August 18, 1942[1]

MEMORANDUM FOR: Control Division, Services of Supply, Attention of Major John B. Millet.

SUBJECT: Material for the annual reports of the Secretary of War and the Under Secretary of War.

MISSION OF THE MEDICAL DEPARTMENT

The mission of the Medical Department is the conservation of manpower – the preservation of the strength of the military forces. This is accomplished by the selection and enrollment for military service, through properly conducted physical examinations, of only those men physically fit for the performance of the duties to evolve upon them, the keeping of such personnel in good physical condition through the application of modern principles of preventive medicine, and in furnishing those who become disabled with such aid in the form of evacuation and hospitalization facilities as will speedily restore them to health and fighting efficiency.

GENERAL

During the fiscal year 1942 the activities of the Medical Department have been expanded greatly to enable it to meet the requirements for the expanding Army of the United States and to enable it to carry out its functions successfully.

[1] This report was prepared during the war but not published, presumably because it was considered to have classified information. It also lacked the statistical information that was normally included, perhaps because data from ongoing overseas operations were hard to gather.
This document has had punctuation and capitalization silently standardized, and spelling silently corrected. Original pagination has been retained. Additions are in [brackets].

During the fiscal years 1940 and 1941, as authorized by Acts of the Congress and as directed by higher authorities, the following expansion occurred: Additional personnel was procured; new hospitals constructed and existing ones enlarged; medical supplies and equipment procured and distributed; professional services and health measures expanded; tables of organization revised; medical sections of war plans revised and rewritten; professional and tactical medical units were organized and trained to enable them to move promptly to a theater of operations with task forces; and provisions were made for the tactical and professional training of new and militarily untrained medical personnel.[2]

During the fiscal year 1942 and especially since December 7, 1941, all of these activities have been accelerated greatly.

Throughout the entire period of expansion, the Medical Department has had the active, patriotic and unselfish cooperation and support of medical, dental, veterinary, and nursing professions, and also sanitary engineers, nutrition experts, and other allied scientists.

During the early stages of the expansion the Surgeon General requested the assistance and advice of the Medical Division of the National Research Council. That office immediately mobilized the leaders of the medical profession and organized committees to confer upon various medical subjects. These committees have made available the most advanced medical skill for the protection of the health of our troops, and for their professional care when sick.

[2] For the period between the outbreak of WWII in Europe and Pearl Harbor, see Smith CM. *United States Army in World War II, The Technical Services, The Medical Department: Hospitalization and Evacuation, Zone of Interior*. Washington, DC: Center of Military History, United States Army; 1956, chapters 1-3 and Gillet MC. *The Army Medical Department 1917-1941*. Washington, DC: Center of Military History, United States Army; 2009, chapter 17.

The Surgeon General also requested the medical profession at the annual meeting of its national association, the American Medical Association, in June, 1940, to assist in the procurement of the additional medical officers required by the rapidly expanding Army. The enthusiastic response of the profession insured the equitable distribution of professional personnel to the federal service and to the civilian communities. Committees were appointed and suitable plan developed. At the annual meeting in 1941 further action was taken and a Procurement and Assignment Committee named. That committee since that date has cooperated fully with the Director of the Manpower Commission in the procurement.[3]

In December, 1939, the Secretary of War, upon the recommendation of the Surgeon General, requested the Administrator, Federal Security Agency[4] to authorize the U.S. Public Health Service to assist in the protection of the health of the Army by coordinating the activities of the local and state health agencies in extra cantonment areas. This request was approved promptly. Since that date the hearty cooperation of the U.S. Public Health Service and of the state and local health authority has been very beneficial in assuring improvements in sanitation in the vicinity of Army camps.[5]

HEALTH OF THE ARMY

The health of the Army through the fiscal year 1942 has been a source of deep satisfaction to the military as well as to the country at large.[6] Admission rates generally have been lower than for the corresponding period of the last war, in spite of the fact that the policy today is to hospitalize for trivial complaints which in civil life would not be considered. The concentration of men in camps with the resulting close daily contact in training, eating, sleeping, and

[3] On personnel, see Coates JB, Wiltse CM, eds. *Medical Department, United States Army, Personnel in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1963.
[4] A cabinet agency established in 1939 that included the Food and Drug Administration and the Public Health Service, among other agencies.
[5] This refers to the Office of Malaria Control in War Areas, which also coordinated contact between the Army and local health agencies on matters related to venereal diseases. After WWII the OMCWA became the Center for Disease Control.
[6] For data, see Lada J, Reister FA, eds. *Medical Department, United States Army, Medical Statistics in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1975 and the monthly *Health of the Army* (1942-1988).

recreation, naturally tend to increase the incidence of communicable disease, and yet during the period in question the rates compared favorably with those of our peacetime Army.

The excellent health record has had a far-reaching effect on morale, and with its saving of time lost has added much to training programs. A further aid to the intensive war effort must be noted in connection with the savings in drugs, hospital supplies, transportation, and other incidentals.

Death rates from disease were less than one per 1,000, which was decidedly lower than that of civilian males in the same age group, and also lower than for previous years in the Army. Accidents account for more deaths than disease. In 1939 the ratio was one to one, whereas in 1942 it was 2.3 to 1. The combined death rate, however, was the lowest in Army history, being well under 3 per 1,000.

Considering the highly mechanized status of the Army, the rapid increase in air activities, and the movement of large bodies of men by rail and truck, it was reasonable to expect an increase in admissions and deaths from accidents. The rates, however, while showing a rise in admissions over the previous year, were considerably lower for deaths. The Army is making special efforts to reduce accidents by education, training, and the use of safeguards.

The satisfactory health status of the Army may be credited in varying degrees to several factors among which the principal ones are:

a. The nation’s health has been excellent in spite of the unusual conditions associated with war activities, and no epidemics of any consequence have occurred.
b. Housing, supply, hospitalization, physical conditioning, and the general welfare of the soldier were given

every consideration.

c. The Medical Department is using the best quality of equipment and supplies, and has secured the services of the nation's leading professional men in surgery, medicine, prevention, and research.
d. General sanitary measures connected with food, water, disposal of wastes, and control of diseases have been stressed more than ever before.

Unless the country is unfortunate enough during the coming winter to experience severe epidemics, a continuance of present health conditions may be expected.

SERVICES OF THE OFFICE OF THE SURGEON GENERAL

The office of The Surgeon General is organized into Services.[7] Each Service under his direction is responsible for certain of the activities of the Medical Department.

PREVENTIVE MEDICINE SERVICE

The objectives of Preventive Medicine are the maintenance and conservation of the health of the Army through the prevention and control of infectious diseases and the elimination or diminution of occupational health hazards.[8] During the past year the Service was engaged intensely in coping with new situations created by the rapid enlargement of the Army, the location of American troops in almost every part of the world, and the fight against infectious disease on a scale fully commensurate with the military operations of a global conflict. It has advanced toward its objectives by constant investigations and accumulation of knowledge, by applying the most promising technics [sic], by drawing upon every available appropriate facility, and by enlisting the services of the most highly qualified persons on all the fields of its work.

[7] For organization of The Surgeon General's Office, see Coates JB, Wiltse CM, eds. *Medical Department, United States Army, Organization and Administration in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1963.
[8] The eight-volume history of preventive medicine is: Coates JB, Hoff EC, eds. *Medical Department, United States Army, Preventive Medicine in World War II, Volume 2, Environmental Hygiene*. Washington, DC: Office of The Surgeon General, Department of the Army; 1955; Coates JB, Hoff EC, Hoff PM, eds. *Volume 3, Personal Health Measures and Immunization*. 1955; Coates JB, Hoff EC, Hoff PM, eds. *Volume 4, Communicable Diseases Transmitted Chiefly Through the Respiratory and Alimentary Tracts.* 1958; Coates JB, Hoff EC, Hoff PM, eds. *Volume 5, Communicable Diseases Transmitted Through Contact or By Unknown Means*. 1960; Coates JB, Hoff EC, Hoff PM, eds. *Volume 6, Communicable Diseases: Malaria*. 1963; Coates JB, Hoff EC, Hoff PM, eds. *Volume 7, Communicable Diseases: Arthropodborne Diseases Other Than Malaria*. 1964; Lada J, Hoff EC, eds. *Volume 8, Civil Affairs/Military Government Public Health Activities*. 1976; Anderson RS, Hoff EC, Hoff PM, eds. *Volume 9, Special Fields*. 1969.

The Preventive Medicine Service of the Surgeon General's Office has maintained close liaison with numerous governmental and civilian agencies. Particularly to be mentioned are the National Research Council and its Committee on Medical Research, the Office of Scientific Research and Development[9], the Bureau of Medicine and Surgery of the Navy Department, the U.S. Public Health Service, the Pan American Sanitary Bureau, the Office of the Coordinator of Inter-American Affairs, the International Health Division of the Rockefeller Foundation, and most of the scientific societies in the fields of biology, medicine, and public health. Association with these agencies has been extensive and intimate.

The Board for the Investigation and Control of Influenza and Other Epidemic Diseases in the Army, established by the Secretary of War in January, 1941, on recommendation of The Surgeon General, is an example of effective collaboration between the Office of The Surgeon General and civilian specialists.[10] The Board and its Commissions, which began operation during 1941, are composed of 112 civilian members. These members, holdings positions as consultants to the Secretary of War, are the leaders in the field of study of infectious diseases. During the year, Commissions investigated a number of epidemics in the Army and conducted fundamental studies at their home laboratories in universities and institutes.

The Sanitation Division, in addition to the routine handling of matters pertaining to sanitary policies, training in sanitation, sanitary inspections, sanitary equipment, sanitary reports and making appropriate recommendations for the correction of sanitary deficiencies, has initiated studies on a number of important projects.

[9] See Andrus, EC. *Office of Scientific Research and Development. Committee on Medical Research. Advances in military medicine, made by American investigators.* Boston: Little, Brown and Co.; 1948.

[10] For more on what became the Armed Forces Epidemiological Board, see Woodward TE. *The Armed Forces Epidemiological Board: Its First Fifty Years.* Washington, DC: Borden Institute, Office of the Surgeon General, Department of the Army; 1990.

The organization of the Sanitary Engineering Division has not changed since March 9, 1942, but its activities have increased greatly due to the expansion of the Army and its reorganization by War Department Circular No.59, when the Medical Department was made responsible for sanitation and mosquito control at air force stations and military industrial establishments.

During the past year it has been the consistent policy to decentralize detail work to Service Command Headquarters. The Surgeon General is concerned largely with the direction and coordination of sanitary engineering activities within the Services of Supply, liaison with other branches of the service and governmental agencies, and the procurement and recommendation of assignments for qualified personnel to carry out field work.

At the direction of Headquarters, Services of Supply, there has been developed a dependable method for disinfecting small quantities of water as required by the individual soldier.[11] In collaboration with the Chemical Warfare Service, methods have been devised for testing and treating waters contaminated with warfare gases.

The low malarial rate of 1.2 cases per thousand per annum, is largely attributable to the mosquito control program at 180 stations. Liaison with the U.S. Public Health Service was maintained in relation to extra-cantonment mosquito control.

The Medical Intelligence Division of The Surgeon General's Office is engaged in the collection of data and information on health and sanitation conditions, facilities, public health organizations and their work in various countries, and any other information which may have a bearing on the protection of the health of American troops in foreign areas.

[11] This refers to halazone tablets, a chlorine tablet included in individual rations that could be used to purify a canteen's worth of water.

A file is maintained for each foreign country in which information is recorded as it is received from many and varied sources. Special reports dealing with health and sanitation in all parts of the world are furnished to many authorized and interested agencies.

The Occupational Hygiene Division coordinates through Service Command Surgeons the emergency medical service in Army-operated industrial plants and depots. It coordinates also the hygiene of working conditions, and occupational health hazards, and maintains an industrial hygiene laboratory at the Army Medical Center.[12] During the past year experimental industrial medical officers have been commissioned and assigned to duty at all plants requiring their services. Provision has been made to meet the needs of new plants and of those being enlarged.

Conference have been held with officers of the Ordnance Department, Chemical Warfare Service, Air Service Command, Signal Corps and Quartermaster Department relative to the needs of their respective plants and inspectors of important health hazards have been made and others are under way. Close liaison is maintained with all these departments of the Army.

At present, emergency medical service is provided for the 400,000 civilian employees of more than 160 Army-operated plants. Inspection of working conditions is being pushed as rapidly as circumstances permit.

In addition, the Division has been given the responsibility for the supervision of the industrial health, and hygiene, and environmental sanitation of War Department owned, contractor-operated industrial plants. These plants are surveyed by the Industrial Hygiene Division of the National Institute of Health, U.S. Public Health

[12] Then titled the Army Medical Center, it was commonly known as Walter Reed and in 1952 renamed Walter Reed Army Medical Center.

Service, which submits reports to The Surgeon General. The reports, recommendations, etc., are forwarded to responsible Services.

Special consideration is being given to the hazards of mechanized equipment. Consequently an Armored Force Medical Research laboratory has been organized at Fort Knox, Kentucky. A Director of Research was selected, appointed, and sent to England to observe methods used there. He has returned and is on duty at the Laboratory. Four scientific assistants have been commissioned and are now on duty.

The Venereal Disease Control Division is charged with the formulation of policies and plans concerned with the prevention of venereal disease. Its activities include the preparation of educational material, collaboration with civilian agencies engaged in venereal disease control activities, and continuous study of the problem with a view to recommending new preventive measures.

During the year the division has played an active role in the initiation and development of the Inter-department Liaison Committee on Venereal Disease, which includes representatives from the Navy, U.S. Public Health Service, and the Division of Social Protection of the Federal Security Agency, the American Social Hygiene Association, and various services of the Army. This committee serves effectively to coordinate the varied activities incident to a comprehensive program designed to prevent venereal disease in the armed forces.

In February, 1942, the War Department authorized the assignment of medical officers specially trained in venereal disease control to each large Army camp and to the headquarters of major elements of the field forces and supply services. Through the efforts of this division some of the best qualified men in the country have been procured for these posts.

PROFESSIONAL SERVICE

The volume of professional work has increased greatly during the past year.[13] It has been necessary to review the reports of the large number of physical examinations of individuals being inducted into the military service, and to insure the satisfactory professional care of the sick.

The supervision and coordination of professional problems in all Medical Department installations became increasingly more difficult as these units gradually acquired staffs of medical officers recently withdrawn from civilian practice with widely divergent professional viewpoints, and a minimum of military experience.

In addition to the professional care of the military personnel and the review of the reports of physical examinations, the Surgeon General recommends policy concerning physical standards and physical examinations for all military personnel.[14] It also provides professional advice concerning the purchase and distribution of drugs, dressings, instruments and medical equipment. In performing this service, [it] maintains contact with civilian producers, the National Research Council, and other scientific and professional groups.

In addition it maintains a close liaison with the Assistant Chief of Staff, G-1, S.O.S. and with National Selective Service Headquarters on matters pertaining to induction stations, physical examinations, and classifications of registrants for military duty. A representative of the Division attends conferences in various defense command areas on problems concerning the medical aspects of Selective Service. By inspection a check is maintained on the character of work done at certain induction stations.

[13] Some 20 of the historical volumes published by the Office of The Surgeon General cover advances in professional medical matters, including surgery, medicine, and psychiatry.
[14] See Anderson RS, Wiltse CM, eds. *Medical Department, United States Army, Physical Standards in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1967.

To provide for the proper supervision of the professional service in the general and station hospitals, distinguished civilian physicians have been commissioned and assigned to duty in the office of The Surgeon General. One of them [is] in charge of the Surgical Service, and a second of the practice of internal medicine [to] supervise and [to] coordinate general surgical and medical practice in Army hospitals and assist in the selection of drugs and surgical equipment.

The third is a neuropsychiatrist who supervises and coordinates the neuropsychiatric practice in the hospitals and recommends policies in regard to the disposition of military personnel with psychiatric diseases.

The Surgeon General early in the emergency period secured the services of an eminent nutritional expert to act in an advisory capacity in the selection and preparation of food. This scientist with assistants, conducts studies on nutrition in the Army, the suitability of rations, the character of messes, and maintains liaisons with the Quartermaster Corps and other government agencies with regard to food and nutrition.

DENTAL SERVICE

The Dental Service is specifically charged with the preservation of the dento-oral health and the prevention of dento-oral diseases and deficiencies among military personnel.[15] It is responsible for the recommendation of plans and policies for the progressive development of the dental service.

During the calendar years 1940 and 1941 dental attendance steadily increased in proportion to the increase in personnel and

[15] See Jeffcott GF. *Medical Department, United States Army, United States Army Dental Service in World War II.* Washington, DC: Office of The Surgeon General, Department of the Army; 1955.

facilities, and as the size of the Army increased. The increase has continued during the past year. There is, however, relatively more need for dental service by the present Army than was needed by the peacetime Army. The strength of the peacetime Army of two years ago was largely static with a relatively small number of new recruits. In the emergency Army there is a constant flow of men from civil life, a large percentage of whom require immediate and extensive dental treatment. This created a need for a proportionately greater dental service to bring the dental health of the troops up to the standard necessary in the military service.

In addition War Department Circular No.43, February 12, 1941, and later the revised MR 1-9[16], radically lowered the dental requirements for induction into the Army. Since the publication of those directives, the influx into the Army of a great number of inductees with immediate need for dental treatment and for dental prosthetic replacements has increased greatly the dental service required. This need was foreseen and the War Department instructions were issued April 25, 1942, which extended the authorization for replacement of missing teeth for military personnel to include teeth lost prior to entry into the service if needed to masticate the Army ration.

It was found necessary at certain camps and stations to initiate a system of two shifts of personnel so that the additional dental service could be provided without increasing the facilities and equipment, which became increasingly difficult to obtain.

Following the reorganization of the Army and the placing of the Surgeon General's Office under Headquarters, Services of Supply, to facilitate the administration, the Dental Division was designated the Dental Service, and organized into two divisions,

[16] Mobilization Regulation 1-9, Standards of Physical Examination During Mobilization, Washington, DC: War Department; 31 August 1940.

the Dental Division, and the Miscellaneous Division.

VETERINARY SERVICE

The Veterinary Service as a part of the Medical Department is charged with functions falling into two definite categories – those connected with Army animals, and those concerned with the inspection of meats, meat-food, and dairy products for consumption by troops.[17]

The animal service involves professional and advisory supervision over all matters pertaining to the health, efficiency, treatment, and hospitalization of Army animals. The veterinary meat and dairy hygiene service has as its purpose the protection of the health of troops by determining that meats, meat-food, and dairy products purchased and issued to troops are safe, wholesome, and suitable for food purposes.

To provide qualified food inspectors, arrangements were made to conduct at the Quartermaster Depot, Chicago, Illinois, a special course of instruction in meat and dairy hygiene. A total of 288 veterinary officers have completed the course, which is one of 30 days' duration. It consists of classroom instruction supplemented by a large amount of practical work and observations in the various Chicago packing plants and other establishments handling meat, meat-food, and dairy products.

Close liaison has been maintained with the Subsistence Division, Office of The Quartermaster General, and the United States Department of Agriculture in connection with Army veterinary meat and dairy hygiene service. Liaison has likewise been maintained with the Remount Division, Office of The Quartermaster General, with regard to the purchasing, receiving and conditioning of animals, and operations at Remount Depots, [and] the development of emergency field rations for animals.

[17] See Miller EB, Coates JB, Caldwell GL, eds. *Medical Department, United States Army, United States Army Veterinary Service in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1961.

Following the practice of the past three years, all Army horses and mules were vaccinated against encephalomyelitis. This immunization procedure has proved highly efficacious in protecting Army animals against this serious malady. In spite of considerable losses among civilian animals, Army horses and mules have gone into badly infected territory during maneuvers with no losses since the institution of general vaccination. All Army horses and mules were immunized also against tetanus through the administration of tetanus toxoid.

During the calendar year 1941 the Veterinary Corps inspected 1,035,087,777 pounds of meats, meat-food, and dairy products. Of this amount 51,720,551 pounds were rejected because of failure to meet the provisions of contracts in respect to type, class, or grade and 6,324,892 pounds were rejected because of insanitary or unsound condition. All these rejections were made prior to acceptance, hence with no loss to the Government. Figures for 1942 indicate that the Veterinary Corps in inspecting each day approximately 3½ million pounds of meat, meat-food, and dairy products with such amount progressively increasing as the Army expands.

With the institution of the new method of procurement of perishable subsistence supplies through Army Quartermaster Market Centers there has been a vast increase in the amount of Veterinary Corps inspection at points of origin of shipment of meat, meat-food, and dairy products. By inspecting these food products prior to shipment, rejections at destination are limited essentially to instances where good condition has not been maintained. Difficult replacement problems, wasted transportation, and expense thus are minimized.

The Laboratory Division, at the Army Medical Center, Washington, D.C., is conducting a constantly increasing amount of

veterinary laboratory work. Much of this incident to the examinations and analysis of meat, meat-food, and dairy products. It also manufactures various vaccines, bacterins, antigens, diagnostic agents, and other veterinary biological products. This included, during the past year, over one million cubic centimeters of encephalomyelitis vaccine for the immunization of Army animals.

One of the research projects of the Army Veterinary School is the further perfection of encephalomyelitis vaccine for possible use in the immunization of troops should future circumstances make it necessary to utilize vaccine to control outbreaks of this disease in the human family, to which it is readily transmitted by the mosquito. The disease in man has a high mortality rate.

PERSONNEL SERVICE

The procurement of medical department personnel for the Medical Corps, Dental Corps, Medical Administrative Corps, Veterinary Corps, and Sanitary Corps has been one of the most formidable problems of the Surgeon General during the past three years.[18]

In addition to procurement, the personnel must be classified according to specialties such as general surgical, orthopedic, neuro-surgery, specialist in the diseases of the eye, ear, nose and throat, medical internists, epidemiologists, gastroenterologists, etc.

Subsequent to procurement and classification, the properly qualified personnel must be assigned and distributed according to Tables of Organization to provide balanced professional staffs and consultants for existing and new units to be organized. To provide information in regard to proper assignment and reassignment it is necessary to maintain accurate records and cross references on every individual officer with information in regard to his age, specialty,

[18] See Coates JB, Wiltse CM, eds. *Medical Department, United States Army, Personnel in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1963.

efficiency, and assignment. Records of units must also be maintained.

The Medical Department personnel on duty on June 30, 1940 was: Medical Corps, 1,578; Dental Corps, 354; Veterinary Corps, 171; Medical Administrative Corps, 66; Sanitary Corps, 6; and enlisted men 13,585.

By June 30, 1942 it had been increased to: Medical Corps, 16,872; Dental Corps, 4,500; Veterinary Corps, 916; Medical Administrative Corps, 1,900; Sanitary Corps, 935; enlisted men 187,801.

In order to procure a sufficient number of medical officers it was necessary to decentralize the procurement to the field. Teams consisting of one medical officer and one branch immaterial officer were organized and one was assigned to each state. The boards were authorized to obtain the application for appointment in the Medical Department and to appoint each applicant a First Lieutenant or Captain according to age, if below the age of 45, and if certified as available by the Procurement and Assignment Committee.

In addition they were authorized to procure applications from physicians in the age group of 45-54 and to forward them direct to the Surgeon General for final recommendations.

NUSRING SERVICE

The program for the procurement of reserve nurses under the decentralized plan of assignment through the Service Commands has been continued through the year.[19] Since the bombing of Pearl Harbor with the resultant declaration of war there has been a decided increase in interest with the induction of 5,866 nurses from January to June 30, 1942.

Nurses are selected from the rolls of the American Red Cross. During the fiscal year 1942, 1,166 nurses were appointed

[19] On nursing, see Coates JB, Wiltse CM, eds. *Medical Department, United States Army, Personnel in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1963 and Sarnecky MT. *A History of the U.S. Army Nurse Corps.* Philadelphia, PA: University of Pennsylvania Press; 1999.

to the regular Corps and 8,406 were assigned as reserves. The authorized strength of the Army Nurse Corps for the fiscal year 1942 was 18,114. The number on duty on June 30, 1942, was 12,475.

In order to render a greater number of nurses eligible for appointment, several changes were made in the qualifications. The age requirements for appointment to affiliated units were raised to include those up to forty-five years of age.[20] The physical requirements for those assigned to service units within the United States only were lowered, principally a reduction of the requirements for vision, teeth, and weight. A change was made also in the pre-nursing educational requirement so as to include nurses who graduated prior to 1934 who were not high school graduates to coincide with Red Cross requirements.

A concerted effort with the Red Cross for new enrollments has continued and a publicity campaign has been carried on by means of the radio, magazines, periodicals, and through the biennial and state nursing association conventions.

Eighteen nurses who saw service on Bataan and Corregidor have returned to the United States. Suitable award was given when The Surgeon General pinned upon the coat of each the royal blue citation ribbon for meritorious service.[21]

OPERATIONS SERVICE

The Operation Service as organized in March 1942 is comprised of the Plans, Training, Hospital, Administration, Hospital Construction and Sanitary Inspection Divisions.[22]

The rapid expansion of the Army since June, 1940, with the further acceleration of all activities following the advent of war created a tremendous training problem. A steady and adequate flow of trained officers, enlisted specialists, and basically trained enlisted men had to be assured.[23]

[20] Affiliated units were raised by particular civilian hospitals.
[21] This is apparently a reference to the Distinguished Unit Citation (from 1966 Presidential Unit Citation) awarded to the personnel of Sternberg General Hospital.
[22] See Coates JB, Wiltse CM, eds. *Medical Department, United States Army, Organization and Administration in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1963.
[23] See Mullins WS, Parks RJ, eds. *Medical Department, United States Army, Medical Training in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1974.

Only such training is provided for physicians, dentists, veterinarians, [and] scientists commissioned from civilian life as is required to enable them to perform their medico-military duties satisfactorily, and in addition to provide such specialists as are required for the military service which are not available in civilian life.

Similarly in the training of enlisted men the prior education of the soldier is utilized and only such additional training is provided as is required to enable him to perform more satisfactorily his duties in medical units and installations.

In June, 1940, the training of Medical Department officers was confined almost entirely to that received at the Army Medical School, Washington, D.C., and the Medical Field Service School, Carlisle, Pennsylvania. Through these two training agencies, basic professional courses and basic courses in field medicine were provided for newly commissioned officers and advance courses for experienced officers. In the fiscal year 1941, 183 officers graduated from those two schools.

By June 30, 1941, facilities had been provided for the training of 500 officers each two months and for 100 officer candidates each three months. These facilities were expanded further so that by June 30, 1942, they either existed or were being provided to train 800 officers [and] 750 officer candidates each month, and 1,500 replacement officers every two or three months. In addition, arrangements have been completed for the training of 600 to 700 officers each month in civilian schools or hospitals that are recommended by the Medical Division of the National Research Council.

The problem of training an adequate number of enlisted men

was even more formidable than that of professional men as officers. During the fiscal year 1941, 165 enlisted technicians were trained at the Army Medical Center. Other[s] received technical training in station and general hospitals, in field medical units, and in corps area facilities.

By June, 1941, the training facilities were expanded to provide: Medical Replacement Training Centers for basic training 15,000 each 13 weeks; Medical Department Enlisted Technician School 1,500 each month. The Technicians Schools conducted courses that qualify their students as x-ray, laboratory, medical, surgical, nursing, pharmacy, veterinary, and dental specialists. In addition, 3,000 administrative or common specialists, including auto mechanics, cooks and bakers, mess sergeants, motorcyclists, clerks, and so forth were trained every three months.

The training facilities now authorized are: Medical Replacement Training Centers for basic training 53,000 each 8 weeks; Medical Department enlisted technicians 3,000 each month; administrative or common specialists 6,000 each two months. In addition 300 advanced specialists will be trained each year in civilian educational institutions, and 45 each 3 months in general hospitals, as orthopedic bracemakers, etc.

An important activity of the training work is the preparation of technical training manuals, training film strips, and training films. By June 30, 1942, training literature and aids available were: Field and Technical manuals, 25; training films, 6; film strips, 48.

The Hospital Administration [sic. Hospitalization Division] is charged with the development and promulgation of policies in regard to hospitalization and the treatment of the military sick; the administrative supervision of the named general hospitals and advisory supervision over the administration of station hospitals.[24]

[24] See Smith CM. *United States Army in World War II, The Technical Services, The Medical Department: Hospitalization and Evacuation, Zone of Interior*. Washington, DC: Center of Military History, United States Army; 1956.

The development of bed credits in the named general hospitals and the assignment of them to patients transferred from overseas bases is an important function of the division. For this purpose a list of bed credits is published from time to time to Commanding General Services Commands, to the Commanding General of the Army Air Forces, the Commanding Generals of Ports of Embarkation, and to the general hospital concerned. The Commanding General Service Commands allots bed credits to Commanding Officers of stations who then transfer patients to the designated general hospital without reference to higher authority.

Several changes in Army Regulations have been recommended by the Surgeon General and after approval have been published to facilitate the disposal of patients in hospitals. Arrangements have also been made with the Veterans Administration to transfer promptly to their facilities soldiers who become physically unfit for further military duty and whose incapacity is in line of duty. To facilitate such transfers, a monthly list of such patients is furnished to the Veterans Administration.[25]

New hospital construction during the year has been for the most part of the authorized cantonment type. When a new hospital is, or the modernization of an existing one is required, complete floor plans are prepared. These plans show the allotment and arrangement of space in the proposed building. They are sent to the Chief of Engineers and after development they are returned to the Surgeon General's Office where the location of built-in and fixed equipment is indicated. Final drawings are then prepared by the Chief of Engineers and returned to the Surgeon General for approval and signature, after which they are sent to the field constructing agencies.

During the year representatives of the Surgeon General

[25] In July 1940 the Federal Board of Hospitalization, (consisting of the Surgeons General of the Army, Navy, and Public Health Service; the Administrator of the VA and another VA representative; the Superintendent of St. Elizabeth's; and the Solicitor General) agreed that the military would quickly pass tuberculosis patients, psychiatric patients, and those not likely to return to duty to the VA.

inspected many of the newly constructed cantonment hospitals as well as a number of existing units to study suggestions and criticisms of local men. As a result the facilities in many of the hospitals have been improved greatly.

The inspections and conferences with the local authorities have permitted also in many instances the omission of certain units authorized for construction which would have otherwise duplicated existing facilities. As a result a saving has been effected of many thousands of dollars of appropriated funds. In addition, representatives from the Surgeon General have aided in the selection of hospital sites for many new camps, some of which are now under construction.

Data have been procured on many civilian institutions such as hotels, sanitariums, and hospitals, some of which are suitable for conversion to army hospitals if required. In some instances such conversion has been or is now in progress.

To illustrate the expansion of the hospital facilities in the continental United States, on June 30, 1940, there were 5 general hospitals, 99 station hospitals, 5 general dispensaries, 19 station dispensaries, no veterinary general hospitals, and 8 prophylactic stations. There were available 4,063 beds in general hospitals, 8,568 in station hospitals.

By June 30, 1942, the hospital facilities in the continental United States had been increased to 15 general hospitals, 764 station hospitals, 8 general dispensaries, 129 station dispensaries, 1 veterinary general hospital, 44 veterinary station hospitals and 128 prophylactic stations. There were available 14,783 general hospital beds and 81,696 station hospital beds.

There has been no major change in the organization of the

Division since March 9, 1942, with the exception that the fiscal and budget records pertaining to the construction and repair of hospital funds were discontinued effective June 30, 1942. Such records are now maintained in the Office of the Chief of Engineers who is charged with the responsibility for the maintenance and repair of all hospital buildings.

The Plans Division of the Operations Service is concerned with war plans, tables of organization, tables of basic equipment, and development of new field equipment.

The Plans Division submits recommendations relative to medical units to be included in the War Department Troop Basis and the time of activation to permit adequate training prior to transfer overseas. It also furnishes advice to the Staff of S.O.S. on hospitalization and medical service in existing and proposed bases and theaters.

The Organization Division has revised Medical Department Tables of Organization to provide proper support for the new types of combat units. In order to economize on medical personnel, the number of medical officers required by the Tables of Organization were reduced to the absolute minimum. Wherever possible officers of the Sanitary Corps, Dental Corps, and Medical Administrative Corps have replaced medical officers. In addition, Tables of Organization for [a] number of new medical units have been submitted to the War Department. These units were developed to meet present requirements that were not satisfactorily covered by former types of medical units.[26]

Tables of Basic Allowances have been revised as required by the revision of old Tables of Organization and by the authorization

[26] Compare Field Manual FM 8-5 Medical Field Manual: Mobile Units of the Medical Department (January 1942) and Medical Department Units of a Theater of Operations (May 1945) for examples.

of new types of medical units.

Continual research work has been carried on with the other services of the S.O.S. and with the equipment laboratories at the Field Medical School [sic], at Carlisle Barracks, to provide the improved field medical equipment and such new equipment as the changing situation requires.

FINANCE AND SUPPLY SERVICE

The Finance and Supply Service as constituted prior to July 1, 1942, was responsible, in general, for the preparation, defense, and justification of all estimates for funds, and for the procurement and distribution of all supplies and equipment necessary in the medical care of military personnel both within and without the Continental United States.[27]

To accomplish this mission, the item requirements of Medical Department supplies and equipment are computed in accordance with specific military programs. These item requirements, together with the anticipated needs for the operation of medical professional services, preventive medicine and sanitation activities, pre-induction examinations, operation of depots, education and training, research and development, and administration of The Surgeon General's Office, form the basis for the preparation of estimates of funds required for the performance of the prescribed Medical Department functions. As funds were appropriated and made available to the Medical Department they were allotted to depots, hospitals, stations, and all other operation[al] field installations as well as to departmental and other purposes.

[27] See Anderson RS, Wiltse CM, eds. *Medical Department, United States Army, Medical Supply in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1968.

Of the total funds appropriated each fiscal year, approximately 75 percent are used for the procurement of supplies and equipment necessary in the medical care of military personnel. The actual purchasing of medical supplies and equipment has been done mainly by purchasing and contracting officers in field depots operating under the technical supervision of the Chief of The Finance and Supply Service in Washington, D.C. Items are purchased in accordance with established Medical Department specifications, and consist of approximately 6,000 separate and distinct articles which are procured from approximately 700 manufacturing concerns in the United States. They comprise drugs, biologicals, dressings, surgical instruments, surgical appliances, laboratory supplies and equipment, dental supplies and equipment, and special technical field articles not produced for the commercial market. With the tremendous expansion of the Army, and the ever-increasing demands of allied foreign governments, constant revision of specifications is necessary in order to conserve critical raw materials.

Of great importance in the performance of the duties outlined above are the production control functions supervised by the Finance and Supply Service. These functions include the conducting of industrial surveys to determine the productive capacity of industry to meet the requirements of the Medical Department. Delinquencies in deliveries to depots are made the subject of exhaustive investigation, and recommendations for corrective action are promptly made. Both prime contractors and sub-contractors were assisted in procuring critical raw materials, and the necessary preference ratings secured and expedited. This work entailed close coordination with the requirements, purchasing,

and distribution activities of the government as well as the enforcement of directives promulgated by the War Production Board and the Army-Navy Munitions Board. The necessity for the expansion of production facilities were studied and appropriate recommendations made.

In this connection, the procurement planning maintained throughout the past twenty years by the Medical Department was of great benefit in meeting the demands of this program. Those plans were invaluable in making information available as to sources of supply as an aid to industry generally in securing priority ratings to obtain raw materials necessary to complete government contracts and to keep abreast of requirements of items absolutely essential to civilian institutions in order to safeguard the health of the civilian population. Many new firms were contacted and surveys and resurveys made to meet ever-changing requirements.

At the end of fiscal year 1940, the Finance and Supply functions were being performed on a peacetime basis. There had been a total appropriation for that fiscal year of only $4,315,599; of that amount $2,851,547 had been estimated for supplies and equipment. 1,000,000 square feet of space were available in depots scattered throughout the United States. More than one half of the available storage space was used to house the so-called medical reserve stocks. The larger portion of the war reserve stocks were from World War I that had been hastily assembled at the close of that conflict without adequate checking and with no subsequent repacking and replacing of deteriorating articles, for which there had been no funds available.

Shortly after the beginning of fiscal year 1941, the Medical Department was confronted with the task of providing medical care for the largest peacetime Army in the history of the United States. The

resultant [illegible word] expansion of medical facilities brought a marked increase in appropriations for the Medical Department provided by supplemental estimates and appropriations. The total for the fiscal year 1941 was $75,818,914 of which $52,536,095 was estimated for the purchase of supplies and equipment.

To purchase, store and distribute those supplies, an additional 3,400,000 square feet of space was acquired by the activation of new depots and the augmentation of existing ones. That increase enabled the Medical Department to procure supplies as rapidly as the productive capacity of industry permitted. It is well to record that the efforts of the Medical Department to fulfill its program were met by full cooperation on the part of manufacturers.

The tremendous demands made upon the Medical Department by the expanding Army became even more apparent with the beginning of fiscal year 1942, when the original and supplemental appropriations made available to the Medical Department, the aggregate sum of $412,303,437, of which that for supplies and equipment amounted to $341,726,127.

Along with this increase in appropriated funds there was necessarily a comparable increase in personnel, purchase functions, production control functions, production expediting functions, assistance to manufacturers in obtaining necessary priorities and materials, plant protection advice, distribution activities at depots, the assembling of both Zone of Interior and theaters of operations medical units, the assembling of maintenance units for medical installations in theaters of operations, acquisition of additional warehouse space for depot distribution facilities, and an astronomical increase in Lend-Lease activities to supply allied foreign governments with urgently needed medical supplies.

To facilitate the increase purchase, storage, and distribution activities, and additional 4,000,000 square feet of warehouse space was acquired, or is being constructed, making a total of 8,400,000 square feet of space available by the current program.

With the expansion of the armed forces there naturally followed inauguration of new activities, many of which brought new functions to Finance and Supply Service. For example, through the cooperation of the Army, Navy, National Research Council, American Red Cross, and commercial biological manufacturers, a blood plasma procurement program calling for the production of a minimum of 700,000 units of dried plasma for the Army was instituted.[28] Donations of raw blood are made to the American Red Cross and then shipped to some eight laboratories holding contracts with the Army for the processing of the blood into dried plasma. A portion of the dried plasma thus procured is supplied to the Navy under a reciprocal agreement whereby the Navy procures dried human albumin in quantities sufficient to supply the Army with its requirements.

Another interesting program instituted during this fiscal year followed the adoption of a policy to include the furnishing of spectacles to military personnel. The latest available statistics show that approximately 10 percent of Army personnel required spectacles. It is estimated that one-half of these individuals will have to be supplied with new spectacles, or with replacements in the course of a year. By the end of the fiscal year, approximately 125,000 spectacle orders had been processed by Finance and Supply Service. To further this program, a mobile optical unit was designed to furnish, repair, and replace spectacles in the theaters of operations. Three such units were procured and delivered to the Army Ground Forces.

[28] See Coates JB, McFetridge EM, eds. *Medical Department, United States Army, Blood Program in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1964.

P[illegible] these expanding activities, fiscal procedures were studied, developed, and adopted. A more accurate basis for the preparation of estimates was evolved by use of a "cost factor per man year" basis, obtained by detailed analyses of actual expenditures and issues made over a period of years.

In conformance with the organization of Headquarters, Services of Supply, Finance and Supply Service was reorganized in March 1942 to provide the following Divisions: Finance, Procurement, Storage and Issue, Production Control, and Miscellaneous.[29] Preliminary steps were taken for the formation of a Legal Division during the latter part of the year preparatory to actual organization as of July 1, 1942. Of greater importance, however, from an organizational standpoint was an exhaustive study made in conjunction with the Headquarters, Services of Supply, to physically separate the fiscal and supply functions of this service, and to consolidate all fiscal functions of the Office of The Surgeon General in a separate Fiscal Division, in accordance with the policies promulgated by Headquarters, Services of Supply. This plan was adopted effective July 1, 1942.

[29] See Coates JB, Wiltse CM, eds. *Medical Department, United States Army, Organization and Administration in World War II*. Washington, DC: Office of The Surgeon General, Department of the Army; 1963 and the memoir of LTC Tracy Voorhees, *A Lawyer Among Army Doctors*, http://history.amedd.army.mil/memoirs/VorheesTraceyStebbins.pdf. Voorhees largely worked on supply issues.