offensive." *Report of the Surgeon General, 1919*, 1517-23. *Field Operations*, 531-41, 634-35.

overloading certain hospitals while hospitals in other sectors remained idle. The inability to transfer hospitals quickly further complicated the shortage of hospitals and personnel.

Hospitals lacked sufficient organic transportation to move with the troops. This problem peaked in the Meuse-Argonne offensive, where the First Army Surgeon felt that he could not have moved another hospital if the armistice had not intervened. Evacuation and field hospitals lacked sufficient trucks and depended on the army or corps transportation assets to move. The army and corps needed these trucks for other supplies. Medical units tended to be low priority. The distance lengthened from the front to evacuation hospitals, which could not move to keep up. The longer distances complicated and delayed evacuation. Severely wounded soldiers were less likely to survive the longer trips. The Medical Department devised three stopgap measures. It created rest stations to resuscitate patients having problems along the evacuation routes. The surgical and X-ray sections of the mobile hospitals, which had sufficient trucks, moved forward while the rest of the hospital remained behind. Finally, field hospitals received augmentation to allow them to care for those patients who could not survive the trip to the rear. The Medical Department constantly compensated for a shortage of units, and personnel as it adapted to a war on a scale never before imagined.²⁰

²⁰Letter, Alexander N. Stark, Chief Surgeon First Army, to Assistant Chief of Staff, G-4, First Army, 4 November 1918, Subject: Moving of Evacuation Hospitals. TMs, Army War College Historical Section, Carlisle, PA. Alexander N. Stark, "Explanation and Execution of Plans for Hospitalization for St. Mihiel Operation and ARGONNE-MEUSE Offensive," *Lectures, 1st Army Staff*, TMs, United States Army Command and General Staff College Library, Fort Leavenworth, KS. *Report of the Surgeon General, 1919*, 1476, 1517-23, 1691-1705. *Field Operations*, 531-41, 634-35, 810-837.

Modern medical planners face many of the same problems as their counterparts in World War I. Medical units must move forward with the combat units. They need to have the assets to do so. Many of our modern hospitals lack sufficient assets to move themselves and must have augmentation to do so. The demands for transportation assets are possibly greater today than in World War I.

EVACUATION

The Army had mixed success with its evacuation system. Medical doctrine described the evacuation of patients from the front line to hospitals in the United States. It prescribed units to carry out each step of the evacuation. The failure of the Army to raise and transport adequate numbers of these units to France created severe problems for the Medical Department. The Medical Department proved innovative in adapting to this shortage. It procured hospital trains and barges in Europe to transport the patients. Medical regulating officers directed the flow of these patients to the rear to prevent overloading any one base hospital or hospital center. The French lent the Americans hospital trains to make up for the shortage.

The patient distribution during the Meuse-Argonne offensive demonstrates the effectiveness of the regulating system and the hospital trains. The Medical Department had 170,305 patients in camp and base hospitals on 7 November 1918. The Advance Section, closest to the front, had only about forty per cent of its beds occupied while the base sections had over eighty per cent occupied. This allowed rapid treatment and hospitalization of battle casualties near the front despite the drastic patient overload.²¹

²¹*Administration, A.E.F.*, 314-15.

At the front, problems with evacuation proved more difficult to solve. To carry out the massive evacuations required in battles like the Meuse-Argonne, the Medical Department borrowed trains, ambulances, trucks, even sight-seeing buses. Since the roads in the combat areas were often crowded and in poor shape, ambulances had to make longer hauls over congested roads, which further increased the number of ambulances required.

The ambulances available had to use roads, so when roads were impassable, such as in the Meuse-Argonne, the ambulance companies used horse-drawn wagons. There were only twelve of these in a division. Combat unit commanders used the wagons they had to carry ammunition and other supplies. The Medical Department failed to provide adequate cross-country transportation. This inability to move off the road slowed evacuations and forced medical officers to improvise to transport the wounded.

Much of the doctrine the Americans and Allies developed was for trench warfare in fixed formations. Evacuations took place over good roads and were relatively short. In the offensive, evacuation distances stretched as the front moved farther from evacuation hospitals. The longer distances required more ambulances than trench warfare, with its fixed evacuation routes. The road congestion as men, artillery, ammunition, and other supplies rushed to the front delayed evacuation and increased the number of ambulances needed. The A. E. F. had an ambulance shortage; decreased demand for ambulances in trench operations had masked this shortage.²²

²²Letter, Alexander N. Stark, Chief Surgeon First Army, to Assistant Chief of Staff, G-4, First Army, 4 November 1918, Subject: Moving of Evacuation Hospitals. TMs, Army War College Historical Section, Carlisle, PA. Stark, "Hospitalization for St. Mihiel Operation and ARGONNE-MEUSE Offensive." *Report of the Surgeon General, 1919*, 1476, 1517-23, 1691-1705. *Field Operations*, 531-41, 634-35, 810-837.

SANITATION

Field sanitation was a triumph of the Medical Department. The Army had learned the lessons of the Spanish-American War. Typhoid, which ravaged the Army in 1898, was rarely seen in 1917 and 1918. The A. E. F. had an efficient and thorough vaccination system for typhoid. It also aggressively sought carriers and infected water supplies, which prevented spread of the disease.²³

The A. E. F. had the lowest rate of venereal disease among the Allied Armies. This resulted from the integrated treatment and prophylaxis plan developed. General Pershing, himself, emphasized the importance of the prevention of venereal disease. General Orders, A. E. F. Nos. 2, 34, and 77 all concern the prevention of venereal disease. This command emphasis helped immeasurably in the enforcement of the prophylactic measures employed. The A. E. F. treated soldiers with venereal disease at their units. The patients did not get evacuated from the front. The British treated their soldiers in the rear; venereal disease proved an easy way to get out of the trenches in the British Army. The combination of command emphasis, soldier education, and aggressive treatment and prophylaxis prevented much illness and suffering in the A. E. F.²⁴

²³Weston P. Chamberlain and Frank W. Weed, *The Medical Department of the United States Army in the World War, Volume VI, Sanitation*, (Washington, D.C.: Government Printing Office, 1926) 534 (Hereafter referred to as *Sanitation*).

²⁴*Sanitation*, 899-970. Hugh H. Young, *Hugh Young: A Surgeon's Autobiography*, (New York: Harcourt, Brace and Co., 1940), 264-69. Historical Division, Department of the Army, United States, *United States Army in the World War, 1917-1919*, Vol. 16. *General Orders, G.H.Q., A.E.F.*, (Washington, D.C.: Government Printing Office, 1948), 11-12, 71-72, 144-46. (Hereafter referred to as Historical Division, *General Orders*).

STAFF ORGANIZATION

Both the A. E. F. and the Medical Department struggled to establish the optimum administrative system. The original staff organization of the A. E. F. had the Chief Surgeon at G. H. Q. This worked well for the Medical Department, for it allowed the Chief Surgeon direct medical input concerning operations, locations of units, and similar concerns. The Hagood Board recommended limiting the size of G. H. Q. and moving all the administrative and technical staff services to the Services of Supply. This moved the Chief Surgeon's office to the supply services of the S. O. S.²⁵

This new organization created problems for the Medical Department. First, it removed all medical personnel from the General Staff. Second, because it removed the medical units in the Zone of the Armies from the control of the Chief Surgeon, he no longer had any official say in the deployment or use of hospitals and other medical units in combat. Only through liaison officers with the General Staff did the Chief Surgeon maintain the ability to give medical concerns and advice. These officers eventually became part of the General Staff G-4 section. This solution functioned only because men like Brigadier General George Van Horn Moseley, the Assistant Chief of Staff, G-4, worked to keep the channels open between the G. H. Q. and the S. O. S.²⁶

After the war, army doctrine changed to reflect the need for medical staff at G. H. Q. In a letter to the A. E. F. chief of staff, 24 March 1919, Brigadier General Walter D. McCaw emphasized the need for medical

²⁵Johnson Hagood, *The Services of Supply, A Memoir of the Great War*, (Boston and New York: Houghton Mifflin Company, 1927), 129-147. James A. Huston, *The Sinews of War: Army Logistics 1775-1953*, Army Historical Series, (Washington, D. C.: Office of the Chief of Military History, United States Army, 1966), 360-61. Wadhams and Tuttle, "Early Problems," 643-45. *Administration, A.E.F.*, 60-62.

²⁶Wadhams and Tuttle, "Early Problems," 643-45. *Administration, A.E.F.*, 60-62.

representation on the general staff and gave a proposed table of organization with the Chief Surgeon at G. H. Q. He wrote, 29 May 1919, that “medical care had suffered by being treated as a supply service.” He pointed out that medical support required much more than simply supplying the soldiers with medical supplies, but that it involved detailed technical and administrative decisions that needed to be made by the General Staff at General Headquarters.²⁷

Surgeon General Ireland emphasized the G. H. Q. policy-making role in an address published in the *Military Surgeon* in 1928. He stated unequivocally, “It is...necessary that the chief surgeon maintain his office...at General Headquarters and keep in close touch with the commander-in-chief and his General Staff.” M. A. W. Shockley wrote extensively on the organization of medical support in the theater of operations. His book, *An Outline of the Medical Service of the Theatre of Operations*, served to codify much of the medical doctrine derived from the war. He considered having the Chief Surgeon away from G. H. Q. in an organization like the S. O. S. to be the second choice.²⁸

Neither the Chief Surgeon, nor the medical section at G. H. Q. was able to act as the medical staff officers for the armies or corps. The Medical Department assigned a medical officer to advise the commander and run the evacuation hospitals, evacuation ambulance companies, and other army and corps medical assets. This markedly improved the control and utilization of medical units. The Army used the lessons learned in the war to institute the

²⁷United States War Department, *Report of the Surgeon General*, 1919, 2 Vol. (Washington, D.C.: Government Printing Office, 1919), 1439. Letter, chief surgeon, A. E. F., to chief of staff, A. E. F., reprinted in *Administration, A.E.F.*, 67-69.

²⁸Merritte W. Ireland, “The Medical Service in a Theater of Operations,” *Military Surgeon* 62 (May 1928), 574-576. M. A. W. Shockley, *An Outline of the Medical Service of the Theatre of Operations*, (Philadelphia: P. Blakiston’s Son and Co., 1922), 8.

current system of having the surgeon as a special staff officer at each command headquarters.

APPLICATION TO MODERN MILITARY MEDICINE

The successes and the problems from World War I served as the basis for medical doctrine after the war and the Medical Department up to the present. Some names have changed, but the functions remain unchanged from World War I. Mobile hospitals became mobile army surgical hospitals (MASH), field hospitals became divisional clearing companies, and base hospitals became general and station hospitals. The flow of patients from the front back through the medical system differs today only through more efficient means of evacuation.

The base hospitals raised by the Red Cross functioned as the first reserve units available to the Army. Before the raising of these units, all units belonged to either the Regular Army or the National Guard. The success of these units foreshadowed the change in the Army Reserve from individual soldiers to organized units that train and fight together. The Army raised general hospitals in World War II by the same method of organizing them from the staffs of the university hospitals. This provided personnel who had worked together in the same unit without being in the Reserves. Since then, the rise of the Army Reserves has reduced the need for raising hospital units this way.²⁹

The lessons learned by the Medical Department in World War I provided the basis for the medical system in World War II, Korea, Viet Nam, and the present. Currently, all medical units called for by doctrine are

²⁹Richard B. Crossland and James T. Currie, *Twice the Citizen, A History of the United States Army Reserve, 1908-1983*, (Washington, D.C.: Office of the Chief, Army Reserve, 1984), 18-20.

organized, either in the Reserves or the Active Army. Medical units train for their wartime missions as well as providing peacetime medical care. The success in preventing disease has expanded and remains one of the major missions of the Medical Department.

Modern doctrine emphasizes that future wars will probably be contingency in nature. American forces will likely fight overseas as part of an international force. World War I provides the first example in American history of the United States sending a major expeditionary force overseas as part of an international effort. The problems of adapting to the Allies medical system, providing support over long lines of communication, and the limited shipping assets going to combat units rather than support units trouble today's medical planners as much as they did those in 1917. The study of medical support in World War I serves as an example of how to overcome these hardships.