The AMEDD Historian

Army Medical Department Center of History and Heritage, Fort Sam Houston, Texas Number 17 Spring 2017

Contents

Chief's Corner

Welcome to another edition of the *AMEDD Historian*. Like previous editions the authors have done a wonderful job in presenting you some interesting history of Army Medicine. Although the *AMEDD Historian* is an eclectic history publication, this issue has an intended theme with the bulk of articles focusing on deployed hospitals. Primarily written by the staff of the AMEDD Center of History & Heritage (ACHH), we have four new authors, G. Alan Knight, 2LT Tyler Walker, Adriane Askins Wise, and John Alosi. I am grateful for these individuals to submit their articles for publication.

In other news, our technical leadership, the US Army Center of Military History, has revised its focus to "educate, inspire, and preserve," so I felt we needed to rewrite our mission statement to serve Army Medicine. Our ACHH leadership developed a new mission statement:

The mission of the AMEDD Center of History & Heritage (ACHH) is to educate, inspire, and promote esprit de corps in AMEDD Soldiers, DA civilians, and the public, by telling the story of Army Medicine. This mission is supported by the collection and preservation of documents in an accessible archive and by exhibiting and interpreting artifacts. ACHH provides historical context to aid senior leaders' decision-making through research services, publications, speakers, and educational programming.

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How Many Hospitals to Deploy?

Sanders Marble, Senior Historian, ACHH

The AMEDD was established to provide battlefield care, but at times has had real problems deploying enough hospitals for casualties. Over time, the Army has used different ways to forecast casualties, and thus hospital requirements.

At first, there were really no hospitals. On 27 July 1775, the Continental Congress authorized "an Hospital," by which they meant some medical support rather than anything specific. At that time, each regiment (the basic unit of the Army) was authorized one surgeon and one surgeon's mate, who might be a younger doctor or might have very limited medical credentials indeed. These two men would treat casualties and run a regimental hospital for both sick and wounded, but obviously could not provide all the patient care necessary – and regiments needed to evacuate their serious patients to stay mobile. Thus, Congress was authorizing rear-area hospitals. Later, General Washington organized a 'flying hospital' that could travel with the field army; it would clear the regimental hospitals and send patients on to the general hospitals in the rear. (General hospital did not necessarily mean advanced care, but that it took patients from the army in general instead of only from a specific regiment.) The 'flying hospital' was staffed out-of-hide.

At this time, there was no real casualty prediction model. In 1768 a French army doctor, Hugues Ravaton, had estimated sick rates as 3/1000 in garrison, rising to 5-

6/1000 in the middle of a summer's campaign season, and to 10/1000 by the time armies went into winter quarters. He also estimated battle casualties at 10/1000. These rates seem too low, especially the sick rate, as American forces in the 19th Century frequently had 50/1000 sick, and there is no evidence the Continental Army used them. Regardless of the numbers (and their accuracy), there were no extra hospitals or medical units.

After the Revolution, Congress again provided doctors on a per-regiment basis, with only a handful of extra physicians and mates for hospitals. There still was not even one medical attendant (doctor or mate) per post, and in wartime there was no equivalent of the 'flying hospital'. The system would barely change until the 1900s, with a brief exception during the Civil War.

There was change in the Civil War. Medical personnel were still authorized on a per-regiment basis (one surgeon and two assistants, plus a few hospital stewards) and general hospitals were established in the rear. The general hospitals took patients from any unit, brought back by railroad or hospital ship. The change happened with the larger field armies, which had a brigade-division-corps force structure that was new. Since most Civil War regiments quickly dropped below their authorized 1,000 men they did not need all three doctors for sick call or initial treatment on the battlefield. Jonathan Letterman, surgeon of the Army of the Potomac (his title was actually Medical Director), pulled some of the surplus surgeons from the regiments and established divisional hospitals as separate units. They were typically handled by the corps' medical director, so that a division that was heavily engaged could evacuate some of its casualties to another hospital in the corps. There was still no forecasting of casualties, and since casualties could vary enormously between battles or even between units in the same battle, forecasts would have been of only moderate use. Extra medical units would, but the Army was simply not structured that way.

After the Civil War, the Army shrank and dispersed to dozens of coastal and frontier forts that might have only an artillery battery or a couple of companies of troops. With the AMEDD structured on a per-regiment basis, the problem returned to being enough doctors (or stewards) to support all the small installations. Thus the Spanish-American War of 1898 had essentially the same structure as the Revolution: regimental medical personnel and an ad hoc field hospital for each corps. Hospital ships were the new factor, providing extra capacity offshore, but offsetting them was the distance to the general hospitals in the US. Instead of being a train ride away, they were now several days sea voyage.

In the first decade of the Twentieth Century the Army restructured. Divisions replaced regiments as the basic combat unit, and that led to a concomitant restructuring of medical support. There would still be some medical personnel with each regiment who would handle routine illness and injury and triage the wounded. Divisional medical units (both ambulance companies and field hospitals) would care for the lightly wounded. Now there would also be non-divisional hospitals. In 1906 the Manual of the Medical Department discussed a 'stationary hospital' and by the 1916 edition the name had shifted to 'evacuation hospital.'

Now, with hospitals that could be sent where needed the AMEDD would have some flexibility in planning ahead for casualties. But how many patients would there be? Neither the 1906 nor the 1916 manual offered any suggestion. Four 108-bed field hospitals for the lightly wounded were organic to the divisions. (These replaced the regimental hospital, and divisions and brigades still have medical units.) Something new (or old, if you look back at the Revolutionary War 'flying hospital') Each division was also allotted two separate 324-bed evacuation hospitals for the moderate and severely wounded, although these were never formed. But with only 1,080 beds per division, and patients needing a few days to recover enough to be moved, that implied only a few hundred casualties per day for divisions of over 20,000 men. One AMEDD officer tried to estimate casualties. Paul Straub (then a major in the Medical Corps, but attached to the General Staff and thus asking this kind of strategic question) looked at data from the Civil War, the 1870-71 Franco-Prussian War, and the 1904-05 Russo-Japanese War. The data differed widely, and the best he could do was break down casualties into dead, lightly wounded, moderately wounded, and critically wounded. He thought a division might take 10-25% casualties in a day's battle, either of which would overwhelm the available medical support.

The 1916 manual was published just before the US joined WWI. When the US decided to send a large

expeditionary force to France, it opened new questions. Now the field army could not rely on evacuation to the US in a few days, so the general hospitals that had been in the US would need to be in Europe. Hospital ships could not offer equivalent care, so lengthy overseas hospitalization was needed. No longer did the field armies have to think about just short-term casualty care, they had to consider how many rear-area hospitals would be needed. (Hospitals would also be a major source of replacements, so an idea of how many patients would return to duty, and how soon, was useful to G-1 as well as the surgeons.) But the Americans had no idea how many hospitals, with how many beds, would be needed. Estimates ran as high as beds for 25% of the entire American Expeditionary Force (AEF). Yes, one man in four of the entire AEF would be in a hospitalized patient. To staff those hospitals, the AMEDD would have 14% of the deployed force, one man in seven. That plan was rejected, but ultimately hospital beds for 15% of the AEF was accepted.

That still left the question of how many forward hospitals to provide. The first major US attack was at the St Mihiel salient; the US 1st Army had over 250,000 men, and casualty projections ran the gamut from 30,000 to 75,000. Thankfully, the Germans were withdrawing when the US attacked and casualties were only 7,000. But the next US battle, the Meuse-Argonne offensive from 26 September to 11 November, would start with over 600,000 American soldiers – and only 18,000 forward hospital beds, so if casualties were more than 3% then some soldiers were not going to get proper care. In the first few days casualties were far more than 18,000, and over 10,000 wounded soldiers had to be evacuated far to the rear for initial surgery delayed for several days – with higher morbidity and mortality. But 18,000 beds in the mobile hospitals was all the AEF had, because the AMEDD had not been able to successfully articulate how many hospitals it would need.

During the 1920s, Surgeon General Merritte Ireland overhauled the AMEDD, trying to solve many of the problems he had seen when he was first deputy chief surgeon and then chief surgeon of the AEF. Lieutenant Colonel (later Brigadier General) Albert Love, MC, was interested in statistics, and Ireland steered Love into analyzing data from WWI. (There had been reports from the Civil War, but by WWI data was much more scientific and there were punch-card machines available to quickly analyze it.) In 1930 Love published "War Casualties: Their Relation to Medical Service and Replacements" as a statistically-grounded way for medical planners to know what they would need, both for frontline and rear-area hospitals. For the rear areas, they could see how many beds they would need – and could see the effects on the overall force of lengthening or shortening the evacuation policy: how many more beds (and medical staff) would be needed and how many more men would return to duty overseas. With a longer policy, you needed more hospitals but fewer replacements, and vice versa.

For forward areas, Love's number-crunching provided guidance on the number of gassed and physically wounded per unit per day, and for both quiet sectors and intense action. (Since the record-keeping for 'shell shock' patients close to the front was poor, he had no data on them and did not try to hypothesize.) Based on the data, a medical planner could look at the size of the total force going into action for a quick estimate of hospitals needed. If they had more time, they could look at the types of units that would be engaged – infantry, engineer, aviation – and their strengths to work out a more detailed estimate. Planners could calculate roughly how many high-acuity hospitals and mid-acuity hospitals would be needed, and also how many ambulance companies and hospital trains.

Albert Love as a brigadier general. Courtesy National Library of Medicine.

The AMEDD converted Love's statistics into part of Field Manual 8-55, Medical Field Manual Reference Data, 5 March 1941. Medical planners could factor that into their "Medical Estimate of the Situation and Plans." That was all the data the AMEDD had for WWII, but using it the AMEDD was able to get more hospitals into overseas theaters, mobile hospitals for the forward areas, area-support hospitals for the sick and wounded, and general hospitals for full recovery overseas.

After WWII the analysis became much more detailed. For the 1960 edition of FM 8-55 there were da-

ta on in-garrison healthcare (so overseas TDA hospitals could be right-sized for the population at risk), including data on various climates, and dental and veterinary workload. For wartime, there was data on neuropsychiatric casualties from battle, data from WWII and Korea, and analysis by type of battle – for instance amphibious landings, attacks, city fighting, enemy attacks, river crossings. WWI data was jettisoned, gas warfare was no longer mentioned, but nuclear warfare got a chapter of its own. There was also 5 pages of guidance on care for enemy prisoners of war, including data from WWII and Korea, but no comments on any care for injured civilians.

It would be another generation before there were any changes, but in 1985 there was a major update. Hospitals in the combat zone (mobile) and communication zone (mostly immobile) were both discussed, with different evacuation policies for each. The repercussions on hospitalization in CONUS were mentioned, but that was not a major topic for a field manual. Computers appeared, in the form of a Medical Planning Module in the Joint Operation Planning System. It helped the planner "determine the gross health service support requirements based upon the variables ... including the forces-at-risk, casualty admission rates, and the evacuation policy." Outputs included: number and type of personnel, hospital beds and OR tables needed, blood and medical fluid requirements, Class VIII supplies needed, and evacuation requirements. The output did not, however, break down how many and which types of hospitals were needed – planners still had to decide how many MASH, CSH, and evacuation hospitals would be needed in the combat zone, and how many general, station, and field hospitals in the communication zone. The number of beds and OR tables would be a guide, but not definitive. There was a much wider range of data to determine the WIA rates to plug into the computer: WWII, Korea, and Vietnam; infantry, mechanized infantry, armor, and non-divisional units; further organized by wounded, non-battle injury and diseases; type of operations; and climate. There was even some data on casualty rates from the Arab-Israeli wars, but not as detailed. Prisoner of war calculations were down to a single paragraph, and there was still no mention of civilian patients to be treated.

The 1994 edition was remarkably similar, although hospitalization doctrine was in the process of changing. Instead of holding patients for 60 days in the operational theater, needing far more hospitals, there might be a limit of only 3-7 days. That would reduce hospitals, and medical personnel, but would not reduce the number of OR tables as much.

Another 18 years would go by before another overhaul, and the 2012 joint planning doctrine had a new computer program (the Joint Medical Planning tool) to predict "daily number of evacuees, beds, blood products, medical staffing, and other logistic requirements." This was wholly based on US service forces, but there was supposed to be another way to calculate units to handle prisoners of war, civilians, and coalition patients. The Army had a more detailed manual that looked at the population to be supported (including all US armed forces, coalition forces, local nationals, DOD civilians, DOD contractors, and prisoners), also considering which of them would need Army medevac and medical logistics support; some populations could need some support but not patient care. A more detailed Medical and Casualty Estimator Tool had data from "recent combat events" that developed a very detailed estimate from five probabilistic determinations. The computer crunched through mechanism of injury, cause of injury, nature of injury, damaged body region, and even generated ICD codes and Injury Severity Scores. There was a separate Disease and Nonbattle Injury Calculator to complement the MACE. CBRN casualties were considered, and the back of the manual still had the casualty rates from WWII and other wars in case the planners did not want to use the MACE and DNBI Calculator.

The AMEDD has come a long way in patient care since 1775, but it took over 100 years before there was any meaningful attempt to predict patient numbers. Fortunately, the models have become much more sophisticated, and if the next engagements are different from "recent combat events," there is a wealth of examples planners can use for their predictions.

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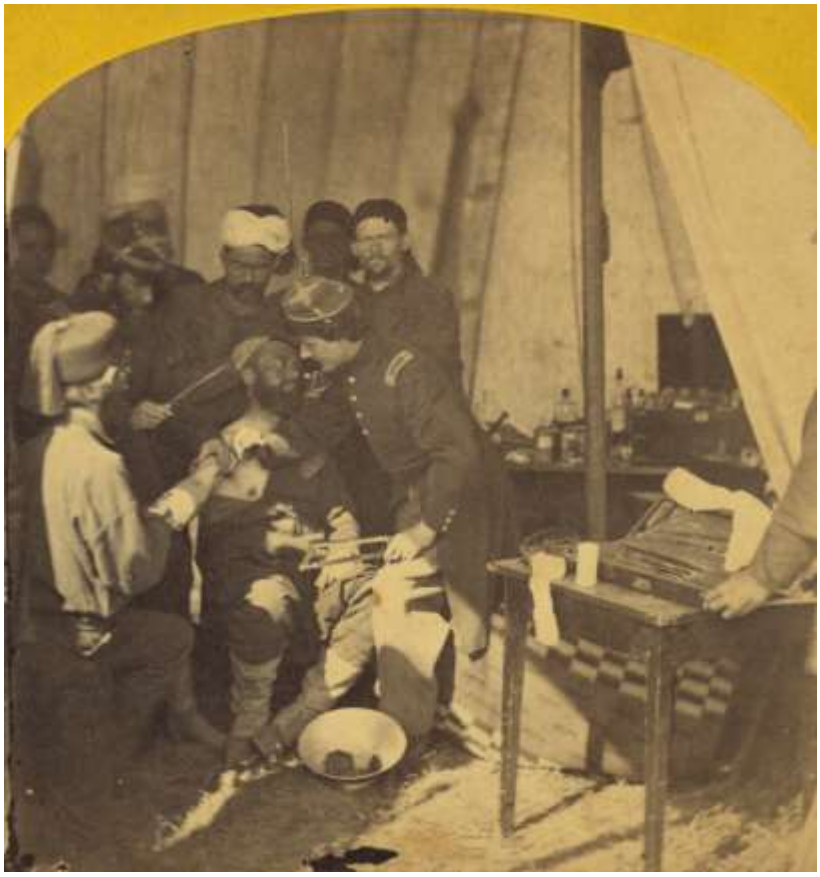
Field Hospitals: What's in a Name?

Sanders Marble, Senior Historian, ACHH

The Army is going back to the term 'field hospital' for deployable hospitals after a decade of all deployable hospitals being combat support hospitals. What have field hospitals been, and what have they done?

The term was apparently first used in the War of 1812 and for about a century was a non-specific term for any hospital in the field with the army, as opposed to rear area hospitals. (These were called general hospitals, base hospitals, or if they were for a particular post, post hospital.) Field hospitals could be in tents, temporary buildings, or permanent buildings temporarily taken over for military use. They might have a few dozen beds or (in one Civil War field hospital) as many as 10,000. There was no standard organization, equipment, or mission. Without a system in place, there was no standard way to get or train the doctors or enlisted men, and nurses (civilian employees, 40 years before the Nurse Corps was established) were only used in rear-area hospitals.



A staged photo of activities in a Civil War field hospital.

In 1911 the first specific field hospitals were formed. Actually, they were combined Field Hospital and Ambulance Companies (formed 17 April 1911), then split on 5 October 1911. Four 216-bed field hospitals (six physicians and 67 enlisted men each) were organic to each division, but their capabilities were deliberately "limited to providing necessities for the sick and wounded pending their evacuation to the rear by the line of communications." Seeing them in action on the Punitive Expedition, chasing Pancho Villa in Mexico, an experienced Army doctor commented they were "merely meagerly equipped shelters" rather than real hospitals. To reduce weight and cube, they had neither beds nor cots, but bed sacks to be filled with straw.

That kind of field hospital served through WWI, but were suddenly gone in 1922 when they were retitled Hospital Companies. They were still assigned to sanitary trains (later retitled Medical Regiments) but by the 1930s the name was changed to Clearing Company. The role did not change, taking care of low-acuity patients, but the term "hospital" had come imply higher-acuity care.

A field hospital in Mexico during the Punitive Expedition.

In 1942 the Army revived the term Field Hospital, as it needed a new size of hospital to fill a gap. Station Hospitals provided low-acuity hospitalization, but they were not mobile and the smallest station hospital was 250 beds. For small installations, and the inevitable sick and injured in rear areas of mobile forces, something else was needed and it was the field hospital. It provided low-acuity medical and surgical care for up to 400 patients, but it could also be split into three 100-bed platoons. It was approved on 28 February 1942, so it was either staffed at lightning speed or was in the works before Pearl Harbor. Field hospitals performed that role throughout WWII, but also were adapted for another use. The Army had discovered the need to push surgical care closer to the front line, and took existing pieces (teams from Auxiliary Surgical Groups and platoons from Field Hospitals) to make the predecessor of the Mobile Army Surgical Hospital.

The 139th Field Hospital (Kansas National Guard) at Neuvilly, France, late September 1918.

After WWII, the Field Hospital continued in the same size (400 beds, or three 100-bed platoons) with the same role. Field hospitals would be sent where there were soldiers, but combat casualties were unlikely, such as military advisory situations. That led to the 8th Field Hospital in downtown Saigon from 1962, as the Military Advisory Group Vietnam expanded to the Military Assistance Command Vietnam. But a hospital in downtown Saigon was no ordinary deployed hospital: it had a cardiac care unit, and the nurses were ordered to wear the starched white hospital uniform, even once the Vietnam war heated up.

Through the rest of the Cold War, the role for the field hospital did not change: being a deployable, mobile, low-acuity hospital. Yet in the late 1980s the AMEDD was examining all deployed hospitals to simplify the structure. There were MASH and CSH, Field, Evacuation, Station, and General Hospitals. Many of them overlapped, and while that provided redundancy and extra capacity to treat patients, it also required more resources. The early-80s Medical System Program Review changed into the late-80s Health Service Support for AirLand Battle with just two types of hospital in a theater of operations: Combat Support Hospitals (in the Combat Zone) and General Hospitals (in the Communications Zone). Yet at the same time, a "Modular Field Hospital concept" had a single type of deployable hospital, with an HQ element and 60 beds balanced between medical and surgical. Additional 60-bed modules could be added to meet various needs, and the AMEDD would have only Field Hospitals and General Hospitals. For unknown reasons, the decision went away from modular Field Hospitals and in favor of two types of Combat Support Hospital – but also deleted the General Hospitals in favor of flying patients out of theater. In time, the two types of CSH became one type, and by late 2006 all deployable hospitals were reorganized as CSH.

Pre-operative ward, 3d Platoon, 54th Field Hospital. 27 October 1944, somewhere in France.

Now, the AMEDD is again changing its force structure, creating Field Hospitals, but making them modular for various needs. These will not be the "Modular Field Hospital" considered in 1987, but they will be modular and field hospitals. Nor will they be the generic term used in the Civil War, but once again field hospitals will be the only kind of hospital deployed.

Facilities of the 3d Field Hospital, Saigon.

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Experiences From Field Hospitals of the Past
by G. Alan Knight

For much of the 20th Century, the field hospital has played an important role in the Army's medical care capabilities. While the term "field hospital" appears to have first been used in the War of 1812, the first true field hospital deployed in 1916 in the Punitive Expedition (1916-1917) when BG John J. Pershing crossed the border into Mexico, leading a provisional division to capture Pancho Villa. An experienced Army medical officer who saw these field hospitals units in action characterized them as "merely meagerly-equipped shelters" rather than real hospitals. While such a hospital had a surgical ward, it was designed to be mobile and to reduce weight and cube, had neither beds nor cots, but bed sacks that could be filled with straw.

This was essentially, in structure, the same field hospital that deployed during World War I. The recorded comments of some World War I Army nurses paint a vivid picture of life in a field hospital. Kathryn Leverman, ANC, and six nurse colleagues, members of Base Hospital #46 (organized by medical personnel at the University of Oregon) were attached successively to Field Hospital #165 and Field Hospital #27. Arriving at Chateau Thierry, the field hospital occupied a commandeered French chateau. She said:

We were constantly under enemy observation and therefore had to use every precaution. The offices, our surgery and dining room were on the first floor. Also a shock ward...the enlisted personnel were camped in tents all through the park (chateau grounds) on one side. On the other were pitched the hospital ward tents which were so soon to be filled with the wounded from Chateau Thierry and Belleau Wood. The Germans bombed the chateau and surrounding area periodically and Leverman said *Naturally the first command upon hearing an enemy plane would be "lights out!" and unless in the midst of some operation, even our surgery lights went out. My co-worker in the surgery and I did not care for the atmosphere in the bomb-proof place in the cellar where we were ordered to go during air raids. But I don't deny a peculiar feeling that came over me whenever a bomb landed real close and the time all the window panes came crashing in on us.*

Clearly, it was often necessary to care for casualties while working under blackout conditions. A nurse assigned to a night shift in a field hospital at Beauvais provided comments that provide insight into the duties of a clinician: *I have done things in the dark here which seems almost impossible, such as giving hypodermics, Dakin's solution etc. One night during a raid I gave nine hypodermics to men whose nerves were shattered from shell shock. All our morphine is put up in 1/4 grain containers with sterile needles attached, so that one does not have to stop to sterilize, the needle is thrown away after each dose. Surely they are a God-send. Here is a boy with a gray, set face. He is hanging on ... too far gone to make a sound. His stomach is blown wide open and only held together by a few bands of sopping gauze which I must pull away. The odor is sickening; the gauze is a greenish yellow. Gangrene. He was wounded three days ago and has been waiting on the grounds. He will die.*

In World War II, for personnel assigned to field hospitals, now including nurses, the carnage of battle was as brutal as ever. However, medical developments including widespread use of penicillin and plasma provided caregivers with tools unknown in the last war. The operational tempo was often hectic, whether in the European or Pacific Theaters.

The 45th Field Hospital came ashore at Utah Beach in Normandy on 10 June 1944. Personnel "waded ashore in waist deep water and were on duty twenty minutes after arriving. Thirty minutes after the first two groups of Army nurses debarked, another contingent of nurses with the 42d Field and 91st Evacuation Hospitals arrived. They settled 2.5 miles inland and admitted three hundred patients by 10.00 PM, and three hundred more by midnight. The nurses checked dressings, served food, and staffed four operating tables, which maintained a large backlog throughout the night."

The 64th Field Hospital supported the 3d Infantry Division in the Rhine River Crossing and later moved on to Heidelberg and Weingarten. A medical officer, MAJ John Burwell, chronicled the operations

of the 64th. He extolled the mobility, flexibility, and efficiency of the field hospitals. *These field hospitals could be set-up either behind the lines in existing buildings or in tents that were in direct contact with the Division Clearing Station. In the latter case they were augmented by mobile surgical teams, which included extra nurses, anesthesiologists, and surgeons – either general or specialized. The personnel of the unit furnished laboratory, nursing, X-ray, and blood services, in addition to organization and manpower. Those who needed immediate surgical care were operated on by the field hospital surgeons or the mobile surgical teams, both supported by the hospital's nurses, X-ray units and laboratory facilities.*

Commenting on medical support for the river crossing, Burwell said *Soon the crossing area was bedlam. Soon the wounded began arriving and thereafter we were too occupied with them to see anything else. In a short time, stretchers four deep reached for a hundred feet. Movement to the rear (when feasible) or to the hospital operating tents, was continuous. The variety of injuries was legion – head, abdominal or extremities. The latter posed a special problem, because of resulting transfusion difficulties.* Burwell credits blood supplies furnished by the Red Cross and the skills of unit personnel with overcoming this difficult situation. *I recall one casualty who had lost both arms and one leg being successfully transfused with quantities of blood, and later sent back to a base hospital for rehabilitation.*

After WWII, Field Hospitals, now vastly reduced in numbers, continued to be a key component of the Army medical system, maintaining its 400-bed configuration with the capability to split into three 100-bed platoons. In Korea, the state of medical unpreparedness was initially significant as the Army had downsized at the end of World War II. By August 1950 the 64th Field Hospital and 4th Field Hospital were in country. Soon the 3d and 14th Field Hospitals joined them. Uniquely, to handle massive numbers of POWs, the 1st Prisoner of War Field Hospital (Provisional) was established. Subsequently elements of the 3rd and 14th Field Hospitals and then the 64th Field Hospital took over.

Lieut. Stanley Weintraub, MSC, highlights paints a vivid scene of the sights and sounds and trials and tribulations of the 1st POW Hospital in 1950-51. *The hospital's headquarters was the one permanent building, a two-storied, white-stuccoed school diverted from its purpose when survival displaced learning in Korea*. Around the headquarters were clustered a number of barbed-wire enclosed compounds, each having several wards. Next to these barbed-wire enclosed wards were other compounds designed to house POW personnel who worked in the hospital, people such as laborers, doctors, and nurses. *Initially the hospital's Army complement consisted of 2 MC officers, one ANC officer, one MSC officer, and one enlisted man. The bulk of the medical staff consisted of eleven Korean doctors and twenty-two Korean nurses*. While American personnel would soon be much more numerous, the hospital continued to need augmentation by detained Koreans. By the end of 1950, the patient population totaled seven thousand disabled POWs. Services went far beyond those normally provided in a field hospital. *Services included plastic and orthopedic rehabilitation and fitting of dental, ocular, and upper and lower extremity prostheses*. Weintraub continued: *Patient care was expert when we could figure out what was wrong. Wounded prisoners presented no diagnostic problems but sick ones did. Interpretation difficulties were endless. A doctor performed his ward rounds or worked in the admissions hut, in tandem with Korean and Chinese PW interpreters. Many patients were severe dysentery cases. In the first four months of 1951, there were more than 20,000 dysentery admissions and, fortunately, no sudden increase in battle casualties.*

Less than a decade later, field hospitals were again deployed. With the build-up of American military personnel in Vietnam, the 8th Field Hospital deployed in 1962, locating in Saigon where it became a de-facto general hospital, providing specialty care not normally seen in this type facility. The 3rd and 51st Field Hospitals also deployed to Vietnam, establishing themselves at Long Binh. A former chief nurse, COL Anna Antonicci, recalls that the hospitals together had a 1,000-bed capacity. Like the 8th Field Hospital, the two Long Binh units also had unusual specialty care capabilities. *And then we had an attachment, the renal detachment with us too. Although we would have some casualties, we would not have the mass casualties to the extent they had in the other outlying units, but what we would get would be those patients who were stabilized and who required more sophisticated care. We also were the only coronary care unit in Vietnam. I think the other problem perhaps was that, because we didn't have the American casualties, they did do a lot of elective sur-*

gery on the Vietnamese people.

1LT Julie Klebaum, one of seven ANC officers at the 8th Field Hospital from July 1964 June 1965, who was awarded the Bronze Star for her role in treating a large number of casualties from the fighting at Pleiku, offered a variety of comments on her duty in the unit. *I've helped nurse everybody from a Vietnamese baby with tuberculosis to GIs with worms, malaria, dengue fever, appendicitis, or gunshot wounds. We see a lot of infections – they heal slowly in this climate - and hepatitis*. Klebaum commented that nurses, during their training, are taught not to become emotionally involved in the conditions their patients, to give them empathy but no sympathy. She said, *That's impossible here. These men are under terrible strain. They need someone they can talk to who will give them human understanding.*

Operation Desert Shield/Desert Storm (1990-1991) promised to be a lethal conflict and the US, went to war medically prepared. Some medical units, such as the 47th Field Hospital, deployed not to Saudi Arabia or Kuwait but to neighboring Bahrain which could potentially have been drawn into the war when it started. The threat of a chemical agent attack from Iraq was real, a threat not only to soldiers in combat but also to hospital personnel. A member of the 47th recalled frequent gas alarm drills: *We all don protective masks, including the patients, and wear them for fifteen minutes. We will eventually work up to an hour of wear twice a week. My optical inserts make it more difficult for me to see and my movements are as graceful as a gorilla. My nose itches and I scratch the voicemitter in a fruitless attempt to relieve it. I continue to work as usual until I can unmask again*.

The last of the field hospitals, the 115th Field Hospital, was deployed to Iraq in 2004-2005 with a mission not undertaken since the Korean War: providing patient care for Iraqi prisoners of war at Abu Ghraib, close to Baghdad. By 2004 it was a huge and rather notorious prison facility. The notoriety, though originally associated with the regime of Saddam Hussein, had been rekindled by soldiers' abusive handling of detainees after assuming control of the facility; this treatment receiving widespread media coverage that included courts martial of some personnel, and relief and demotion of the general officer in charge of POW facilities. The 115th assumed the missions of providing care at Abu Ghraib itself, and long-term POW medical rehabilitation at Camp Bucca. In essence, the unit was split into two hospitals. A significant degree of POW care was provided "inside the wire." Despite the POW mission, the 115th, located in the middle of the so-called Sunni Triangle, also found itself treating Marines and third country nationals. MAJ Genevive Grossnickle, Head Nurse of the ICU, said that "the busiest time happened during the 2nd Battle of Fallujah (November – December 2004). *The ICU at Abu Ghraib is a real ICU. We had a 54-bed hospital and ended up with 84 patients there. We saw as much as you could see in any ICU in the States that we saw there at Abu. We had a wide variety of wounds and when we first got there it seemed like we were doing a lot of orthopedic things: legs and arms and as we finished out, we were doing more chest and abdomen injuries.* Characterizing a busy ICU, she said *You have seven patients... You have to do, run blood, full open on two different patients at the same time and make sure you don't get the wrong blood to the wrong guy, and make sure the chest tube doesn't overflow, and make sure the suction tubing doesn't overflow and ruin the suction machine. The physicians would get involved in doing the doc things, and they'd be doing the lines, and the tubes or this or that...*

MAJ Richard Hoyt, MSC, XO of the 115th, in response to a question on medical logistics, said, *Our biggest commodity item we would run short on was blood and if we were hit with different casualties ... there were times we had to bring emergency lab reagents, lab supplies, and blood just to meet mission ... Day to day, the only time I took [body armor] off was when I went to sleep, went to the bathroom, went to the shower, or I was sitting down in the chow hall ...* A 115th ER doctor, MAJ Laurence DeShields, MC, described the kinds of wounds he commonly saw *... A lot of decapitated legs, feet, Iraqis, some of them our guys, suicides, blown-off heads, just a lot of those. A lot of gunshot wounds though, a lot of just gunshot wounds all over the place - chest, legs, abdomen, head. We had ten ICU beds and we had about 75 general medical beds. Now were just huge and every bed was full ... we were a big hospital. We had four wards, two medical floors, and ICU and an ER, and we had a post-op area.*

Upon return to Fort Polk, the 115th reorganized into a combat support hospital. The day of the Army field hospital had seemingly ended ... maybe or maybe not.

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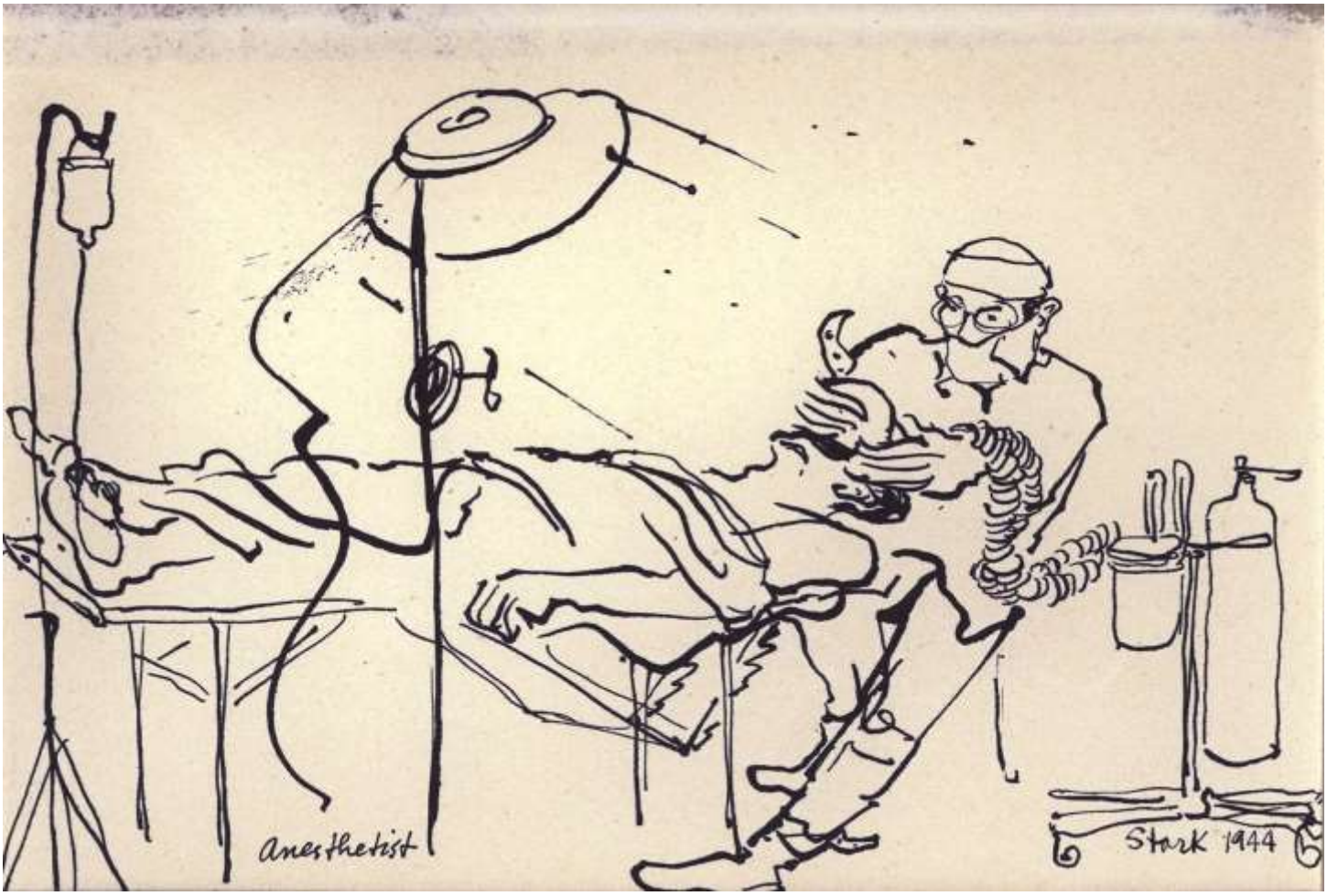

Anesthetist
Robert B. Stark, 1944.
Ink on paper.
From the Stark collection at the AMEDD Museum .

Field Hospital Equipment

Chuck Franson and Paula Ussery, AMEDD Museum

If World War I was a stagnant "war of the trenches" with limited forward movement from the winter of 1914 until mid-1918, then World War II was its polar opposite. From Germany's "Blitzkrieg" (lightning war) across Poland, Holland, Belgium, and France, beginning on 1 September 1939 until the surrender of the Japanese on the deck of the USS *Missouri* on 2 September 1945, World War II was a war of mobility, both in Europe and in the Pacific "island hopping" campaigns.

In keeping with this emphasis on mobility, the role of Field Hospitals changed. In World War I the Field Hospital was predominantly a facility for triage. In World War II the Field Hospital was often the facility where the first surgery was performed. Usually located about 3 to 8 miles behind the front line, the Field Hospital's normal size was 400 beds, but could be divided to make 3 independent smaller hospitals of 100 beds each. And it could be transported either by land, ship or landing craft or by air. A reported embedded with the 51st Field Hospital described its organization thusly "The hospital consists of three platoons, each having four medical officers, six nurses, one administrative officer, one dentist and 190 enlisted men." The 51st kept up with the fighting forces, and the platoons "skipped" across Europe.

Equipment and supplies were packed to reduce shipping space and organized to make it quicker to unpack and start treating patients. Small supplies such as dressings, bandages and compresses were stored in a new container, developed in 1942, the **Chest, Field, Plain.** It was made of plywood, edged with metal strips and corners, and had a capacity of 5 cubic feet. The flexibility of this chest was almost limitless. One of the first interior modifications produced, was Item # 9754000 in the Medical Supply Catalogue, the **Chest, Field, Modified**. This version had a central divider to accommodate 2 large wooden containers. Inside the lid was a folding tabletop. This Modified Medical Chest also contained supports that could be used to create a portable operating table. Additionally, a series of collapsible tray sets further extended the flexibility of the medical chest. Each of these held supplies and equipment for a specific purpose. For example, Tray Set # 1 which consisted of 3 trays and a flat top was used to hold medical supplies. The number assigned to each chest depended on its contents. For example, Chest # 1 held surgical dressings. Chest # 2 held drugs and surgical instruments. Chest # 5 held the sterilizer equipment. The standard AMEDD chests were also used for dental and veterinary equipment and supplies. The dental chests were Nos. 60, 61, and 62, each with a specific purpose and a specific packing list.

The Modified Medical Chest contained a fold out table and was divided into two compartments with containers of surgical dressings and bandages.

CPT William Metzler, Army dentist, treating a patient in Australia, May, 1942. Medical Chest # 60 is in the background between CPT Metzler and his dental technician.

Some equipment was not packed in chests. Surgical equipment came pre-organized and packed, with each canvas roll containing the instruments necessary for a specific purpose. Item # 93210 was the Basic In-

strument Set, Complete. Additionally there were supplemental instrument sets, again pre-packed, for chest injuries, eye, ear, nose and throat, fractures and amputations and genitourinary injuries. To provide light for treating wounded, field hospitals received **Lamp, Operating, Field, item # 99315.** This lamp came apart and fitted into a rectangular steel box for transport. Folding operating tables that stowed neatly in a carrying case were issued, as well as the usual assortment of surgical sponges, surgical pads, and surgical drapes. A wooden anesthesia case contained an array of small equipment needed to administer either regional or general anesthesia. The Picker X-Ray Company supplied small portable X-ray units to the US Army that, unlike the WWI X-ray units, did not need an entire truck to transport them and run the generator. Field hospitals also received the latest in medical technologies, whole blood, penicillin, and sulfa ointments and powders.

The success of the field hospitals in WWII in following the Army on the march led to the next evolution in forward surgical care, the Mobile Army Surgical Hospital of the Korean War.

Field Hospitals were issued a Basic Instrument Set and Supplemental Instrument Sets due to their surgical mission. This is the Supplemental Set for Fractures and Amputations, and contains a broad range of orthopedic instruments.

A WWII-manufactured "Field Operating Lamp" that dissembled for travel in its steel base. The lamp was easily set up for operation and could run off various power sources including A/C or D/C current, a portable generator, or from the dry cell batteries stored in the base.

Jonathan Letterman: How he helped save the Union with Population Health and Organizational Design

2LT Tyler Walker MSC, USAR, M.D. Candidate at Sidney Kimmel Medical College, Philadelphia

Introduction

In May of 1862, Jonathan Letterman reported to General George McClellan at Harper's Ferry, Virginia, as the new Medical Director of the Army of the Potomac, which was a large segment of the Union Army, consisting of more than 30,000 men. Letterman was a U.S. Army physician with more than 10 years of experience who graduated in 1849 from Jefferson Medical College in Philadelphia. At the time of his arrival to the battlefield, General McClellan wrote of his army, "The nature of the military operations had also unavoidably placed the Medical Department in a very unsatisfactory condition. Supplies had been almost exhausted or necessarily abandoned; hospital tents abandoned or destroyed, and the medical officers deficient in numbers broken down by fatigue." Letterman immediately began the daunting task of organizing medical support. He did so with tireless effort, ingenious organizational skills, and strong leadership.

Surgeon and Major Jonathan Letterman
Courtesy National Library of Medicine

When Letterman began his service, the Army of the Potomac (AOP) had 103,000 men and 29% where sick or listed as unable to fight. Smallpox, malaria, and typhus, not the Confederacy, were the Union's greatest threat. Soldiers subsisted on rock hard bread, poorly cooked meat and vegetables, and little to no fruit. Hospitals were set up last minute in houses or barns close to the battlefield without considering their suitability. Ventilation and sanitation practices were ignored, in hospitals and camps alike. Worst of all, battlefield evacuation was an afterthought. Battles would leave wounded men scattered across the field, writhing in pain, left to die alone in the heat or cold with no hope of rescue. Initially, family, friends, and volunteers would search the fields after a battle and remove the wounded with carriages. There was no process for triaging wounded men and bringing them to a hospital, and multitudes of men were left to suffer on the battlefield. Letterman found these abysmal conditions unacceptable. His reforms, which became known as the Letterman Plan, saved the lives of countless soldiers and changed the very nature of healthcare by instituting measures that would today be called population health initiatives. His influence can still be seen today, not only in military medicine, but also throughout civilian healthcare.

Although the idea of population health was not in practice in the 19th Century, Letterman knew how he would be most effective. He wrote in his memoirs about "a popular delusion that the highest duties of medical officers are performed in prescribing a drug or amputating a limb. The true function is to strengthen the hand of the Commanding General by keeping his army in the most vigorous health, thus rendering it in the highest degree efficient for enduring fatigue and privation, and for fighting." As with professionals in population health today, Letterman sought to do so by focusing less on health of individuals and more on the health of the larger population of the Army by: improving healthcare, improving individual behavior, and changing the social and physical environment of the Army's healthcare delivery system.

Healthcare Reform

Letterman's greatest challenge was managing the healthcare for wounded soldiers on the battlefield. In the Civil War, many volunteer units took along well-intentioned doctors from their hometowns as regimental surgeons. Ambulances, if they could even be called that, were simple horse drawn carts, run by the quarter-

master. The quartermaster's other duties of procuring weapons, uniforms, and rations would often be deemed more important than caring for the wounded and so the "ambulances" would be taken for other purposes. Letterman changed this by procuring horses and carts that he converted to ambulances based on the famous *Ambulance Volante* that Baron Dominique Jean Larrey designed for Napoleon's *Grande Armée* in the first decade of the 19th Century. Letterman took Larrey's idea of battlefield evacuation and perfected it by creating an ambulance corps, complete with officers, sergeants, and soldiers who were dedicated to the care and evacuation of the wounded. Letterman pushed for unique uniform designations for the medical corps, secured the authority to deny the quartermaster from taking their equipment, and drilled the ambulance teams until they were proficient at removing wounded soldiers from the field. As a result of this system, wounded men no longer lay in agony for hours or even days, dying slowly from their wounds and exposure. Letterman proved the success of his ambulance corps many times. After the Battle of Antietam, for example, where almost 10,000 men were wounded, every wounded soldier was collected and placed under shelter within twenty-four hours.

Letterman also changed hospitals to improve care of the wounded. Although germ theory was not yet established, he keenly observed that patients faired much better with fresh air, and so he insisted on tents being used. Tents, he observed, were well ventilated and helped keep disease and infection from spreading. This practice differed from the old practice of using houses and barns close to the battlefield. In addition, Letterman urged the Army to adopt a pavilion-style hospital, which became the basis for hospital design for the next seventy-five years. These hospitals had many beds in a single large, well-ventilated room, a design that allowed physicians and nurses to care for a large number of patients more efficiently.

The need for different types of hospitals also became clear to Letterman. He knew he couldn't begin a large scale operation on every battlefront, so he placed a few surgeons, in small tents as close to the front as possible to stabilize the wounded coming off the field. Once capable of being transported, soldiers would be moved further back to larger and more definitive care and eventually ending up in a hospital in a larger city. Letterman's genius is clearly seen here considering this practice is still in place today in the United States Army with wounded soldiers moving through Role I, Role II ("Charlie Med"), Role III (combat support hospitals), and Role IV (hospitals such as Walter Reed) levels of care.

Letterman was also very frustrated by how supplies would run low when he knew the United States government could provide the supplies his hospitals needed. He often personally wrote to Congress, demanding medical supplies for his hospitals and ambulances – all of which were usually provided.

By changing the environment of military medicine in these ways, Letterman created a more efficient system by which wounded men would receive the best healthcare available. His changes to hospital care resulted in marked improvement in a very short time. Specifically, at the Battle of Antietam in 1862, more than 20% of the almost 10,000 wounded died after reaching a military hospital. Eight months later at Gettysburg, less than 10% of the 10,000 wounded died in the hospital. Putting real numbers behind his changes, under Letterman's improvements, the Army of the Potomac's died of wounds mortality rate dropped from 25.6% to 13.3%. Without Letterman's reforms, assuming that the died of wounds mortality had remained unchanged, an additional 25,928 Union soldiers would have perished over the course of the war.

Social and Cultural Environment Reform

Letterman used his authority over the Army of the Potomac's medical corps to alter the society and culture surrounding military medicine. To Letterman, healthcare was not about the physician gaining glory or recognition, but solely for the healing of the sick and wounded. So he changed selection practices for military physicians, who were often appointed based on whom they knew and how long they had served in the Army. He once commented, "It is certainly true that some incompetent surgeons were commissioned in this Army chiefly through political and family influence." Instead of status of pedigree, he appointed physicians based on their skills as military surgeons and cared little about their rank. His criteria were that surgeons had, "distinguished, themselves for surgical skill, sound judgment, and conscientious regard for the highest interests of the wounded." This made him more than a few political enemies, but again, Letterman's primary concern was the health and well-being of his wounded.

In addition, Letterman's passion for the care of wounded led him to establish triage as official Army of the Potomac policy. This was no small change in the culture of the Army since a soldier's rank in the 1860s was a major social determinant. Officers previously received preferential medical treatment, but with Letterman's plan in place, the most critically wounded, regardless of who they were, were triaged appropriately and given the care they needed. These policies of treating friend, foe, or civilian are still encouraged and practiced today.

Reforming Individual Behavior

The deplorable unsanitary conditions in the Army's camps and poor personal hygiene habits of soldiers posed another negative determinant for the health of soldiers. Letterman wrote of the soldier's plight at Harrison's Landing, "Marching and fighting in such a region, in such weather, with lack of food, want of rest, great excitement, and the depression necessary consequent upon it, could have no other effect than that of greatly increasing the numbers of sick..." After Letterman observed the soldiers and gave careful thought to their individual needs, he recommended commanders enforce the following practices: sleep schedules, better cooking to ensure the most nutrition, the depth that wells should be dug to ensure clean water, the proper way to bury dead animals, and how to organize tents in camp to ensure ventilation. Letterman even inserted himself into the combat commander's realm by recommended how long soldiers trained and how long to rest when the weather was too hot or too cold. Letterman felt these simple changes, which most men of the 1860s would not have considered, would greatly increase the fighting strength of the army. He was right.

Letterman and his staff. The whole medical staff of the Army of the Potomac (up to 100,000 men) was a handful of officers.
Courtesy National Library of Medicine.

Letterman and "The Triple Aim"

Letterman's plan and initiatives should also be commended because of how they fit with what today is considered the goal of population health: The Triple Aim. Defined as care, health, and cost, the Triple Aim is what experts in the field of population health consider the main pursuit of the United States healthcare system. Experts say that all three—the health of the population, improving quality of care, and lowering costs—need to be simultaneously pursued. Letterman indeed pursued these three and was effective at each. He improved the quality of care by organizing the ambulance system, appointing quality surgeons, and creating cleaner and healthier hospitals. In addition, Letterman dictated that each of his hospitals keep detailed records of wounds, treatment given, and outcomes so care could be adjusted based on what was working. Data are a keystone of population health and Letterman was one of the first to apply statistics to medicine, making surgeons keep notebooks of procedures and results. He improved the overall health of the Army by implementing recommendations from the U.S. Sanitary Commission, a government-backed charity, as well as from his own observa-

tions. And finally, he always sought to reduce his expenditures. He once wrote, "I desired to reduce the waste…and to avoid a multiplicity of accounts." He strove to stretch what supplies he had, and he expected every surgeon under him to do the same.

Population health seeks to improve the health of individuals in a specific group through policies and programs. Population health also seeks to improve the health of a group, but never at the expense of another. Even in this, Letterman was exemplary, seeking to improve the health of the Confederate Army when given the opportunity by offering medical supplies to the enemy. Letterman wrote, "Humanity teaches that a wounded and prostrate foe is no longer an enemy." To Letterman, the sick and wounded required the best of care, no matter who they were or what they believed.

His example of changing policy to improve health is a testament to the power that policy and popular thinking can have on health. It should be noted, however, that Letterman's experience with what would today fall under population health is unique. His ability to change policy quickly would be impossible in a civilian setting. Letterman could write orders and literally command men to practice healthy habits with the threat of discipline. In addition, Letterman had the trust of the commanding general, George McClellan, whose father was the founder of Jefferson Medical College, Letterman's alma mater. Such circumstances gave Letterman the liberty to implement broad, sweeping policy changes for the group of individuals entrusted to his care.

The lessons from Letterman are clear: getting to know your population, understanding the extent of your influence, and expressing strong leadership are all ingredients to bettering the health of a population. Letterman is an example for any practitioner or student of medicine and/or population health. His legacy is one of selfless service to his country and the United States Army and its effects have stretched into the population at large. His work played a major role in the improving of the health and morale of the army that fought to restore the Union and end slavery during the American Civil War and his reforms are still relevant and practiced to this day. His attention to healthcare beyond the individual level has contributed to our understanding of what is today called population health. Letterman shows us that improving the health and quality of life for a group of individuals can have a powerful impact on society and can even change the course of history.

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The 31st Infantry Regiment in Shanghai, 1932: A Learning Lesson for the Advanced Course of 1934

Adriane Askins Wise, Command Historian, AMEDDC&S, HRCoE

Under the terms of the Treaty of Nanking, which followed the First Opium War (1839-1842), China opened five treaty ports to foreign powers. The Port of Shanghai was included among these concessions where foreign powers could freely live, trade, proselytize, and travel. In 1862, the British and American districts in Shanghai formally combined to form the Shanghai International Settlement with other foreign districts joining the settlement over the years. By the late 1920s - early 1930s, the settlement boasted enclaves of wealthy British, American, French, Russian, Japanese, and Jewish expats and businessmen living, in many cases, opulent and decadent lifestyles. It became a major trading city in the center of Republican China with its own common governing body including its own court, defense budget, and security force - the Shanghai Volunteer Corps (SVC). Unlike Hong Kong, which was a sovereign British territory, the Shanghai International Settlement always remained Chinese sovereign territory.

In 1931, the Japanese annexed Manchuria and began provoking the Chinese in incidents aimed to justify an invasion of China. In January 1932, in an anti-Japanese incident, Chinese civilians brutally beat five Japanese Buddhist monks, killing one in the process. The Japanese government used the beatings as an excuse to attack districts surrounding the Shanghai International Settlement. China's Communists and Nationalists, bitter rivals, joined forces to fight off the Japanese. The SVC, protecting the Shanghai International Settlement, realized if fighting spilled into the settlement they would likely be overwhelmed. The British and the Americans, the predominant concessionaires, immediately called for reinforcement from their respective nations. British troops in Hong Kong and American troops in the Philippines were sent for within days of one another.

On 31 January 1932, President Herbert Hoover convened a conference at the White House with his secretaries of state, war departments, and other key leadership to address the increasing hostilities in China. In response to the deteriorating situation in Shanghai, he ordered the deployment of forces for the further protection of American citizens and property in the Shanghai International Settlement. That same day, army chief of staff, General Douglas MacArthur, ordered Philippine Department commander General John L. Hines via radiogram, to deploy the 31st Infantry Regiment to reinforce the 4th Marine Regiment, the American contingent of the SVC which had been encircled by heavy fighting between the Japanese and Chinese troops for several weeks.

The following morning a verbal warning order was issued and less than 24 hours later the expeditionary force was underway aboard the USS *Chaumont* on what was to be the first of the Regiment's many peacekeeping missions. As the transport ship steamed toward Shanghai, the Regiment, posted in Manila, Philippines for 12 years, would transition from garrison duty in the tropics to preparation for battle under winter conditions in China.

Aboard the *Chaumont* was a hastily thrown together medical detachment. The three medical officers and fifteen enlisted men on duty with the 31st were assigned personnel from Sternberg General Hospital and the hospital in Corregidor to bring the detachment to full strength. On 2 February, the departing detachment was composed of 37 medical soldiers (five medical officers, one dental officer, and 31 Medical Department enlisted), regimental and battalion field equipment, equipment for a 100 bed emergency hospital, one month of medical supplies (including cholera and smallpox vaccine for 1,400 men), and three motor ambulances.

In charge of the medical detachment was regimental surgeon, Major William F. Sappington, MC. Familiar with climate and health conditions prevalent throughout Asia as well as communicable diseases endemic to military forces such as venereal disease, cholera, and small pox, his primary focus was on preventive medicine measures. His secondary focus was on medical activities related to combat, garrison duty, defense of the city, and the possibility of running an American refugee camp. The contingencies the medical detachment might face were great and Sappington did his best to plan in the limited time available and with constraints

placed on the amount of equipment and supplies due to limited cargo space aboard the USS *Chaumont*.

Once underway, the medical detachment began vaccinating the troops against cholera. The decision to focus on cholera vaccinations rather than smallpox was a decision they would later regret. Sappington assumed long standing Philippine Department orders to revaccinate newly arrived soldiers against smallpox had been followed. He was to find out shortly that many soldiers had slipped through the proverbial cracks and had not been revaccinated. Sappington and his men were also unaware deaths from smallpox and pneumonia, and outbreaks of respiratory diseases had been reported in Shanghai by returning travelers to Manila almost upon their departure.

Sending the 31st Regiment had been the first response, but it was clearly not enough. Two days later a second medical element was dispatched from Manila to reinforce the medical detachment. Major Addison D. Davis, MC, (future Commandant of the Medical Field Service School, MFSS, at Carlisle Barracks, Pennsylvania from 1941 to 1946) with four Army nurses, several Medical Department enlisted men, additional funds, and equipment for a station hospital weighed anchor from Manila aboard the U.S. Army Transport *Grant* on 3 February 1932.

The *Grant* arrived at the International Settlement in Shanghai three days later to find they were too late with their smallpox revaccination supplies. Seven American soldiers had already contracted smallpox, four of whom later died, before supplies were unloaded and a campaign to fully revaccinate the troops was in place. The smallpox virus encountered in Shanghai was a more virulent form than had been encountered in the past and protecting soldiers from contracting it was considered the most significant medical duty during the deployment. By the early 1930s, the Medical Department knew about different strains of smallpox virus with varying degrees of virulence. But it appears they were unaware that the prevalent strain in Asia, *variola major*, was much more fatal than the *variola minor* strain found in North America, Europe, and parts of South America. In some cases, the fatality rate of *variola major* was 20 to 40 percent greater than *variola minor*.

The 1st Battalion initially bivouacked beneath the grandstand of the Shanghai Racetrack but found it to be cold, damp, and unsanitary and were later moved to a renovated library within the International Settlement.
Courtesy Wikipedia

Much time and labor was devoted to venereal disease control during the deployment. At first it was not a pressing medical issue, but as hostilities decreased contraction of venereal disease became rampant. Visits to nearby Chinese houses of prostitutions (one house was located directly across the street from the 3d Battalion) were cheap due to a favorable exchange rate or could be made without having any cash on hand as many house proprietors were willing to extend liberal credit.

All major surgery was performed at the Shanghai General Hospital.
Courtesy www.shanghailander.net

Venereal disease control evolved into establishment of four separate prophylactic stations, enforced prophylaxis, punishment of soldiers not following guide-

lines, and close medical supervision of all brothels and their occupants. The medical detachment had the authority to close establishments or place them out-of-bounds to soldiers, but were advised by the British Municipal Police (via the Provost Marshal) that closing one would only result in the opening of a unknown house and it was best to let the known establishments continue to operate, especially those with proprietors who were willing to cooperate and submit to the sanitary regulations.

Medically speaking, both Majors Sappington and Davis considered the rest of the expedition routine and uneventful. Hostilities ebbed in April and ended with the signing of the Shanghai Ceasefire Agreement on 5 May 1932. Troops began to redeploy within a few weeks. Major Davis was one of the last with the medical detachment to redeploy to Manila.

Two years later, Major Davis chronicled the detachment's six month deployment (1 February to 1 July 1932) as part of his final report while attending the Advanced Course at the Medical Field Service School in the fall of 1934. The Advanced Course was designed to train senior Medical Department officers for field grade positions. Taught at the MFSS in a seminar format over eight weeks during the months of October through December, the course content was tailored to fill gaps in officers' experiential knowledge and could vary greatly from course to course. It did, however, have a standard refresher element reviewing mobilization, training, and employment of Medical Department units within a division. The capstone course project was a paper on national mobilization, organization, and operation of the medical service of armies and/or expeditionary forces with an emphasis on applying the principles of medical organization and administration to an assumed expeditionary force.

The flexibility with which the course was taught and assignments made is reflected in the final reports submitted by Davis and his classmates. Of the 21 papers still available, it appears students with firsthand experience in mobilization and expeditionary operations wrote after action reports, which classmates then reviewed and critiqued. The assignment was as much as learning experience for those making the critiques as those receiving them according to comments made within the reports.

Numerous reports submitted as part of the Advanced Course, both those that preceded and followed Davis' class of 1934, are part of the Stimson Library, Army Medical Department History Digital Collection. They offer insight as to the ingenuity, reflection, dedication and professionalism of AMEDD Officers rising through the ranks and show the foundation of AMEDD success has been based on the education and training provided by the MFSS and its successor, the Army Medical Department Center and School, Health Readiness Center of Excellence. I highly encourage the reader to explore more AMEDDC&S, HRCoE history by visiting the Stimson Library Digital Collections online at http://cdm15290.contentdm.oclc.org/

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Dr. Lawton Shanks, Wake Island Navy Cross Recipient

Robert L. Ampula, ACHH

Although an American possession, Wake Island was undeveloped prior to Pan American Airline's interest in setting up a refueling base, one in a series which would allow them to conduct flights between the United States, Honolulu, Midway, Wake and Guam. Singapore would be added in 1941. Their request was granted in 1935 and Pan American immediately began shipping personnel, equipment and material to construct facilities on the atoll. Since this was a stopover, the facilities would include a hotel and recreational activities for the passengers. By October of 1936, commercial flights began.

Shanks, from his 1936 class yearbook.

Dr. Lawton E. Shank was hired in 1940 to provide health care to the Pan American employees and passengers. Dr. Shank was also a United States Army Reserve Medical Corps First Lieutenant, although working on Wake as a civilian employee. In October of 1941 Dr. Shank was hired as the physician for the civilian contractors working on an airfield and facilities for the military contingent now assigned to Wake. This consisted of approximately 450 Marine Corps personnel under the command of Major James Devereux, 70 Navy personnel under the command of Commander Winfield S. Cunningham, a few Army radio operators, and 1220 civilian contractors. Commander Cunningham was designated the overall commander of Wake.

On 8 December 1941, (7 December Honolulu time), word came that Pearl Harbor had been attacked by the Japanese. Commander Cunningham immediately ordered battle stations knowing that it was only a matter of time before Wake would become a target. The initial attack began about noon on the 8th. During the attack Japanese planes bombed, strafed and destroyed most of the planes on the island. They also strafed the pilots who were scrambling to get to their planes. Dr. Lawton Shank ran out to the airstrip amid the bombing and strafing to care for the wounded and to carry them to the island's hospital. Navy Reserve Lieutenant Gustave Kahn, Medical Corps, also assisted in the care of the wounded.

On 9 December the main camp was targeted including the civilian hospital facility which was clearly marked. Dr Shanks gallantly carried the already wounded civilians and military out of the burning hospital while the bombing and strafing went on all around him. After he made sure all had been removed from the hospital, he moved the wounded to an empty magazine where he created a new hospital and began treating his patients. So courageous were Dr. Shank's actions that day that a marine gunner remarked that he should be awarded the Medal of Honor for his heroism. After the attack subsided, Dr. Shank and other medical personnel returned to the burning hospital to recover the medical equipment and supplies that had escaped destruction and then established two 21-bed wards in two magazines.

On 11 December the Japanese attempted a landing and the defenders fought tenaciously, managing to repel the attack as well as sinking two destroyers. A second assault began in the early hours of 23 December with the addition of two carrier groups from the task force that bombed Pearl Harbor. Bombing preceded the landings, which ensued before dawn. Once again the defenders fought determinedly, but the sheer number of Japanese made for an overwhelming task. Although the fighting continued to rage, Major Devereux and Commander Cunningham decided that continued resistance was futile. After the surrender the remaining military and civilian personnel were disrobed and led out onto the coral surface of the airfield where they were bound and held without food or water for most of two days. After two days the prisoners were finally allowed to retrieve clothing and bury their dead.

On January 12, 1942, all of the military and most of the civilians were send to China as prisoners of war. Approximately 1200 personnel left that day on the Japanese ship Nitta Maru. About 360 civilian contractors were selected to remain on Wake, some because they were sick and wounded and others because of their particular construction skills. Dr Shanks chose to remain on Wake to provide medical care to the sick and wounded. Expecting a United States invasion, the Japanese ordered the contractors to continue work on the defensive construction they were performing prior to the Japanese takeover using the existing equipment

and supplies.

In October of 1942 approximately 260 of the captives were placed on the Tachibana Maru for transport to Japan. Certain prisoners were selected to remain to continue the unfinished work on the island. The Japanese told Dr. Shank, who continued to care for the wounded and ill, that no sick or wounded would be allowed on the ship. Dr. Shanks once again volunteered to remain on the island. Dr Shanks merely told the wounded that it would be better for them to remain on the island rather than endure the trip in the hold of the ship on its voyage to the mainland.

The U.S. bombed the island periodically, but had no intention of landing troops. Wake was not included in their island hopping plans, but they bombed to take away the use of the airfield and lagoon for re-supply or reinforcement. The plan was to isolate the island and allow it to wither. In October of 1943 a task force assembled off of the island and the most extensive bombing of Wake followed. Captain (later Rear Admiral) Shigematsu Sakaibara, Japanese commander of Wake, was convinced this was a prelude to an invasion. On his orders, the 98 remaining prisoners were marched to the beach near an anti-tank ditch where their hands and feet were bound. They were shot and their bodies were dumped into the ditch and buried.

The Japanese would surrender Wake Island in September of 1945. Some of the Japanese would be tried for war crimes for the murder of the 98 prisoners. Among them, Admiral Sakaibara, who would be executed in 1947. The remains of most of those who fell on Wake Island during WW II were disinterred from the island and reinterred in a mass grave in the Punchbowl cemetery in 1953. They are marked by a large granite marker listing 178 men who lost their lives on Wake. Dr. Shank was nominated as a civilian for the Navy Cross by Commander Winfield Scott Cunningham, U.S. Navy in May of 1946. This award was approved in August of 1946. Dr. Shank is, to date, the only civilian ever awarded the Navy Cross. First Lieutenant Lawton E. Shank, Medical Corps, USAR was nominated for the Medal of Honor by Captain John Hamas, United States Marine Corps, in November 1946. This nomination was disapproved in March of 1947, presumably because he was employed as a civilian. Dr. Shanks' Navy Cross citation can be viewed on the AMEDD Regiment website

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"Separate, but almost equal": The Army's Negro medical field units in World War II

Sanders Marble, Senior Historian, ACHH

Introduction

In World War II, the US Army readily accepted the racism and segregation of society. It sought ways to keep African-Americans (which the Army termed Negroes) in segregated units, and to reduce their chances for combat. The AMEDD followed general Army policies and put most Negroes into menial duties. Despite the Army's, and AMEDD's, intentions, a mix of political pressure and military necessity allowed Negro units a higher profile than initially planned.

The Army accepted segregation as the law of the land; Negro officers were not supposed to be in positions where they could command Whites. The AMEDD accepted the prejudices of many Whites and would not put Negro doctors and dentists in positions to routinely treat Whites. That reduced requirements for Negro doctors and dentists to only those needed to treat Negro troops, and resulted in peak strengths below 400 Negro doctors and 125 dentists.

Segregation caused organizational problems for the Army during its 1940-43 expansion. Segregation extended to military facilities, so separate barracks had to be built, separate mess halls, recreation buildings, etc. Army policy also accepted local segregation laws, including back-of-the-bus provisions, that caused substantial tension, both between White and Negro troops and between Negro troops and White civilians.

The AMEDD faced slightly different problems in using Negro manpower. The Army did not totally segregate patients (although frequently a separate ward was set aside for Negro patients) but did segregate professional medical personnel. (In 1944 one White hospital received Negro nurses, but only because of political pressure from First Lady Eleanor Roosevelt.) Since White patients were to receive care from White medical personnel only, Negro medical units were only needed where there were enough Negroes to keep an entire hospital busy. With most Negroes assigned to small units working in the rear areas, there was thus little need for such hospitals and the Army organized few Negro hospitals (only three ultimately served overseas), and could utilize only a few enlisted personnel. This situation raised a fresh problem for AMEDD personnel planners. The Army was committed to both taking Negroes in line with their population percentage and distributing them evenly across the Army, so the AMEDD had to utilize them. The AMEDD first sought to evade the Army's general rule about equal distribution by saying few Negroes had the necessary education highly technical medical work. (The AMEDD was not alone in this; the Army Air Forces and Signal Corps both avoided taking substantial numbers of Negroes. Political pressure, however, forced the Air Forces to yield and bring in the Tuskegee Airmen.) This resistance had some results for the AMEDD: it ultimately was only 4.2% Negro, while the entire Army peaked at 10.3% in December 1945. But the AMEDD did have to absorb Negro draftees. The first answer, starting in 1940, was forming Medical Sanitary Companies, and then, from 1943, ambulance units.

Medical Sanitary Companies

The very term 'medical sanitary company' was adopted to circumvent Army policy. Officially the Army had no "Negroes-only" category of units, but the AMEDD filled all sanitary companies with Negro enlisted men, so when planners saw XYZ Medical Sanitary Company they knew what it meant.

The AMEDD began forming sanitary companies in 1941. At first they were simply a place to park Negroes: they had no set organization, equipment, or vehicles. Each 1000-bed general hospital would have one company for labor. Any Negro doctors or nurses assigned to the hospital's segregated ward could eat in the sanitary company's mess, facilitating segregation. Few 1,000-bed general hospitals were operational then, and it seems most sanitary companies performed general labor. For instance, the 729th recorded "various labor details," and the 730th said "post labor details interfered with training." Work in the hospitals was not necessarily medical: the 720th (at Fort Lewis, Washington) had men working in the kitchen (including garbage removal), doing landscaping, and engaged in rat/vermin control. Integration into the hospital was also a mixed blessing for training: the 793d (at the San Francisco Port of Embarkation) found "Trying to get the men released

from their respective duties so that they could attend the training program classes … was no easy matter. The Medical Officers needed the men to keep their respective departments functioning smoothly, and often complained to the Post Surgeon." The lack of meaningful medical duties undermined morale and led to at least one protest. In 1943, the 703d Sanitary Company, at Fort Custer, Michigan, recorded "a disturbance regarding the use of the enlisted personnel for menial duties and such work as is ordinarily performed by engineering units. [This may refer to trash and latrine-emptying duties.] This matter was adjusted immediately and the men returned to their duties in the hospital wards."

Company area of the 777th Medical Sanitary Company.
Courtesy National Archives.

While Sanitary Companies started with White officers, several received Negro officers during the war. The 711th records showed morale improved when they received their first Negro officer, and improved again when all three officers were Negro. The 726th had an unusual experience with a new White commander, 2LT (later CPT) Paul Steinbaum:

> This, however, was Captain Steinbaum's first experience as a commanding officer, and his own admission that he had formed preconceived notions as to the proper methods necessary to control Colored troops was reflected in his early efforts as a leader of these troops. But Captain Steinbaum quickly realized he was following the usual erroneous notions of many American whites in their relations with Colored Americans. As a result, Captain Steinbaum reversed his attitude completely, causing his popularity to soar with the men until he became one of the best officers to be assigned to the unit. The War Department's pamphlet "The Command of Negro Troops" was read and recommended to the enlisted men and officers by Captain Steinbaum. Captain Steinbaum also obtained Public Affairs Pamphlet No.85, "The Races of Mankind" and became convinced that individuals deserve judgment on the basis of personal ability and merit, rather than upon racial identity. His leadership from then on became increasingly effective.

By late 1942, Surgeon General James Magee had to explain why Sanitary Companies had no official organization or authorized equipment and why none were overseas. The Army could not waste manpower. The Army staff demanded a reorganization "designed for useful work rather than merely as a method of clothing and feeding negro soldiers." A medical purpose and TO&E were quickly created: insect control, through ditching, spraying, and oiling. In mid-1943 units in the US started insect-control training, but continued various cleaning chores. At times, they over-lapped because clearing brush helped control insects. The 777th, for instance, controlled flies at an amphibious training center but also cleaned 250 latrine cans daily.

The units were still considered of low utility. It took over six months before any overseas theater requested a Sanitary Company. Even then, a majority of the units stayed in the US on various medical duties. Overseas the Sanitary Companies saw widely varied duties. The 18 in the South Pacific were used for malaria control, as semi- and un-skilled labor alongside local laborers. Ditching was slow but long-lasting, while repeated oiling and spraying of DDT was necessary given the high rainfall. The units were scattered across many islands, often far in the rear because logistics bases were seldom closed when the front advanced.

Eight companies went to Europe where malaria was little problem. Instead, the European Theater Surgeon, Major General Paul Hawley, set specific priorities for his Negro units: 1)unskilled labor to help establish hospitals 2)semi-skilled labor to help operate hospitals 3)labor for "sanitary appliances" (such as incinerators, dumps, and sewage plants), insect control, and loading/unloading of hospital trains and ships. Thus 701st built facilities for a general hospital and provided drivers and kitchen help. It also operated clinics and a 120-bed facility with an all-Negro staff. In addition, the 701st loaded over 16,000 patients onto US-bound hospital ships. The 736th constructed buildings for several hospitals in England, then, after D-Day, was involved in unloading the Landing Ship Tanks that brought wounded back from the fighting in Normandy.

Handling casualties became the highest-profile mission of the Sanitary Companies. They received special training for this mission, and proved to be far faster than predicted. After D-Day at the main cross-

Channel port four companies unloaded the landing craft, two on duty and two resting from 24-hour shifts that could see the transfer of 100 patients/hour. When the tide was low and an urgent patient was on an LST, litter-bearers would go out on a Landing Craft, Infantry and unload the patient(s). With fierce and prolonged fighting in Normandy, there were many urgent patients. Two separate Sanitary Companies handled over 100,000 litter patients each. MG Hawley specifically noted "These negroes were as gentle as doves with the casualties and I have never seen better ambulance loading." Once there were enough German prisoners, the 711th trained and supervised them. Only then did the 711th receive weapons training and weapons; as non-combatants, medical units normally did not receive such training.

Sanitary Companies moved forward as the front advanced. The first into France was the 736th, in August 1944. They loaded medical supplies, buried dead animals, and did other miscellaneous sanitation work. After the fighting settled in along the German border they moved forward into Belgium, handling patients at the 9th Field Hospital. During the Battle of the Bulge one officer and three men were wounded. (The 709th also suffered casualties. It was moving patients around at a hospital center at Liege, Belgium, when a German rocket hit, killing one man and wounding thirteen.) With aircraft speeding evacuation, the loading/unloading work expanded to include handling patients for air evacuation. Elements of the 726th were even flown forward into Germany in 1945 with the Field Hospital to which they were attached.

Men of the 723d Medical Sanitary Company loading wounded soldiers onto a hospital train, Aachen, Germany. Red marks on photo are the censor's marks. Courtesy National Archives

At least two Sanitary Companies, the 703d and 711th, were awarded the Meritorious Service Unit Plaque (predecessor of the Meritorious Unit Commendation) for their work in unloading and loading casualties. At least two men received Bronze Stars for their work, Technician 5th Grade George Hoffman of the 701st for his work as a dental technician and pharmacist, and T/4 Asa Parrish of the 711th for unspecified actions.

When the fighting in Europe was over, the Sanitary Companies were used for general AMEDD work. Some continued work against insects, others loaded hospital ships, others helped in hospitals or at medical depots. The companies were inactivated in the winter of 1945-46 and the men released from the Army.

Ambulance Units

In spring 1943 the Army formed three motor ambulance battalions with Negro enlisted men. All had a small headquarters detachment (seven officers and twenty-two enlisted men) and three ambulance companies, each four officers and eighty-nine men. All ambulance battalions were soon reorganized with independent companies and the battalion headquarters separate HQs to command ambulance companies operating in a sector. The Army readily attached White units to these battalions, showing no discrimination. Because the battalions had White officers there was no issue of putting Negroes in command of Whites.

Conclusion

While the Army was ambivalent about Negro troops, and the AMEDD antipathetic, the draftees had to be accepted and utilized. The AMEDD's first response was probably the most racist, employing Black men simply as unskilled laborers, not even training them for any military duty. When that was unsustainable, low-skilled medical work followed. The highest profile mission, loading and unloading the wounded, drew the most attention and praise from the Army, and also engendered esprit de corps in the companies doing the work as the men recognized the importance of what they were doing. Working in a segregated country and Army, these men took the role they were given, gave it their best, and overcame obstacles.

Sources

This is based on the author's article of the same title in the Journal of the National Medical Association, volume 104 no. 1-2 (Jan-Feb 2012) pages 96-103, available at http://www.nmanet.org/sample_journals/January-2012-sample.pdf

Due to the wide interest in the topic, we have two reviews of this book. The first is from Shelton Jackson, MD, who saw part of the Vietnam War as a platoon medic and subsequently became a physician. The second is from Michael Doidge, historian for the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury.

Norman M. Camp, US Army Psychiatry in the Vietnam War: New Challenges in Extended Counterinsurgency Warfare. Borden Institute of the Office of The Surgeon General, 2014. pp558 and xvi. Illustrations. Tables. Index.

Doctor Norman M. Camp chronicles the deterioration of the psychiatric health of the U.S. Army over the course of the war in Vietnam. Dr. Camp divides the Vietnam War into two different wars. The Vietnam War from 1965-1969 was a war of high morale and idealistic purpose. The war from late 1969-1972 was a war of deteriorating morale and sharply increased psychiatric casualties. I personally served as a platoon and company medic during 1967-68 with the 2d Battalion/27th Infantry Regiment "Wolfhounds," in Cu Chi, Vietnam. After sustaining a fragment wound, I was evacuated out of theater and eventually was placed on VA Vocational Rehabilitation and earned a BUS and MS. Afterwards, I was awarded a USPHS Scholarship to medical school, and eventually became a board certified emergency physician. This training allows me to evaluate my experiences in Vietnam from a scientific, medical perspective.

During the Vietnam War, there was one psychiatrist for each of seven combat divisions, two Army Neuropsychiatric Specialty Detachments, that each had three psychiatrists, as well as a psychiatric consultant assigned to the U. S. Army, Vietnam Headquarters. A large portion of this book is devoted to a 1982 survey by Walter Reed Army Institute of Research of locatable physicians who served as Army psychiatrists in the Vietnam War. This survey addressed several aspects of Vietnam service. This included questions concerning professional preparation, time spent on military versus professional duties, indications for prescribing psychotropic medications, efficacy of therapy for combat reactions, circumstantial factors, troop morals, professional requirements, utility of prevention efforts, patterns of drug abuse and frustrations. One of the more stark comparisons of individual psychiatrists, was civilian versus military training and philosophy. The goal of Army psychiatry is the maintenance of troop strength rather than individual psychological well-being. Therefore, the Army concentrates on forward treatment and on an expectation of rapid return to one's unit. Troops with combat exhaustion were typically treated at division base camp with thorazine, adequate sleep, a shower, and clean clothes. The majority of soldiers with combat exhaustion were returned quickly to their units. Patients requiring further care may actually have had more serious psychiatric problems or personality disorders. Overall, the psychiatric care in the Vietnam War was excellent. The availability of new psychotropic medications and the philosophy of early, forward treatment of combat stress and exhaustion with an expectation of early return of a soldier to his unit proved valuable in preserving fighting strength and soldier and unit morale. Most negative aspects of this survey had to do with late war frustrations, plummeting morale and drug abuse. A major strength of this book is the large number of case studies used to illustrate various ideas and treatment methods. This served to augment the understanding of various points and treatment methodologies. Dr. Camp describes combat stress, combat exhaustion and combat reaction casualties, as well as deployment stress, inverted morale (anti-war fervor so high that it bolstered morale, rather than high morale generated by the military missions), drug abuse, and psychiatric attrition in the Vietnam War.

During the first part of the Vietnam War, psychiatric attrition was low (12-16.5/1,000), when compared to Korea (73/1,000) and WWII (28-101/1,000). This is attributed to good morale and less intense warfare in Vietnam. Army medical evaluation and services were improved during the Vietnam War. This was primarily the result of enhanced helicopter evacuation, improved medical training and forward-placed hospitals. The availability of new antipsychotic, antidepressant and anxiolytic medications also contributed to bet-

ter, more rapid recovery. As a medic, I was given responsibility to distribute anti-malarial medication, as well as morphine as needed for pain in combat casualties. Wolfhound medics also carried Dexamyl® capsules to distribute on an as needed basis to keep troops awake when 100 percent alert was required, or for ambush patrols. We were given Librium® capsules that could be used every six to eight hours on soldiers for acute anxiety. I know from personal experience that having Librium available to give combat stress saved several soldiers from having to be evacuated.

The last three years of the war saw increased psychiatric casualties from all sources, but especially from an epidemic of drug abuse. Heroin use spiked from the summer of 1970 until the end of the war. During this time of deteriorating morale "fragging" (the assassination of officers and NCOs) and intimidation of officers and NCOs became increasingly common. This period of the war saw demoralization, increasing dissent and dysfunction, with as many as one in eight enlisted men being evacuated from the theater of war for psychiatric reasons. Of interest is the fact that the psychiatric casualty rate during this time was greatest among non-combat support troops.

Besides the general antiwar sentiments in the country, Dr. Camp mentions some outside factors that contributed to the severe morale problems at the end of the war. The "Winter-Soldier Investigation" conducted by John Kerry in Buffalo, NY in February, 1971 dramatized atrocities supposedly committed by soldiers in Vietnam against the population. Although much of the testimony is controversial and discredited, the "investigation" soured the public against the war and the soldier. Although not mentioned in the text, some observers may conclude that the "Winter-Soldier Investigation" was less of an investigation than it was anti-war propaganda. During my tenure in Vietnam, I witnessed no atrocities. Quite to the contrary, I was instructed to treat civilians and the enemy as well as our troops. Medics had to sign and carry cards that had some rules and requirements of the Geneva Convention. The My Lai massacre of March 16, 1968, by a unit of the Americal Division, is also mentioned as an event that increased antiwar sentiment in the USA. During this incident, several hundred civilians were killed in the hamlet of My Lai. 2LT William Calley, the commander of these troops, was prosecuted and convicted. This occurrence greatly soured the American peoples' perception of the war and the soldiers fighting it. Thirdly, Dr. Camp mentions the drafting of men with substandard AFQT test scores and criminal histories in a project conceived by Robert McNamara to lessen the need to draft others, such as college students or married men, or to activate the reserve or National Guard. This project had devastating effects on morale and emerging criminality as the war progressed, as well as doing a disservice to many of these men that served. Hamilton Gregory, in 2015, published a book, McNamara's Folly, treats this subject in detail. These men were many times more likely to die if assigned to combat units. This is because, infantrymen are not just cannon fodder but intelligent men who practice detailed tactics and plans that give them survivability and lethality. Many of "McNamara's men" had difficulty adjusting to the military and were diagnosed with personality disorders or given bad conduct discharges, making them worse off than before they were drafted. After reading extensively and talking to other Vietnam combat veterans, including my dad, I have concluded that the introduction of McNamara's substandard men had devastating effects on the psychiatric health and morale of our military in Vietnam. One rotten apple spoils the barrel.

After reading this book, I have come away with an appreciation of psychiatric treatment in wartime, and late Vietnam War psychiatric attrition that produced unsustainable losses and threatened the ability of the Army to fight. One of the aspects of the survey that interested me was military versus civilian training. Military psychiatrists place the preservation of troop strength above personal treatment. A military psychiatrist is likely to return a soldier to his unit once he can perform his duties, rather than entering the soldier in long course of psychotherapy or medication therapy. The soldier is treated and can return to his unit when he can discharge his duties. This likely has a positive effect on the pride and self-esteem of the soldier and is not detrimental to his psychiatric health, and bolsters the manpower needs of the Army.

I appreciate Dr. Camp's work very much. It opened my eyes to the depth of drug (especially heroin) abuse, and the low morale and disorderly disposition of the Army during the last years of the war. I believe the

lesson of this book is that we should never prosecute a war using incrementalism, and never measure success by enemy attrition. For the sake of our troops and our population, wars should be fought by professional military men and prosecuted vigorously as with WWII or the first Gulf War.

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"Where does Post-Traumatic Stress Disorder come from?"

Michael Doidge, Historian (Contractor), Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury

Broadly understood, Norman Camp's work examines the US Army's psychiatric Vietnam War history. In so doing, it raises a few of its legacies as well. Camp served as a psychiatrist in the US Army during Vietnam, and wrote this work to fill the psychiatric gap in the war's historical literature.

Camp argues there is no consensus among psychiatric history in Vietnam, save for one: "there was a relatively low incidence of acute combat exhaustion." (p434) This may be his most striking conclusion, especially in light of the postwar's emphasis on mental health. Returning veterans who exhibited difficulty in their societal reacclimation were labeled Post-Vietnam Syndrome cases. By 1980, that name gave way to an official term, Post-Traumatic Stress Disorder, when PTSD was first placed within the third volume of the Diagnostic and Statistical Manual of Mental Disorders. Yet, whether Post-Vietnam Syndrome in the seventies or PTSD in the eighties, societal consensus agreed these veterans were damaged by war.

The decades that followed institutionalized the war-damaged veteran in the American political and cultural landscape. Television, film, and literature simultaneously mythologized and caricatured Vietnam veterans, both ennobling and contaminating them. Meanwhile, good-willed citizens, veterans groups, and policy-makers alike sought mental health care, as well as economic, housing, and educational assistance at the community and national level. Despite veteran's aid efforts, the Post-Vietnam Syndrome spread like a palpable malaise over the nation. It evolved into the "Vietnam Syndrome." The term served as evidence of the American population's now strong dislike for overseas military commitments. The veteran's traumatic experience in Vietnam became conflated with the nation's traumatic experience with the war in general.

Yet just as the Vietnam Syndrome led Americans to question their combat power as a means to achieve national goals, the 'damaged vet' myth embraced combat as trauma's singular source. However, as Camp convincingly argues, incidences of combat exhaustion were relatively low. According to Camp, Army psychiatrists estimated acute combat exhaustion (also known as combat stress reaction) casualties at 6-7/1000 service-members/year. (p153-156, 434) Should the consensus hold, we must conclude that combat trauma alone cannot account for mental health problems faced by returning US veterans; Camp strongly intimates detrimental military policies, as well as a societal "break" on the war's viability led to declining morale, which in turn fed then service member and, later, veteran's postwar psychosocial stressors (p437-439).

While the seventies and eighties brought legislation and clinical diagnoses to aid Vietnam veterans, the nation as a whole also took on a reflexive and oversimplified vision of trauma, veterans, and war. Doing so led to the 'damaged vet' narrative, and it is a narrative we as a nation live with to this day. This oversimplification has impeded progress in service member and veteran's mental health. To understand post-traumatic behavior in the Vietnam veteran and US veterans more broadly, Camp argues that we must look beyond the battlefield.

New to the ACHH Research Collection

Documents

COL (Ret.) Kimberly Smith donated eight handwritten journals that detail her pre-military career as an ROTC student at the University of Pittsburg and later during her deployments to Bosnia and Iraq as an Army Nurse.

Bill and Alice Gamble donated additional papers that belonged to Bill's father, LTC Jess Gamble, who served as a Medical Corps officer during WWII.

LTC (Ret.) Mike McCoy donated 22 photographs of his tour during Desert Storm.

42 photographs illustrating ANC historical uniforms and activities were donated to the ACHH by Michael Schlicher.

Jerry D. Ledbetter, BS/MS/PhD/RN, donated five 3-ring binders relating to the history of the 312th Evacuation Hospital during the Vietnam War and Desert Shield/Storm. The collection includes an assortment of 35mm Ektochrome slides, documents, and photographs as well as digital materials and signed art prints.

Highlights

Dr. Jess Gamble began his service in the US Army at Walter Reed General Hospital in 1939. He was promoted to First Lieutenant, Medical Corps Reserve in 1941 and by January 1944 had already achieved the rank of Lieutenant Colonel. From September 1944 to July 1945, LTC Gamble commanded the188th Medical Battalion which made its way across Western Europe. The ACHH is thankful to the Gamble family for donating his notebooks to the research collection.

Books

Rushton, Patricia. 2013. *Vietnam War nurses: personal accounts of 18 Americans*. North Carolina : McFarland & Company, Inc., Publishers.

Donor: COL (Ret.) James Odom

New to the AMEDD Museum

The AMEDD Museum has recently received several exciting donation offers.

The AMEDD Museum Foundation has offered two beautiful rank chevrons, worn on the M1902 enlisted Dress Blue uniform. In keeping with the "new" branch color of maroon, the chevrons are maroon on a navy blue background. The Chevrons are for an Acting Hospital Steward and a Hospital Steward.

Former Army Surgeon General Frank F. Ledford Jr. has donated to the museum one of his Army Green Uniforms, several pieces of AMEDD hospital china and an AK-47 bayonet that was presented to him from Operation Just Cause. LTG Ledford served as Surgeon General from 1 June 1988 until 30 June 1992.

From the World War I, era the Museum has been offered a variety of pieces, including a General Surgery Case with instruments and a Hospital Corps pouch. With the upcoming centennial of America's involvement in WWI, these pieces are an especially timely offer. Also from World War I are two WWI Bandage Training Kits still packed in the original boxes that were found on post and forwarded to the AMEDD Museum. The first aid packet for World War I was housed in a metal container and contained two small dressings with 2 safety pins to attach the bandages to the wound. The training kits duplicate the contents of the first aid packet, but the compresses are housed in a cheaper cardboard box and are designed to be re-used. An additional donation offer is from the family of Albert Daniels Friedel, who was served with Field Hospital No. 159. This offer includes a small Red Cross or Geneva Cross flag, a Red Cross Brassard, which was worn by Army Medical personnel, his identification disc, and a photograph album documenting the experiences of the unit.

Medical Civic Action by the 5th Battalion, 42d Artillery

John Alosi, former Public Information Specialist with 5/42 Artillery

Even though the 5th Battalion, 42d Artillery was a combat unit it engaged in several civil affairs programs as part of its overall mission in Vietnam. One of the activities encouraged by the Army in Vietnam was the Medical Civic Action Program (MEDCAP). It was an initiative that was embraced by the battalion and implemented by Captain Wilbur M. Byrd, the battalion surgeon, and Captain Thomas Singletary, the battalion S-2/S-5officer. The MEDCAP was devised by the Army to provide outpatient medical care for Vietnamese civilians living in primarily rural areas. Each mobile MEDCAP team was supervised by a medical officer with enlisted personnel providing much of the care. Working with their ARVN counterparts, MEDCAP teams established temporary health stations, diagnosed ailments, and dispensed medicine. The program also trained Vietnamese in medical techniques. The main goal of the MEDCAP program was to eventually develop an independent, self-sustaining Vietnamese public health care service that was capable of providing all the health care for the people of the country.

In 1970 the 5/42d Artillery was part of the 23d Artillery Group. The group supported all the units in II Field Force, which operated in the Third Military Region (aka III Corps) around Saigon. The battalion headquarters was located at Camp Price, on the eastern outskirts of the city of Bien Hoa. Bien Hoa is located on the Dong Nai River, approximately 30 kilometers (18 miles) northeast of Saigon. Camp Price was a small facility close to the massive Long Binh Army Base and Bien Hoa Air Force Base. The runways were visible in the distance from the guard bunkers and towers located along the camp's western perimeter. In 1970 Bien Hoa Army Base was the headquarters for the 1st Air Cavalry Division.

One battalion project that was administered by Captain Singletary and his NCOIC, Sergeant Rod Shaughnessy, was the construction of two or three maternity clinics in the city of Bien Hoa. I visited one of them but I did not take any photos. I did not see the delivery room or the nursery but wandered through the ward where the expectant mothers and the women who were recovering from giving birth were resting on their wooden beds. I did not want to violate their privacy so I did not take any photos. The ward did not look like any medical facility I had ever seen, it was more like a screened-in picnic pavilion in a municipal park.

Captain Byrd directed the battalion's MEDCAP project. They went into a neighborhood on the west side of the Dong Nai River and set up shop in a school building and treated Vietnamese citizens. The battalion medical team conducted the MEDCAPs along with its South Vietnamese Army sister artillery battalion (the 46th ARVN artillery battalion) on a bi-weekly basis. To make the effort self-sustaining Captain Byrd set up a program to train Vietnamese civilians in the medical sciences. He and his staff trained eight Vietnamese students (three girls and five boys) in a Medical Assistant Course. They attended classes at the battalion aid station five days per week, six hours per day. The goal was to have the students take an active role in the villages where we had MEDCAPS. They could take care of

minor medical problems and anything more difficult could be referred to a doctor from the Vietnamese Public Health Department.

The first photo is the reception area in the schoolhouse where the incoming patients would describe their ailments to the Vietnamese Army medic and our battalion surgeon, Captain Byrd, who are seated at desks. Captain Byrd was drafted not long after graduating from med school. In addition to the MEDCAP program he also required our own medics to take courses he would teach so they could maintain and/or improve their skills. The Vietnamese soldier standing was our interpreter, Staff Sergeant Dang-van-Tien. He was only 19 years old going on 20 and he had a knack for assuaging the fears of the mothers who were a little apprehensive of bringing their children to Americans. He lived at our battalion headquarters and we became friends. He escaped Saigon on the last plane out when the city fell in 1975. Unfortunately, he died of lung cancer in January of 2010. The young woman in the background is one of our students. She is wearing an Áo Dài (pronounced ow-ee-yigh, [rhymes with how high]), Vietnamese formal wear. They can't be purchased off the rack and are form fitted for every woman by a tailor. They are slit at the waist and extend to the ankles (or thereabouts) and wave in the breeze. The women wear slacks underneath that are made of satin, usually black or sometimes white. The satin shimmers in the sunlight when they walk.

The second photo is of our makeshift pharmacy. The medic in the foreground is Jim Duffy, a draftee. Back then medics went through the eight weeks of basic training every soldier was required to undergo, then 10 weeks of specialized training as a medic, then they were assigned to a unit. The three female students are filling the prescriptions. The soldier in the background is Dick Steinberg, who was the battalion's clinical specialist. He was more highly trained than a medic and held the rank of Specialist 6, the same pay grade as a staff sergeant. He did basic training and the 10-week medics course. Then he was trained for an additional year in medicine. With the advent of the internet we were able to reconnect and now carry on a lively correspondence. We both attended Tien's funeral. Dick and Tien were especially close. On their own, the two of them sometimes went out to rural villages and treated the people. I was unaware that was taking place and did not learn of it until many years later. Going out into the rural villages could be dangerous but they were lucky and did not have any problems, except when a village chief offered them some kind of dish for lunch that included fish heads. Tien told Dick that if he rejected the chief's hospitality and didn't eat them they would be killed. Last year one of the male students contacted Dick. He escaped to the USA and became a doctor. He had been practicing medicine in southern California for many years. Dick was really excited and elated.

The third photo is of Dick bandaging a four or five year old boy who had some cysts that Doc Byrd removed. When the kid came in it looked like he had five or six hard-boiled eggs sticking out of his head.

U.S. Army photos by PFC John Alosi, 5th Battalion, 42d Artillery Public Information Office, May 1970.

This mission statement gives us a course heading and sets our priorities to "educate, inspire, and promote esprit de corps." Education can take many forms and the *AMEDD Historian* is one of them. We also bring AMEDD history to you through our Facebook, Instagram, Youtube, and Twitter sites, so between issues of the *Historian*, check these sites!

On October 27-28, 2016, ACHH conducted a Living History Day at our museum on Fort Sam Houston. The event supported the AMEDD Best Medic Competition.

The next few months begin what we call the anniversary season with AMEDD corps birthdays beginning with the Army Nurse Corps (2 February 1901), Enlisted Corps (1 March 1887), Dental Corps (3 March 1911), Civilian Corps (26 March 1996), Medical Specialist Corps (16 April 1947), Veterinary Corps (3 June 1916), the centennial birthday of the Medical Service Corps (30 June 1917), and Medical Corps that coincides with the AMEDD Birthday (27 July 1775). So if you are planning an anniversary activity and need information about your corps, our staff is always willing to help!

Last, since this is your history newsletter, please ask your colleagues if they receive it, if not, share it with them, and get them on our mailing list. History matters only to the extent that it is perceived to provide its users something of value!

Bob Driscoll
Chief, ACHH

Writing for *The AMEDD Historian*

We are seeking contributions! We believe variety is the way to attract a variety of audiences, so we can use:

- Photos of historical interest, with an explanatory caption
- Photos of artifacts, with an explanation
- Documents (either scanned or transcribed), with an explanation to provide context
- Articles of varying length (500 word minimum), with sources listed if not footnotes/endnotes
- Book reviews and news of books about AMEDD history

Material can be submitted to **usarmy.jbsa.medcom.mbx.hq-medcom-office-of-medical-history@mail.mil**
Please contact us about technical specifications.

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AMEDD Center of History and Heritage

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