

Chapter One

World War I

On the 3rd of January, 1918, 181 men stood in formation at Fort Riley, Kansas, as Lieutenant Colonel Horace Bloombergh read the orders that formally created Evacuation Hospital Number 12. The 12th would help define the role of the US Army's newest unit: What would an evacuation hospital do in the Army? How would it work in the field? What made an evacuation hospital different from any other kind of hospital? More immediately for the staff of the 12th, how soon would they arrive in France and get to work?

THE ROLE OF THE EVACUATION HOSPITAL

In World War I, the 12th and other "evacs" became a key link in the middle of the Army's evacuation chain. Stretcher bearers carried wounded soldiers from the front lines to a doctor's care at the battalion aid station, where bandages and splints were applied, but no resources were available for additional care. From the battalion aid station, other stretcher bearers and ambulances carried the wounded back to a triage point at one of an infantry division's four field hospitals, located a few miles from the front lines.

At triage, the wounded were sorted into "light" and "serious" cases, sick men were sent to a designated field hospital, and those suffering from poison gas went to another hospital. (The line between light and serious wounds varied, and gas casualties often had other wounds as well.) Some additional care was available at the triage point, but field hospitals had limited equipment and could treat the lightly wounded only.

From triage, wounded men were taken by ambulance to the evacuation hospitals for surgical care, where they stayed several days to stabilize and begin recovery. From there, they were taken by hospital train to base hospitals, where they could receive complicated procedures and recuperate. The Army also experimented with mobile hospitals that were smaller than the evacs and focused

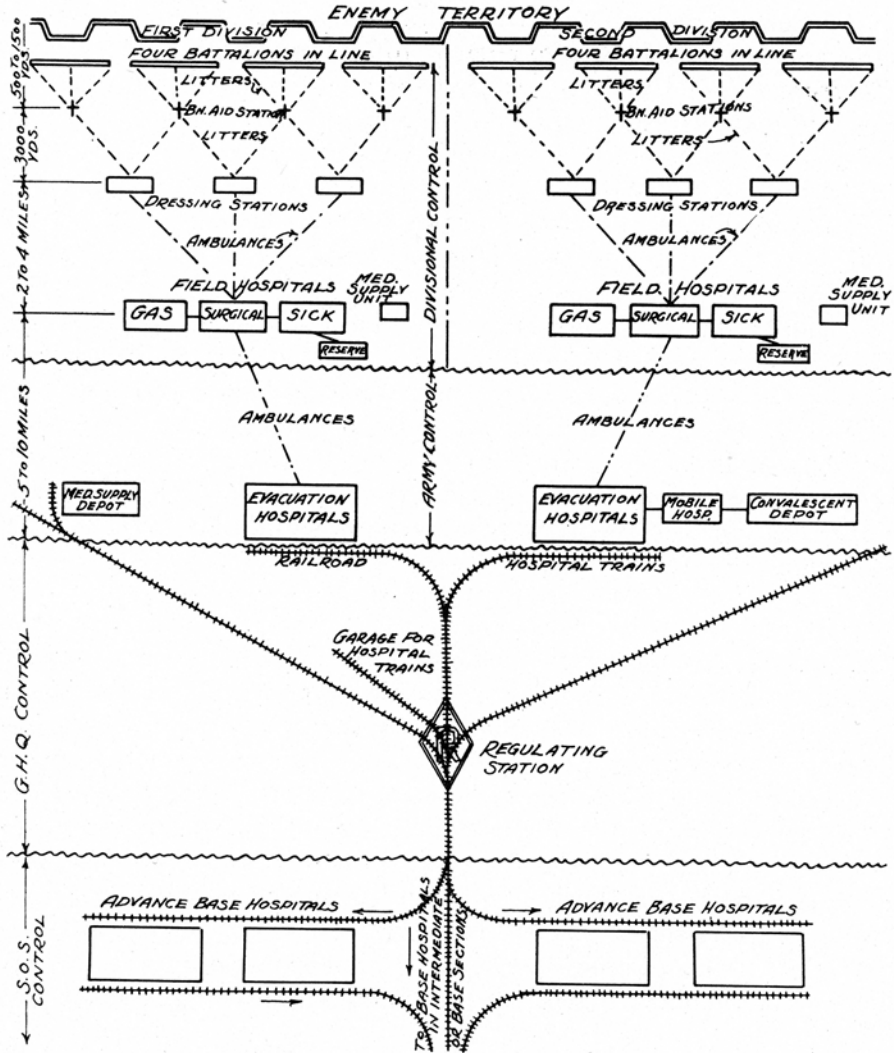


Figure 1-1. Schematic diagram of the hospitalization and evacuation system of the American Expeditionary Forces.

Reproduced from: Lynch C, Ford J, Weed F. Field Operations. Vol VIII in: *The Medical Department of the United States Army in the World War*. Washington, DC: Government Printing Office; 1925: 262.

entirely on surgical cases, but the experiment had mixed results. With an insufficient number of beds to handle postoperative patients, these hospitals lost mobility almost as soon as the first patients were treated.

At the evacuation hospital, incoming patients were triaged again, into what were then termed the “slightly wounded” (who would be checked and rebandaged before being evacuated as soon as possible); patients who could go straight into surgery; patients who needed a radiograph before surgery (x-ray equipment was not portable and was usually located in a separate x-ray ward); shock patients (sent to a special shock ward to be warmed and given blood transfusions before surgery); and those who needed specialist surgical teams (formed to handle difficult cases as well as to provide reinforcements during busy periods) for head, chest, or abdominal wounds.

An evacuation hospital ideally had ten operating teams, each with two doctors, a nurse, an orderly, and an anesthesiologist or nurse-anesthetist. Sometimes the doctors, working in teams, would take turns providing anesthesia—usually ether and chloroform—and performing surgery during a 12-hour shift. Each team had two operating tables, one in use while the other was cleaned and pre-



Figure 1-2. Triage of patients at an evacuation hospital, World War I. Reproduced from: Signal Corps photograph SC-30556. Record Group 111, National Archives and Records Administration.

pared for the next patient. After surgery, the patient was moved to a specialized ward for each type of wound, gas exposure, or disease.

In the wards, physicians rather than surgeons were in charge, checking that patients were stable and recovering and deciding when they were strong enough to be moved to base hospitals. Nurses (all women) and ward attendants (all enlisted men) cared for patients. Few drugs beyond painkillers were available, so care primarily meant keeping patients warm and calm, feeding them, and changing dressings. Probably the most time-intensive nursing procedure was applying and reapplying Dakin's solution wound dressing—a very low concentration of bleach and boric acid devised during the war by British and French doctors. The solution was used for wound irrigation to kill bacteria (Dakin-Carrel treatment) as well as postoperatively soaked into gauze pads and applied to wounds to prevent infection during the early stages of healing.

Ideally, patients would be on the wards only a day or two, although unstable patients were kept until they were strong enough to be moved. Certain types of wounds also required longer stays for stabilization: head wounds about 10 days, chest or abdominal wounds 10 to 14 days, and badly fractured legs longer. By moving postoperative patients out as soon as possible, the Army kept the evacuation hospitals ready to receive new patients while quickly moving the wounded back to better-equipped base hospitals for full recovery.

The Army found that evacuation hospitals were best situated 9 to 15 miles from the front lines; any closer and they were likely to be shelled, any farther back and evacuation took too long. Location near a railway line was important because evacuation to base hospitals by hospital trains (carrying up to 400 patients each) was more efficient than transporting patients four per ambulance; therefore, railway locations were favored even when they were farther from the front lines. The Army tried to stock each hospital with supplies for 10 days in case supplies were interrupted. Hospitals also needed fuel and water, but could not be located close to supply dumps or other military camps because of the danger from shelling and bombing.

Although evacuation hospitals were not meant to be easily moved (requiring 90 to 120 three-ton truck trips to relocate), staff practiced setting up tents to begin operations quickly; they also practiced setting up an extra 500 beds (above the standard 1,000 beds) in case rearward evacuation was delayed. With no laundry facilities of their own, evacuation hospitals needed a laundry unit nearby to clean sheets and blankets; the hospitals had a limited number of service vehicles for such routine activities. Although seldom providing enough electricity, Army electric generators powered the radiographic equipment and lights in the operating room, administrative offices, and triage and preoperative wards. Any additional power was a luxury, and lights were installed in wards ahead of living quarters.

Unlike evacuation hospitals, field hospitals were relatively easy to create: they were small and had limited equipment, and four field hospitals were shipped

to France as part of each division. Many base hospitals had been formed and equipped by the Red Cross before the United States joined the war, so they were ready to deploy to France; some had even deployed before US combat units and worked with the British Expeditionary Force for the duration of the war. Evacuation hospitals posed a larger problem for the Army. Although the United States declared war against Germany in early April 1917, the first evac was not formed until the end of September; by December only four had been formed, and none was ready for the field. The 12th was part of the next batch, started in January 1918.

The Army ultimately formed 29 evacuation hospitals, although several did not get to France and others arrived only after the fighting had ended. Shipping space was a bottleneck: German U-boats had sunk thousands of ships, and the United States had begun shipping the entire American Expeditionary Forces (AEF) in addition to raw materials and supplies for the Allies. Politics and military operations caused priorities for supplies and troops to fluctuate, which changed shipping schedules. Due to German offensives in March and April 1918, the Army downgraded support units, instead shipping more fighting troops. This change was meant to be temporary, but logistical units never caught up, resulting in a shortage of AEF forward surgical hospitals and evacs alike. So serious was the shortage that at times when too many patients arrived at forward hospitals, some of the lightly wounded were bandaged and shipped immediately to base hospitals. Unfortunately, this practice led to preventable deaths among the wounded when hospital trains were sidetracked on the way.

THE 12TH DEPLOYS

It would be several months before the 12th was ready for action. In World War I, the Army mobilized from a standing start: in December 1916 the Army consisted of about 200,000 men (including the National Guard), and it peaked at 3,685,000 troops in 1918. Thousands volunteered and the draft brought in many more. The 12th was formed from men who volunteered for the Regular Army (beginning with one officer and 181 enlisted men), and many were not fully trained. Two Army medical training schools existed, one at Fort Riley and another at Camp Greenleaf (outside Chickamauga, Georgia), each providing 3 months' training. However, the schools were not large enough to handle the student load; some men were assigned to units without attending any training, and some students were transferred to short-handed units before they finished the course.

Records suggest that the 12th's officers, aside from Lieutenant Colonel Bloombergh (a Regular Army officer), received training in one of the 3-month courses at Fort Riley or Camp Greenleaf. Both schools taught the newly uniformed officers about Army regulations, the *Manual for the Medical Department* (Washington, DC: Government Printing Office; 1916), and Army paperwork.

By law, only physicians could serve in the Medical Corps, so the Army created the Sanitary Corps for supply officers, laboratory scientists, sanitary engineers, psychologists, and other positions. In addition to the expertise brought from their fields, these men allowed doctors to spend more time caring for patients. (The Army Dental, Nurse, and Veterinary Corps were already established.)

Like most units, the 12th had to provide basic training to some personnel on everything from saluting to wearing uniforms to marching in step; it also had to provide technical training for medical duties. Although medical personnel were not supposed to carry weapons and thus did not need marksmanship training, Lieutenant Colonel Bloombergh requested “pistol practice” for his officers because they were deploying overseas. The War Department failed to reach a decision on the request before the 12th left for France.

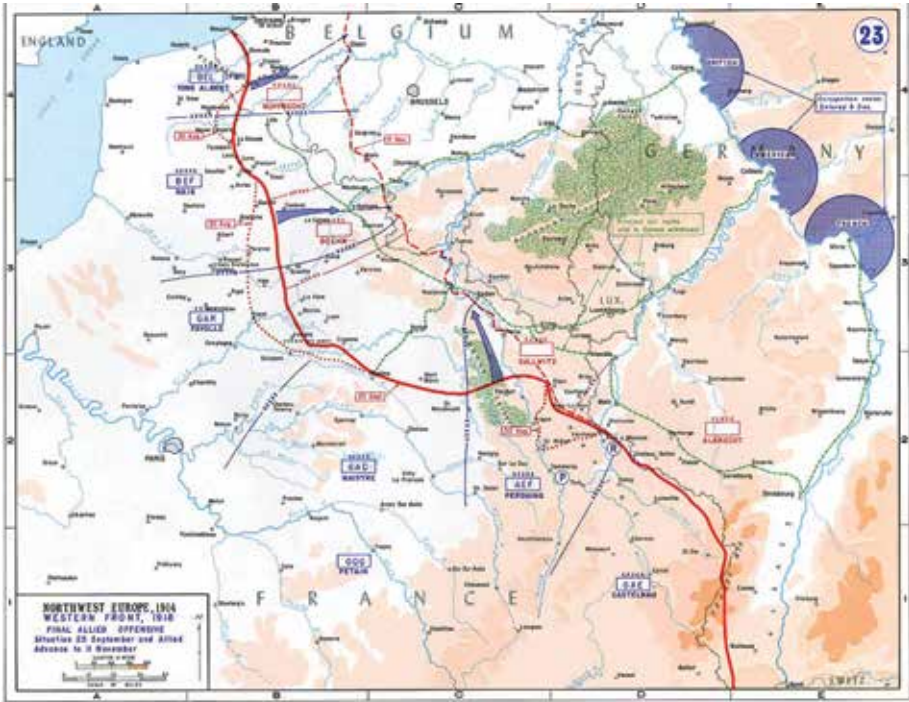
Prewar plans for evacuation hospitals called for 18 officers and 179 men to support 432 beds. However, wartime demands for beds resulted in expansion to 1,000 beds per evacuation hospital. The Army ultimately settled on 34 officers (including Quartermaster, Sanitary, and Dental Corps) and 237 men. However, more personnel were added in France because of the workload, and units operated above their formal authorization (up to double the authorized number). Extra personnel helped with labor duties, kitchen work, grave digging, and a host of other duties. Extra surgical teams were assigned to help with a rush of casualties.

Nurses were also added to evacuation hospital staff, although they were not originally authorized because, unlike in the 19th century, long-range artillery and aircraft brought evacs too close to combat. However, the need for nurses in surgery and patient care outweighed the Army’s traditional aversion to putting women (all Army nurses were female until male nurses were accepted in 1955) at risk, and, following a decision the Allies had already made, about 50 nurses were assigned to each of the evacuation hospitals in Europe. No record survives of what day in 1918 nurses joined the 12th, but they were apparently treated as part of the unit.

Institutionally, the Army remained uneasy about nurses. Despite the long-



Figure 1-3. The men of Evacuation Hospital No. 12. Reproduced from: *Year Book: Medical Officers Training Camp, Fort Riley, Kansas, 1917-1918*. Kansas City, MO: Union Bank Note Co; 1918: 82–83.



Map 1-1. Western Front, final Allied offensive, September 25–November 11, 1918. The Allied offensives in late 1918 broke the German army. The AEF attacked near St Mihiel and then in the Meuse-Argonne. Pagny-sur-Meuse is marked “P” and Royaucourt is marked “R.” Reproduced from: US Military Academy at West Point website. Campaign Atlas to the Great War. <http://www.dean.usma.edu/departments/history/web03/atlases/WorldWarOne/WWOneJPG/WWOne23.jpg>. Accessed October 19, 2009.

recognized need for nurses (at about one per ten hospital beds), the Army was all-male and, especially in an era when most troops were assigned to combat units, there was strong resistance to bringing women into the force. Thus members of the Army Nurse Corps (established in 1901) had no rank and could not issue orders. Nurses served in the Army, but were recruited by the Red Cross, paid less than men, and issued thoroughly impractical uniforms that had to be modified in the field.

Almost 5 months were spent on recruitment and training before the 12th Evacuation Hospital was ready to deploy. On June 1 the unit moved by rail to Camp Dix (now Fort Dix), New Jersey, a holding area for units awaiting shipment overseas. The 12th was slightly delayed at Camp Dix as it waited for additional personnel in response to the Army’s decision to increase the size of the evacu-



Figure 1-4. Kitchen of a hospital in the field, World War I.

Reproduced from: Signal Corps photograph SC-150396. Record Group 111, National Archives and Records Administration.

ation hospitals. Two weeks later, 150 men arrived, some trained, some partly trained, and some untrained. The unit spent the next month choosing which men to retain and finishing their training. By July 10, the 12th was again ready to sail but had to wait until mid-August to depart, probably due to the shortage of shipping and the higher priority given to combat units. On August 16, the unit left New York harbor, en route to England.

The Army used a number of liners (including some former German ships) to shuttle troops to Europe. All of them were packed with men, often over double the peacetime capacity. Although men did not have to share bunks, the galleys frequently could produce only enough food for two meals a day, and men could spend most of their day lined up waiting for those two meals. Ships traveled in convoy because of the threat of submarine attack, zigzagging across the North Atlantic. Blackouts were strictly enforced at night, and everyone had to stay below deck lest one glowing cigarette reveal the location of the convoy.



Figure 1-5. Laundry of a hospital in the field, World War I.
 Reproduced from: Signal Corps photograph SC-15040. Record Group 111, National Archives and Records Administration.

After 12 days at sea, the 12th arrived at Liverpool, probably the first time most of the men had been overseas. The next day they traveled by train to the south coast of England, and on August 30 they boarded a smaller ship for an overnight trip across the English Channel to France. At Cherbourg they immediately boarded a French train, crowding into boxcars labeled “40 homme/8 chevaux” (40 men or 8 horses), and headed east toward the front.

INTO ACTION

On the morning of September 3, 1918 (after 3 days and 2 nights in the cramped boxcars), the 12th Evacuation Hospital unloaded at the village of Pagny-sur-Meuse. It was a small village, with about 1,250 inhabitants before the war (although by then most of the men were in the French army), situated on a low rise next to the Meuse River. Two American medical units were already located there: a field hospital and a motor ambulance company. The 12th moved into the

facilities of a French military hospital consisting of ten wooden barracks-like wards and a large tent.

Staff began setting up more tents and digging latrines, but the ground was swampy; when the latrines filled with water, more had to be dug. The few patients in the wards, probably from the American divisions holding the line in the quiet sector, did not have serious injuries. After 9 days of quiet, the US First Army launched the first major American attack of the war, the St Mihiel offensive, on September 12, intending to break the German hold on an important railway line. The 12th was not slated to receive casualties; instead it packed up on September 13 and began moving to a forward site at Royauveix. The move, close behind the right flank of the St Mihiel advance, took 3 days. The field hospital and motor ambulance company moved with the 12th (they were probably being used as a group). At Royauveix the unit occupied another French hospital, this time a large one with many Adrian barracks (prefabricated, one-story,



Figure 1-6. Gas casualty being brought into an evacuation hospital, World War I. Reproduced from: Signal Corps photograph SC-14532. Record Group 111, National Archives and Records Administration.

frame buildings with tar paper roofs, built to provide double-decked bunks for 96 soldiers; they were hastily built and drafty, and many had earthen floors) and no tents. Both Pagny and Royauimeix had good road networks for ambulances to bring patients in and railroads to carry treated patients out to base hospitals. However, by the time the 12th was established, the St Mihiel offensive was over and all the wounded had been sent to other hospitals.

Although the 12th was now 15 miles from the front, most US units were moving north and west for the Meuse-Argonne offensive, and Royauimeix remained a fairly quiet sector behind the Second Army. However, few hospitals, including only two evacuation hospitals, supported the sector, so the 12th received some urgent surgical cases as well as many of the slightly wounded, gas casualties, and sick patients.

On November 6, just 5 days before the war's combat ended, the Second Army pushed forward and more wounded flowed back. Wounded continued to arrive after the armistice because some could not be reached by the stretcher-bearers while the fighting continued, and muddy roads slowed the ambulances. Wound-



Figure 1-7. US troops marching into Trier, December 1, 1918.

Reproduced from: Signal Corps photograph SC-33181. Record Group 111, National Archives and Records Administration.

ed continued to arrive in large numbers through the night of November 13, some of them inexperienced troops who had picked up unexploded munitions. The 12th treated 2,700 patients in its 56 days at Royaumeix, averaging about 48 admissions per day. Of these, 1,000 were seriously wounded (about 18 per day). In the second half of November, the 12th also received about 200 liberated Allied prisoners, whom they treated for a variety of conditions.

INTO GERMANY AND THE END OF THE WAR

On December 1, the 12th Evac received orders to join the occupation of Germany. Although Germany had asked for an armistice and the fighting ended on November 11, no peace treaty had been signed. The Allies began occupying parts of western Germany to make sure the Germans could not regroup during the armistice and resume the war. The US Third Army advanced, accompanied by the 12th, which was ordered to the town of Echternach in eastern Luxembourg, and other hospitals. An advance party from the 12th started forward on December 2. On the way there, however, the unit learned that Third Army's



Figure 1-8. Fracture ward of a World War I hospital.

Reproduced from: Weed F. *The Medical Department of the United States Army in the World War*. Vol XI, pt 1. Washington, DC: Government Printing Office; 1925: 122.



Figure 1-9. Surgical ward of a World War I hospital.

Reproduced from: Lynch C, Ford J, Weed F. Field Operations. Vol VIII in: *The Medical Department of the United States Army in the World War*. Washington, DC: Government Printing Office; 1925: 959.

plans had changed, and the 12th was ordered into Germany itself, to the small city of Trier on the Saar River. Although some vehicles ended up in Echternach, the 12th had begun functioning in Trier by December 3, in time for the arrival of 230 patients the same day.

The 12th remained in Trier until May 1919, operating a 1,500-bed hospital. The hospital ultimately occupied 19 well-built modern buildings, with tiled corridors that made it easier to move patients. However, the plumbing systems were overworked and sewage had to be cleaned out of the basements as soon as the hospital moved in. The German economy had collapsed under the strain of the war and an Allied blockade (which continued until mid-1919 when the peace treaty was signed) made many supplies scarce. Even cleaning supplies were in short supply, and the buildings were infested with vermin, including bed bugs. Gradually the buildings were scoured out, bedding was disinfected, and an engineer company rebuilt the plumbing. Staff installed more equipment, improving patient care and their own quality of life. Kitchens were fitted with American bake ovens, wards received bathtubs and beds to replace older German ones, a Red Cross recreation area was set up, and ventilation was improved.

The 12th was busy at Trier, treating 6,795 patients, an average of 49 admissions per day. Some days were much busier; 331 patients were received on one day, and 450 discharged on another. Most of the 12th's work in Trier was medical rather than surgical. Influenza spread around the globe over the winter of

1918–1919, and although the 12th was spared the worst of the pandemic, its doctors also faced measles, mumps, chickenpox, scarlet fever, diphtheria, meningitis, erysipelas, typhoid, ear infections, and dysentery. Outbreaks of “childhood diseases” were typical of a draftee Army because many young men from rural areas who had not been exposed as children moved into barracks with those carrying pathogenic bacteria and viruses. The 12th treated 120 soldiers with diphtheria and 482 with pneumonia (doubtless some of them influenza patients who developed pneumonia while hospitalized); 89 pneumonia patients died. As contact increased between occupation forces and impoverished German women, the 12th treated 427 patients with venereal diseases. A neuropsychiatric service received 249 patients, although just 51 were surgical patients; the rest, termed “mental” patients, received rudimentary care only.

The 12th packed up in late April, shipped back to the United States in May, and arrived at Camp Stuart, Virginia, before heading to Camp Dodge, Iowa, and being demobilized on July 7, 1919.

BETWEEN THE WARS

The Army demobilized rapidly in 1919; peak strength was almost 4 million in 1918, but by mid-1919 over half the troops had been mustered out, and by the end of December only about 130,000 remained. Once the Allies had won and the world was “safe for democracy,” most Americans felt little need for the Army. Few volunteered to serve. The government’s main response to concerns about infiltration by violent communists, socialists, anarchists, and labor unionists was through measures taken by the Bureau of Investigation (soon to be the FBI) and postal inspectors, rather than the military. Congress debated many defense decisions: military spending (which reverted to low prewar levels); recruitment (universal military training was considered but rejected); and organization of the armed forces. Ultimately, drastic cuts were made to the active duty Army’s personnel and equipment.

With reduced funding and authorizations for active-duty units, the Army attempted to retain some capability in what was formally titled the Organized Reserves against a future need. Before World War I, the reserves had not included units; it consisted only of men available for assignment. After the war, in theory, complete units were available for action, but in practice only officers and a cadre of enlisted men were assigned. In 1923, Evacuation Hospital No. 12 was constituted in the reserves, although staffing the unit took until 1925, when the 12th was finally “organized” in Boston, Massachusetts. Despite becoming a real unit on the Army’s rolls, the 12th was still limited; the interwar reserves focused almost entirely on officers, enrolling few nurses or enlisted men. By 1928 the 12th had slightly over half its officers, but no nurses or enlisted men.

For most of the 1920s, the reserves relied on the large number of officers who had served (albeit briefly) in World War I. Reserve service required no drills, and

with no wars on the horizon, there was little risk in return for a commission in the reserves. On the other hand, reservists were not paid. The Army began professionalizing the reserves in 1927. Officers had to take correspondence courses to earn points for promotion and maintain their commissions. However, reservists remained unpaid, and when the 5-year reserve commissions from the post-war period started to expire, the number of reservists dropped. Another administrative change caused problems. Previously, the Army Medical Department (AMEDD) had been responsible for recruiting medical reserves and geographical corps area commands administered the medical units. In 1928 recruiting was reassigned to the corps areas, which showed little interest in medical recruiting, and the AMEDD lost visibility of its reserve units. One corps area headquarters did not even list the doctors in established medical units. As a result, the 12th Evacuation Hospital (its formal name beginning in 1925) had to be reconstituted in the mid-1930s.

The Army also changed the structure of the evacuation hospital, building on the experience of World War I. Original plans for evacuation hospitals called for focus on surgery, included no nurses and few technical support personnel, such as mechanics. In 1927 the Army produced a substantial organizational table composed of 40 officers, 60 nurses, and 300 enlisted men. The table included two dentists, four medical administrative officers (relieving doctors of administrative work), and a chaplain, as well as substantial numbers of nonmedical enlisted men. There were clerks for supplies and records, a typist for all the forms, mechanics for the vehicles and generators, a switchboard operator, a carpenter, and even two buglers (because the hospital would not have a public address system). On the medical side, there were cooks (including diet cooks for patients on special diets), pharmacists, x-ray equipment operators, dental and laboratory technicians, 15 men to help in the operating room, 88 ward men, and 50 litterbearers. Evacuation hospitals now had 750 beds (a compromise between the 432 at the start of World War I and the 1,000 at the end), but only five trucks—just enough to haul food, trash, and undertake other housekeeping requirements. When evacuation hospitals needed to move, the Army would have to provide transportation from other units.

Sources

No documents have been found specifically about the 12th Evacuation Hospital during World War I, beyond the précis in the 1919 *Annual Report of The Surgeon General* (Washington, DC: Government Printing Office, 1919). Information on evacuation hospitals in general comes from the *Annual Report's* section on evacuation hospitals; the *Manual for the Medical Department* (Washington, DC: Government Printing Office; 1916); Major Joseph Darnall's 1936 unpublished paper, "War Service with an Evacuation Hospital" (in the Special Collections of the Stimson Library, Academy of the Health Sciences, Army Medical Department Center & School, San Antonio, TX); and documents 7906, 9237, and 10121 from Record Group 165 (Records of the War Department General and Special Staffs), National Archives and Records Administration. Field operations are covered in Colonel Charles Lynch, Colonel Joseph Ford, and Lieutenant Colonel Frank Weed's *The Medical Department of the United States Army in the World War, Vol VIII: Field Operations* (Washington, DC: Government Printing Office; 1925). Information on Army nurses in the period is in Mary Sarnecky's *A History of the U.S. Army Nurse Corps* (Philadelphia, PA: University of Pennsylvania Press, 1999), chapters 2 and 3.

For the interwar years, Major Clement Gaynor's 1936 paper, "The Organized Reserve Corps— Procurement, Training, Distribution and Purpose of the Medical Section" (also at the Stimson Library Special Collections) gives some background, and the author's article "Professional Doctors but Amateur Soldiers: The US Army's Affiliated Hospitals Program, 1915–1953" (*War & Society*, May 2008) covers the interwar reserves. Tables of Organization and Equipment and the 212th's "Lineage and Honors" statement (available at the US Army Center of Military History, Washington, DC, Force Structure Division) provide further data, and Steven Everett of the Center of Military History explained some terminology.

Copies of this material are on file in the historical research collection of the Army Medical Department Center of History and Heritage, Fort Sam Houston, Texas.