Will There Be Enough Trained Medical Personnel In Case Of War?

The number and types of medical personnel in the military active duty and reserve forces fall far short of the total projected requirements for the current most-demanding wartime planning scenarios. Training of medical personnel in combat casualty care has not been accorded priority, and many such personnel have not developed the needed skills to perform wartime missions effectively.

Federal mobilization planners believe that the civilian sector has sufficient medical personnel to augment most military shortfalls, and they have begun efforts to obtain support from civilian hospitals. GAO recommends (1) alternatives for the Department of Defense, Selective Service, and the Department of Health and Human Services, in coordination with the Federal Emergency Management Agency, to use in obtaining medical personnel needed to staff military hospitals in wartime and (2) ways Defense could improve training of medical personnel in combat-related medical skills.
To the President of the Senate and the Speaker of the House of Representatives

This report discusses ways to improve readiness planning to meet Department of Defense wartime medical personnel requirements. The report's primary emphasis is the need to improve planning to deal with expected postmobilization medical personnel shortages and to improve training given medical personnel for their combat support missions.

We performed this review at the request of Congressman Robin Beard.

Comments on our draft report were received from the Departments of Defense and Health and Human Services, the Selective Service System, and the Federal Emergency Management Agency. Their comments have been incorporated in the report where appropriate.

We are sending copies of this report to the Secretaries of Defense and Health and Human Services; the Directors of the Office of Management and Budget, Federal Emergency Management Agency, and Selective Service System; and to other interested parties.

Milton F. Procop
Acting Comptroller General of the United States
WILL THERE BE ENOUGH TRAINED MEDICAL PERSONNEL IN CASE OF WAR?

DIGEST

Department of Defense (DOD) estimates show that shortages of physicians, nurses, and enlisted medical personnel would be most severe, would reduce capability to deliver wartime care, and would begin to occur soon after mobilization. Shortages of surgical personnel would be especially critical because theater of operations requirements could not be met. Some other enlisted specialty shortages would also be critical because no pretrained pool exists in the civilian sector. (See pp. 10 and 22.)

BETTER METHODS NEEDED TO ESTIMATE SHORTAGES

Reliable estimates of total requirements are crucial to effective readiness planning because they indicate the resources required nationally to meet DOD's medical needs. DOD is developing improved estimating techniques; however, they should be made more reliable.

Effective contingency planning requires an accurate assessment of not only the total personnel needed to care for expected casualties, but also personnel necessary to staff existing military hospitals. This capability requirement is necessary for effectively implementing plans to use medical personnel in DOD and civilian facilities and to draft medical personnel through the Selective Service System. Although DOD has recognized the need for such estimates, it has not yet fully developed them. Data that were available indicated that personnel shortages could prevent maximum use of available DOD wartime facilities.

DOD needs better criteria to use in assessing the validity of medical personnel requirements data prepared by the services. A triservice model is being developed for medical readiness planning, which could provide a uniform method of preparing service personnel requirements estimates. GAO cites additional ways for DOD to improve estimating procedures for service personnel requirements. (See pp. 12 and 14.)
PLANS INCOMPLETE FOR OVERCOMING POSTMOBILIZATION SHORTAGES

DOD's medical readiness planning has focused on long-range goals and objectives to effectively address anticipated changes in threat, personnel, and other factors in future years. Plans for dealing with medical personnel shortages expected to occur during a near-term war (that is, if the Nation went to war tomorrow), especially during the early months following mobilization, are incomplete. Federal mobilization planners believe the civilian sector has enough medical personnel to augment most military mobilization needs for a major conventional war. However, a reliable assessment of how civilian medical personnel should be used to meet both military and civilian commitments after mobilization has not been made. (See pp. 20 and 23.)

Obtaining medical personnel from the civilian sector after mobilization must be carefully planned and coordinated. DOD has begun implementing programs under which a substantial portion of care provided after mobilization would come from Veterans Administration hospitals and civilian hospitals committed to provide care under the Civilian-Military Contingency Hospital System. To assure continuity of care at these hospitals and at other civilian facilities, a coordinated effort is needed to identify other medical personnel that could be used to staff military facilities in both the Continental United States and the theater of operations. (See pp. 23 and 26.)

Selective Service System planners have not determined the rate at which medical personnel could be brought into the military if mobilization occurred. Currently, there is (1) no specific legal authority to register or induct doctors or supporting medical personnel, (2) no agreement among Federal planners on the content of standby legislation to provide such authority for wartime, and (3) a legal requirement that anyone being deployed overseas must first receive at least 12 weeks of training. With the potential for shortages of surgeons and other skilled medical personnel, a specialty draft, if properly planned, may be an effective means to overcome critical early shortages. (See pp. 22 and 24.)
on loan to hospitals, (3) increasing in-hospital training for field unit personnel located within commuting distance of military hospitals, and (4) structuring in-hospital training programs to provide broad exposure to needed clinical skills. (See p. 37.)

Medical personnel are not being adequately trained for potential combat support missions through field and other combat-oriented medical training programs. Army requirements that medical personnel receive 3 days of field training annually are generally not being met, and these programs have no specific structure. Although GAO's review focused primarily on the Army's combat-oriented training, similar weaknesses could also exist in the other services. (See pp. 41 and 42.)

Although new training initiatives have been undertaken that can potentially improve combat-related training for all of the services, it will likely be many years before all eligible personnel can be reached. These initiatives focus primarily on physicians, with limited coverage of other officers or enlisted personnel. Without increased emphasis and expanded coverage, the chances of improving combat medical skills will be limited. (See p. 44.)

RECOMMENDATIONS TO THE SECRETARY OF DEFENSE

GAO is making several recommendations to the Secretary to improve (1) medical mobilization planning, (2) DOD's posture with respect to overcoming postmobilization shortages in critical health personnel categories, and (3) the Army's, and to the extent appropriate the other services', programs for clinical and combat-related skills training. (See pp. 48 to 50.)

RECOMMENDATIONS TO THE SECRETARY OF DEFENSE AND THE DIRECTOR, SELECTIVE SERVICE SYSTEM

The Secretary and the Director of the Selective Service System should, in coordination with the Director of the Federal Emergency Management Agency, develop, and submit to the Congress as soon as possible, a legislative proposal for a postmobilization draft of medical personnel.
There are some other alternatives available to DoD that would be of benefit in planning to overcome shortages of medical personnel after mobilization, including prearrangements:

--with civilian medical professionals for immediate assistance after mobilization,

--for interservice assignment of medical personnel, and

--with the Department of Health and Human Services for assigning Public Health Service (PHS) officers that could be committed for mobilization support.

These alternatives should be considered together with establishing the level of support to be obtained from the Veterans Administration and from hospitals participating in the Civilian-Military Contingency Hospital System. (See p. 26.)

ARMY MEDICAL PERSONNEL NEED WARTIME SKILLS TRAINING

In assessing how well personnel are trained for their wartime mission, GAO focused on the Army's training efforts because that service has the largest numerical and percentage wartime medical personnel shortages. Army medical personnel are not receiving adequate training to perform combat support missions. Requirements for training are unclear, and many obstacles hamper improvement of training. Under present Army training programs, a substantial part of the enlisted medical personnel are unable to pass basic skills qualification tests in their medical specialty, and not enough in-hospital and combat-related medical skills training is being provided. (See p. 35.)

Army medical personnel skills training should be given a higher priority, and a system should be developed to insure that clinical skills training is being accomplished. In-hospital training of medical personnel in combat-related clinical skills could be improved through (1) adopting uniform criteria for the frequency and duration of in-hospital training given to field unit personnel, (2) providing needed skills training programs for field staff.
GAO identifies several issues which must be resolved in developing the proposed legislation. (See p. 50.)

RECOMMENDATION TO THE SECRETARY OF HEALTH AND HUMAN SERVICES

The Secretary should assess the civilian sector wartime medical personnel requirements and resources, including a determination of requirements for PHS officers, and identify the extent to which DOD mobilization plans can rely on PHS officers and medical personnel from the civilian sector. Such an assessment should be coordinated with the Director of the Federal Emergency Management Agency. (See p. 50.)

AGENCIES' COMMENTS AND GAO'S EVALUATION

DOD, the Department of Health and Human Services (HHS), the Selective Service System, and the Federal Emergency Management Agency generally agreed with GAO's conclusions and recommendations.

DOD noted that, to implement the recommendation that DOD plan for wartime use of PHS officers, HHS should inform DOD of the number, specialty mix, and time frame in which officers could be available. DOD also stated that it had already carried out GAO's recommendation to assess the applicability to other services of GAO's recommendations concerning Army training and that the recommendations should be implemented by all services. (See p. 51.)

HHS said that it is carrying out GAO's recommendation that it determine the number of PHS officers who could be committed to DOD during wartime but that it did not believe PHS had significant potential to assist DOD because of PHS' wartime mission and workload requirements. However, GAO believes that, because of the PHS Commissioned Corps' unique status as a pre-trained force that could be quickly mobilized, its potential use must be seriously considered in the context of national, both military and civilian, priorities. HHS also pointed out that the administration is considering reducing or eliminating the PHS Corps and PHS hospitals. Such actions would obviously affect the potential for PHS assistance to DOD. (See p. 51.)
Selective Service stated that the draft standby legislation and a plan to implement it should be completed by February 1982. It intends to submit the legislation to the Congress after coordinating it with other agencies and the medical community. (See p. 52.)

The Federal Emergency Management Agency stated that many of GAO's recommendations would have to be implemented before it could carry out its responsibilities to coordinate and plan for allocation of civilian medical personnel. The agency also said the question of submitting standby legislation to the Congress for approval before, rather than when, a contingency occurs is under consideration. GAO believes that, considering the potential urgency of medical personnel shortages, the Congress' prior approval of standby legislation offers greater potential for an efficient, rapid initiation of a draft when mobilization begins. (See p. 53.)
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**ABBREVIATIONS**

- **CMCHS**: Civilian-Military Contingency Hospital System
- **CONUS**: Continental United States
- **DOD**: Department of Defense
- **FEMA**: Federal Emergency Management Agency
- **GAO**: General Accounting Office
- **HHS**: Department of Health and Human Services
- **HSC**: Health Services Command
- **PHS**: Public Health Service
- **VA**: Veterans Administration
CHAPTER 1
INTRODUCTION

In recent years much attention has been focused on Department of Defense (DOD) medical personnel shortages, especially DOD's inability to recruit physicians. The military services' medical departments have two missions: (1) to provide peacetime care to eligible beneficiaries and (2) to maintain readiness to meet wartime contingencies.

This report focuses on projected medical personnel shortages relative to DOD's readiness mission. In response to a request from Congressman Robin Beard, we assessed DOD's wartime medical personnel requirements and resources and the extent to which medical personnel are available and trained to meet mobilization contingencies.

CURRENT WAR PLANNING SCENARIOS GENERATE SUBSTANTIAL PERSONNEL REQUIREMENTS

Historically, the United States has had long lead times to mobilize its forces. For example, mobilization began 2 years before the Nation entered World War II. However, DOD planners are now placing great emphasis on the Nation's ability to respond to a short warning attack and to fight effectively in the early stages of a conflict.

Short warning scenarios require more medical support earlier. However, transition to the All-Volunteer Force has made it more difficult for DOD to recruit and retain enough personnel, including medical personnel. In spite of uncertainties about requirements, critical wartime medical personnel shortages are probable, especially in physician, nurse, and enlisted medical personnel categories.

Although several physician recruiting and retention initiatives are underway, DOD officials do not expect to fill authorizations until the late 1980s and expect shortages in several specialty categories to continue after that. Given the speed with which personnel are now expected to be needed, these shortages could affect mission accomplishment shortly after mobilization. However, plans have not been fully developed to rapidly obtain personnel or to deal with postmobilization shortages.

Expected shortages make it essential that all military medical personnel on board during peacetime be fully trained to allow (1) maximum flexibility in wartime assignments and (2) confident reliance on this core of personnel to support the numerous new personnel accessions who will be only minimally trained. Many
personnel have not been receiving sufficient training or experience to assure proficiency in mobilization assignments. Although improvement initiatives have begun, they are limited.

MEDICAL PERSONNEL READINESS IS LOW

In recent years DOD and the services have increased their emphasis on mobilization preparedness. In conjunction with this overall emphasis, medical readiness has also received significant attention. Various exercises and studies have identified many overall readiness weaknesses, including medical readiness weaknesses. Medical readiness involves personnel, fixed and deployable medical facilities, and necessary logistic support. Some of the medical problems identified in these exercises and studies relate to personnel, others to such factors as insufficient facilities and transportation capability. For example, one of the worst problems now facing medical planners is the inability of the Navy to provide medical support to the Marines because of a shortfall in deployable medical facilities.

Medical personnel shortages have the potential to severely impair DOD's ability to provide medical care in wartime. Further, service readiness reports indicate that current personnel shortages are hampering the ability of deployable medical units to maintain readiness.

Each military department has established procedures for medical units to report the extent to which they can or cannot fulfill their combat support mission. Although the reports vary among the services, they generally include overall evaluations showing whether the number of personnel assigned, the unit training status, and equipment and supplies on hand are sufficient for the unit to mobilize and deploy. Units use the following rating categories in reporting potential wartime capability.

Ratings

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1</td>
<td>Fully ready</td>
</tr>
<tr>
<td>C-2</td>
<td>Substantially ready</td>
</tr>
<tr>
<td>C-3</td>
<td>Marginally ready</td>
</tr>
<tr>
<td>C-4</td>
<td>Not ready</td>
</tr>
</tbody>
</table>

According to DOD's data, most of the medical units reporting readiness in 1979 were rated less than fully ready, and many were rated not ready. Over half of the units not rated fully ready cited personnel deficiencies as the limiting factor. Further, because of methods used in reporting, it is possible that problems exist even where units are rated fully ready.
To further analyze the effects of personnel problems on readiness, we reviewed additional recent readiness reports for some Army and Air Force units included in the DOD data. The DOD data did not include a sufficient number of Navy units to allow meaningful sampling.

**Army**

Analysis of readiness reports dated May and June 1980 for 98 Army medical units showed that most of them were rated less than fully ready and many were rated not ready. Of those rated less than fully ready, most reported personnel problems as the primary factor limiting readiness.

During peacetime, Army policy requires that many units operate with less than the full complement of personnel necessary for them to be at their fully ready wartime state. Of the 98 units discussed above, many did not achieve the peacetime standards established for them. Most of these units cited personnel problems as the primary reason for their low ratings.

There may be other personnel problems not included in the ratings, especially among active duty professional personnel (physicians, nurses, etc.). In peacetime most of these personnel are assigned to fixed medical facilities; during mobilization many will be transferred to deployable medical units. Commanders of most field units compute their personnel readiness status as if all professional personnel were present, while commanders of fixed facilities are not required to report readiness. As a result, the availability of these professionals is not reflected in the Army's readiness reporting system.

In October 1980 the Army implemented a system to predesignate those officers assigned to fixed facilities who would be assigned to deploying field units within the first 40 days after mobilization begins. According to Army officials, this system improves the readiness and availability of these personnel since they are being informed of their designated units' missions and can train with those units.

Unit readiness reports also show training ratings which indicate how long it would take the unit, with current resources, to train on-board personnel to a fully trained state. Many of the 98 units previously referred to reported training ratings of less than fully trained. Most of those cited personnel shortages as the primary or major limiting factor contributing to the low rating. At our request, Army medical mobilization planners compared the scheduled postmobilization deployment dates of the 98 reporting units to the estimated predeployment training time indicated on recent readiness reports. That analysis showed that, for those units, many of the active duty units stationed in the
United States and some of the National Guard units could not be fully trained before their currently scheduled deployment dates. (Almost 25 percent of the Army Reserve units analyzed did not provide a training rating; the remaining units all reported that they could be trained before their deployment dates.) The planners emphasized that units could be deployed even if they were less than fully trained and that additional resources could be made available to reduce predeployment training time. However, the reports show that, with the resources available, many units could not attain full readiness before their scheduled deployment dates.

**Air Force**

Most of the Air Force medical units which reported readiness to the headquarters level in November 1979 were rated fully capable. However, during 1980, the Air Force implemented what one official termed more objective rating criteria. In June 1980, most units in a randomly selected sample of 50 units reported ratings of less than fully capable. Personnel shortages and/or deficiencies in training were cited as factors reducing all of these units' ratings.

**DOD INITIATIVES TO IMPROVE MEDICAL READINESS**

In recent years DOD and the services have taken or planned several steps to improve medical readiness. Two of the most important initiatives are (1) increasing deployable hospital facilities and (2) developing contingency plans to use Veterans Administration (VA) and non-Federal civilian hospital facilities in the Continental United States (CONUS).

Neither initiative will directly affect the calculations of total personnel needed to satisfy DOD wartime medical needs. However, as more deployable hospitals become available, the number of military personnel DOD will need will increase. The second initiative provides for treating some DOD patients in VA and non-Federal civilian hospitals during wartime. It recognizes that DOD does not have sufficient facilities or personnel to treat all DOD medical needs. DOD is currently discussing with VA officials the extent to which VA can assist DOD in meeting its needs for treating returning wartime casualties. In addition, through its implementation of the Civilian-Military Contingency Hospital System (CMCHS), DOD intends to obtain agreement from non-Federal civilian hospitals to assist it in treating returning casualties.

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1/We pointed out several problems with DOD's implementation of the CMCHS in our report "The Congress Should Mandate Formation of a Military-VA-Civilian Contingency Hospital System" (HRD-80-76, June 26, 1980).
To the extent that DOD plans to use non-military personnel for treating patients in non-DOD facilities, the projected military requirements for personnel would be reduced to those needed to work in DOD facilities.

MOBILIZATION PERSONNEL COME FROM MANY SOURCES

There are several categories of medical personnel available to DOD during mobilization. Personnel in each category were distributed among the services in 1980, as shown below.

<table>
<thead>
<tr>
<th>Category of Personnel</th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peacetime Authorization</td>
<td>Assigned</td>
<td>Assigned</td>
<td>Assigned</td>
<td>Assigned</td>
</tr>
<tr>
<td>Active duty: Officer</td>
<td>15,657</td>
<td>15,843</td>
<td>9,791</td>
<td>9,813</td>
</tr>
<tr>
<td>Enlisted</td>
<td>38,623</td>
<td>35,879</td>
<td>23,062</td>
<td>21,998</td>
</tr>
<tr>
<td>Total</td>
<td>54,280</td>
<td>51,722</td>
<td>32,853</td>
<td>31,811</td>
</tr>
<tr>
<td>Selected Reserve: Reserve: Officer</td>
<td>12,856</td>
<td>8,002</td>
<td>1,741</td>
<td>1,377</td>
</tr>
<tr>
<td>Enlisted</td>
<td>28,380</td>
<td>19,658</td>
<td>5,916</td>
<td>5,352</td>
</tr>
<tr>
<td>Subtotal</td>
<td>41,235</td>
<td>27,660</td>
<td>7,659</td>
<td>6,729</td>
</tr>
<tr>
<td>National Guard: Officer</td>
<td>3,214</td>
<td>2,745</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Enlisted</td>
<td>17,942</td>
<td>14,303</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal</td>
<td>21,156</td>
<td>16,948</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>62,391</td>
<td>44,608</td>
<td>7,659</td>
<td>6,729</td>
</tr>
<tr>
<td>Other: Individual Ready Reserve and Standby Reserve: Officer</td>
<td>-</td>
<td>6,822</td>
<td>-</td>
<td>8,136</td>
</tr>
<tr>
<td>Enlisted</td>
<td>-</td>
<td>8,721</td>
<td>-</td>
<td>4,736</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>15,543</td>
<td>-</td>
<td>12,872</td>
</tr>
<tr>
<td>Retirees (note b): Officer</td>
<td>-</td>
<td>910</td>
<td>-</td>
<td>1,353</td>
</tr>
<tr>
<td>Enlisted</td>
<td>-</td>
<td>2,910</td>
<td>-</td>
<td>2,106</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>3,820</td>
<td>-</td>
<td>3,461</td>
</tr>
<tr>
<td>Grand total</td>
<td>116,591</td>
<td>115,693</td>
<td>40,512</td>
<td>54,073</td>
</tr>
</tbody>
</table>

a/These data were provided by the services and DOD and "assigned" figures are for time periods during September 1979 to September 1980. They represent a reliable estimate of the number and distribution of personnel available during fiscal year 1980.

b/The services reported retirees differently. Army: Regular Army retirees with no medical disabilities who have been retired less than 5 years. Navy: Regular and Reserve retirees who have been retired for 5 years or less. Air Force: Regular and Reserve non-disability retirees from 1976 through 1979.
The following sections briefly describe each of these military personnel pools as well as the potential to use civilians during mobilization. In many cases mobilization assignments will differ significantly from peacetime duties.

Active duty

Most active duty personnel are assigned to fixed facilities engaged in peacetime patient care. Most of those not assigned to fixed facilities are assigned to field medical units.

The Army has field medical units (hospital units of various sizes, ambulance companies, etc.) stationed in the United States, Europe, and other parts of the world. These units are staffed with enlisted personnel and some officers, but generally are assigned no physicians and only a few nurses. The units usually do not have a peacetime patient care mission, but are instead responsible for maintaining preparedness through such activities as unit training and equipment maintenance. After mobilization these units would be responsible for direct patient care in the theater of operations. A large part of the active duty personnel in fixed facilities, especially doctors and nurses, would be reassigned to these units to give them treatment capability. This reassignment will, in turn, reduce treatment capability in fixed facilities until replacements are obtained.

The Air Force has a smaller field unit structure. These units, unlike those in the Army, are attached to fixed hospitals, and personnel are charged with peacetime patient care and maintaining unit wartime preparedness. Upon mobilization, these units would be deployed to the theater of operations and responsible for direct patient care.

Most Navy medical personnel are also assigned to fixed facilities, although some personnel are assigned to field units similar to those in the Army. These field units are responsible for providing medical support to the Marines. Like the other services, medical personnel will be reassigned from fixed hospitals to deployed positions to provide theater medical support. The Navy currently does not have sufficient deployable facilities but plans to increase this capability.

Selected Reserve

The Selected Reserve consists of the services’ Reserve and National Guard units. Selected Reserve organizations with medical units include Army and Air National Guard; and Army, Air Force, and Naval Reserves. In 1980 reserve personnel constituted almost 40 percent of current authorized medical personnel positions, but reserve units (especially the Army) are significantly understrength.
Overall, they have about 77 percent of authorized strength. Rates for physicians and nurses were even lower—39 and 65 percent, respectively.

Reserve units train during the year to maintain unit readiness. Reservists may or may not be involved in medical care as part of their civilian employment. Many reserve units will deploy after mobilization. Army Reserve units, for example, constitute over 70 percent of deployable Army medical units. Some units, however, will be assigned to fixed facilities to allow them to expand or to "backfill" for personnel reassigned to field units.

**Individual Ready Reserve and Standby Reserve**

The Individual Ready Reserve and the Standby Reserve are the major sources of pretrained individuals to fill understrength Active and Selected Reserve units in the early phase of mobilization and to provide replacements for casualties until inductees or volunteers can be obtained, trained, and deployed. Individual ready reservists have completed active duty. Some still have time remaining on their 6-year military obligation, others have voluntarily extended beyond the 6-year obligation. These reservists can be transferred to the Standby Reserve after the 5th year of obligation. Personnel in these categories constituted almost 14 percent of DOD's medical personnel in 1980.

**Retirees**

Retirees can be called to return involuntarily to active duty under certain conditions. DOD has recognized retirees as a potential source of pretrained personnel who could, for example, be used as individual fillers for CONUS hospitals or other facilities, such as induction centers, to provide medical care. The services have begun initiatives to determine and improve the usefulness of these personnel.

**Civilian personnel**

By necessity, postmobilization shortages which exist after applying all available military personnel resources (active, reserves, retirees) must be filled from the civilian sector as (1) uniformed volunteers, (2) inductees, or (3) civilian employees. Two kinds of personnel resources can be obtained from this sector:

---Pretrained personnel who have been trained in a skill or profession that DOD requires and who, consequently, need only "soldier-oriented" training in such areas as combat survival.
--Untrained personnel who do not have skills required by DOD and must be given both skill and combat-oriented training.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives were to determine (1) the extent to which wartime military medical personnel shortages exist, (2) what was being or could be done to overcome the shortages, and (3) how well available personnel were trained for wartime missions.

During our review, we emphasized personnel requirements to meet the contingency DOD uses to develop mobilization personnel plans and programs. This contingency may not be the worst possible strategically and may not actually occur. However, it is used for planning because, of the contingencies considered probable, it is the most demanding in terms of peacetime personnel-related actions. We also focused our review on plans to deal with this contingency if it occurred in the near term. (That is, we focused on the question of what would happen if the Nation "went to war tomorrow.")

One alternative for quickly overcoming shortages is a peacetime draft of medical personnel. This alternative is, however, beyond the scope of this review and is part of the overall national policy debate concerning the All-Volunteer Force and possible need for a general peacetime draft.

We did not assess planned military strategy or threat assessments on which requirements are based and did not make a complete assessment and validation of personnel requirements supplied by DOD or the services. However, our data analysis and discussions with various officials indicated that the quality of currently available data needs improvement, as discussed on page 14.

To assess the extent of personnel shortages and adequacy of plans to overcome shortages, we reviewed and analyzed medical readiness plans and DOD- and service-provided data on personnel requirements and resources. We met with representatives of the Offices of the Assistant Secretaries of Defense for Health Affairs and for Manpower, Reserve Affairs and Logistics and the offices of the Surgeons General of the Army, Navy, and Air Force. We also met with representatives of the United States Army, Europe and of the Army's Health Services Command (HSC) and Forces Command. In addition, we met with representatives of the Selective Service System, the Department of Health and Human Services (HHS), and the Federal Emergency Management Agency (FEMA) who were responsible for mobilization plans for health personnel.
In assessing the adequacy of both clinical and combat-related medical training provided to DOD medical personnel, we focused on the Army's efforts in the training area. According to agreements with the requesting congressman's office, we pursued this focus because the Army has about 50 percent of DOD's total medical personnel and because the Army's numerical and percentage shortages of medical personnel as compared to wartime requirements are greater than those for either of the other services. In addition to discussing training with officials in the offices noted above, we analyzed soldiers' proficiency test results. We also interviewed officials at several Army hospitals and units in CONUS and Europe to determine the extent to which personnel are trained for possible wartime missions and to identify obstacles to improving training. Hospitals and units visited are listed in appendix I.
CHAPTER 2
SHORTAGE OF PERSONNEL COULD REDUCE CAPABILITY TO DELIVER WARTIME MEDICAL CARE

DOD expects that critical shortages of medical personnel to deal with the most-demanding contingency will continue throughout the decade. Current military personnel resources fall far short of total projected personnel requirements.

To effectively plan for mobilization if the Nation went to war tomorrow, DOD planners need data not only on total requirements, but also on what portion of the total personnel requirement DOD can actually use in its own military hospitals. DOD has begun to develop these data. Although estimates were not complete during our review, available data showed shortages which could prevent maximum use of available DOD facilities. Fully assessing the impact of projected shortages and of plans to deal with them also requires reliable estimates of when and where shortages will occur. Available data indicate they will occur soon after mobilization begins, significantly limit operations in CONUS, and cause some critical specialty shortages in the theater of operations.

SIGNIFICANT SHORTAGES EXIST AND ARE EXPECTED TO CONTINUE

Current personnel resources from all DOD sources fall far short of the anticipated numbers and types of personnel required to meet DOD's total estimated wartime medical needs. DOD-wide, available personnel represent only about 50 percent of requirements. The most significant shortages exist in the physician, nurse, and enlisted medical personnel categories. Shortages in specialty categories could be even more critical. Among physicians, surgeons represent the most critical area, constituting almost half of DOD's total shortage. For one service, surgeons represent over 90 percent of the physician shortage. Data on nurses could not be clearly categorized for all services, but surgical specialty nurses accounted for over 30 percent of the nurse shortage in one service. (More detailed information is presented in apps. II and III.)

DOD and service officials have recognized the critical nature of the shortages. Testimony of the Assistant Secretary of Defense for Health Affairs indicates that DOD does not anticipate filling physician active duty authorizations until mid-1982 and physician Selected Reserve authorizations until the late 1980s. Even after overall physician authorizations are full, specialty shortages are expected to continue, in spite of some service efforts, such as Graduate Medical Education programs, to obtain critically needed specialists.
Although DOD has begun many recruiting and retention initiatives that could increase the number of medical personnel, shortages are expected to continue throughout the decade. We did not assess the potential effectiveness of these initiatives. However, most of DOD's emphasis has been on increasing the number of physicians. For example, improvements have been made in the Health Professions Scholarship Program, and physician pay has been increased. DOD also made a special study of its ability to recruit and retain reserve physicians. As a result of the study, DOD has begun improvements, many of which involve the development of legislative proposals.

DOD officials told us that, because total physician shortages are so great and because they did not have reliable data on physician requirements by specialty, they had not yet concentrated efforts on any specific specialties. In view of the severity of surgical shortages, a lack of additional emphasis on recruiting efforts in surgical fields will likely result in a continuation of shortages. Shortages of surgeons could be especially harmful in a near-term conflict because DOD does not have sufficient resources to meet theater requirements.

DOD officials told us that they had not yet begun special initiatives for recruiting nurses because nurse resources have been steadily increasing, and that the nurse shortages, in relation to authorized strengths, are predominantly in the Army Reserve. Army officials told us that they did not have any initiatives planned to improve reserve nurse recruiting because steps had been taken several years ago that were effective. The Army Reserve increased by over 1,500 nurses between April 1976 and September 1980, but was still over 2,400 short of its authorized level. Without additional efforts to recruit nurses, sizable shortages could exist for many years, thus limiting readiness. Shortages of nurses could be especially difficult to overcome, especially on short notice. Unless women become subject to the draft, the potential to fill postmobilization nurse shortages through a draft is limited because most nurses are women.

Even if authorizations are filled, significant shortages as compared to wartime requirements would still exist. Overall, active and reserve authorizations can fill only about 53 percent of DOD's total wartime requirements. (More detailed information is presented in app. IV.) Historically, DOD has planned to make up early shortfalls (total requirements less active and Selected Reserve personnel) primarily from the Individual Ready Reserve. However, this pool has significantly decreased in size in recent years. Although DOD and the services have initiatives underway to increase the size of this pool, these initiatives may not significantly increase the number of individual reserve medical personnel. For example, Army Reserve officials do not expect any significant increase in the number of individual reserve health professional officers for at least the next 5 years.
Shortages could prevent maximum use of available DOD facilities

To effectively plan for and manage resources during a mobilization, DOD needs to know not only total personnel requirements, but how many people could be used within DOD itself in a near-term contingency. Because DOD does not have all the facilities it needs to meet its total wartime medical needs, the DOD personnel (both military and civilian) required to staff available facilities is currently less than the total personnel requirement. Available data indicate significant shortages exist even when personnel resources are compared to this reduced requirement.

Effective planning for a near-term mobilization must include an accurate assessment of current capabilities, considering all available (or quickly obtainable) resources—personnel, facilities, and logistic support. This assessment, in conjunction with calculations of total requirements, is necessary to identify needed increases in military capabilities, to insure that increases in various types of resources are coordinated and balanced and to identify specific shortfalls DOD would face if the Nation went to war tomorrow.

DOD needs to know what personnel are necessary to effectively use available military hospital capacity. Service-developed estimates of total personnel requirements assume that all required nonpersonnel resources are available and that all military war-generated medical needs would be met in DOD medical facilities. Such calculations are necessary to adequately identify the level of national medical personnel DOD would need. However, these total requirements and shortages calculated from them are not adequate to plan for near-term contingencies because the current force structure (nonpersonnel resources) is not sufficient to meet all DOD needs. DOD is experiencing shortages of both deployable and CONUS medical facilities. A second calculation of requirements is needed--one "constrained" to include only those personnel needed for deployable units and CONUS military medical facilities that currently exist or could be obtained quickly after mobilization.

As discussed on page 17, DOD did not have complete data on these constrained requirements. However, the data provided by the services to DOD clearly indicated that, when personnel requirements are considered in the context of what DOD can actually use, requirements are substantially reduced. The data also indicated that shortages in some specialties would cease to exist, either DOD-wide or in one or more of the services. Significantly, however, the data also showed that, in spite of the reduction, major personnel shortages would still exist. The Army would still have the greatest shortage, and DOD-wide surgical specialty shortages would still be severe. Because the services plan to obtain additional wartime medical facilities, these shortages could increase
In the coming years. (More detailed information is presented in apps. V and VI.)

In considering these constrained personnel requirements, it is important to note that the total requirement for medical care is not reduced. Rather, only the demand for personnel to operate in DOD facilities is reduced. In the near term, the difference between the two must be made up by using civilian facilities and personnel. In the longer term, the difference could be made up by developing more DOD capability and by using civilian facilities. As discussed on page 4, DOD is developing plans to use non-Federal civilian and VA facilities to help meet expected facilities' shortfalls and expects the civilian sector to provide necessary staffing. The possibility of DOD controlling civilian facilities and using military personnel to operate them does exist. However, current DOD plans for using civilian facilities do not include operation by military staff, and issues relative to such operations were outside the scope of our review.

In April 1981, pursuant to Public Law 96-342, DOD issued a report to the Congress concerning DOD's mobilization personnel requirements and plans to overcome shortages during mobilization. The data concerning medical personnel—which are classified—show a somewhat different picture of constrained requirements, especially concerning the size and interservice distribution of shortages. According to DOD officials, the data represent estimates of personnel requirements based on facilities expected to exist in 1986 and the projected availability of personnel in that year. On the other hand, data in our report show near-term (fiscal year 1980) personnel requirements for facilities which exist now and current resources.

The DOD report confirms that DOD-wide shortages of medical personnel will continue and that shortages of nurses could be especially critical. The DOD report did not include data on requirements for medical specialties or enlisted medical personnel.

Both theater and CONUS shortages will begin soon after mobilization.

Identifying when and where shortages will occur is vital to determining how rapidly and by what means they must be overcome. For example, if significant shortages do not occur until 5 months after mobilization, DOD and other affected agencies have that amount of time to develop and implement plans to obtain personnel from the civilian sector, through either induction or hiring. Also, if available personnel are insufficient to meet theater requirements, plans to make up those shortages must focus on obtaining uniformed personnel, primarily through the Selective Service System, because most theater personnel shortages can only be met with uniformed personnel.
Limited data available to us and our discussions with DOD and service officials indicated that (1) significant shortages will occur very early after mobilization, (2) although most early theater requirements can be met, critical surgical shortages will occur, and (3) the need to deploy CONUS hospital personnel to meet theater requirements will reduce DOD's CONUS capability to a fraction of its required strength.

Data developed by the Army at our request provided a more detailed basis for assessing these factors because Army medical planners calculated time-phased, constrained requirements by location (theater, CONUS), and allocated available personnel according to estimates of how soon after mobilization they would report. Analysis of that data showed that critical shortages begin soon after mobilization and continue throughout the projected conflict. Because many CONUS personnel will be deployed to overseas locations, CONUS shortages will begin almost immediately. Although most early theater requirements can be met, significant, early surgical shortages exist. The data demonstrate that shortages will have to be dealt with quickly, and that it is important to have plans clearly defined before mobilization.

IMPROVEMENTS NEEDED IN DEVELOPING WARTIME MEDICAL PERSONNEL REQUIREMENTS

In developing any estimate of medical personnel requirements, many factors must be considered. Changes to the expected threat, programed material holdings, national security strategy, or methodologies used to predict casualties could lead to substantially different medical support requirements. However, the best data available to DOD medical mobilization planners on near-term requirements--the data used in this report--need improvement because they have limiting factors beyond those associated with all estimating procedures. We could not estimate the impact of these limitations on the requirements for medical personnel, but some would increase the size of the projected personnel shortages. DOD officials said significant shortages would exist even if all data limitations were overcome.

Service methods vary for computing requirements

The services calculate personnel requirements differently. In February 1979, the Defense Resource Management Study 1/ pointed out that the different methodologies and assumptions used by the services made it difficult to accurately assess requirements. For example, the study found that

--the Air Force showed a requirement for fewer theater beds than the Army, but for twice as many physicians and

--the ratio of anesthesiologists to surgeons was 1 to 2 for the Navy, 1 to 9 for the Army, and 1 to 19 for the Air Force.

In March 1980 DOD issued the Wartime Medical Posture Study 1/ which pointed to weaknesses in the traditional DOD methodology for assessing requirements and to limitations on estimating capabilities. The study outlined differences in service methodologies and emphasized the need for the services to use consistent methodologies and planning factors related to workload.

DOD medical mobilization planners told us that, although they assess service-generated medical personnel requirements, they were not satisfied with the criteria they had available for their assessments and that they generally accepted service data as valid. When we asked for DOD's estimate of personnel requirements, they cited the Wartime Medical Posture Study estimate. Although the Army concurred with the study report, one Army official told us that the study numbers were considered valid within the context of the study but did not represent official Army estimates of requirements. Additionally, this study did not attempt to calculate requirements for nonphysician medical personnel, but recognized that nonphysician requirements should be studied.

The services are now developing a triservice model and planning factors to make medical personnel requirements estimates consistent. According to DOD officials, although each service can tailor the model to its unique mission, the model and planning factors will not only result in consistency, but will also provide DOD with a valid yardstick against which to judge service personnel requirement submissions. DOD expects to have the model and planning factors available in the summer of 1981.

Personnel yield rates need reassessment

A large part of DOD's medical personnel resources are reservists and retirees. Historically, not all personnel in these categories have reported for duty when called. For planning purposes, DOD used estimated yield rates for these groups, based primarily on the services' experiences in activating reserves during the Korean and Vietnam conflicts and also during the Berlin crisis.

1/"Report of the Wartime Medical Posture Study," prepared by the Office of the Secretary of Defense with participation of the Organization of the Joint Chiefs of Staff and the Departments of the Army, Navy, and Air Force, March 1980. (Classified SECRET)
Recent DOD guidance established yield goals and instructed the services to develop programs to reach them. The Individual Ready Reserve goal was increased from 70 to 80 percent in 1981 and will be 90 percent in 1985. The goal for the Selected Reserve remained the same at 95 percent.

DOD and the services have taken several steps to improve management of the individual reserve and retiree pools for all military personnel. One step has been to predesignate retirees to mobilization assignments. However, in spite of ongoing efforts, both to increase the size of the reserve pools and to increase their yields, the expected yield from the reserve categories is still uncertain. Services are now using different rates in estimating reserve resources. For example, in one set of data prepared for DOD, the Army used yield rates of 70 and 50 percent for individual reservists and standby reservists, respectively. In contrast, the Air Force applied an 80-percent rate for each of those categories.

However, Army personnel officials said that, in spite of the management efforts, yield estimates are still little more than guesses, and no valid analysis of expected yields has been made. In July 1979, the Army's Strategic Studies Institute issued a report 1/ which concluded that yield rates are inadequate and misleading as a tool for estimating deployable/employable personnel. The report stated that no one yield rate for each reserve pool could be established. The report recommended development of a comprehensive mobilization manpower management model. The recommended model would not apply an individual yield rate to each reserve pool. Instead, it would apply estimated rates to various categories of personnel within the reserve pools. The rates would be based on expected incidence of various causes of exemptions, delays, and failures to report. An Army personnel official said the Army hopes to develop the model when funding for the project is available.

During our review many DOD and service officials said yield rates for medical personnel could differ from those expected for the general military population. Many said the rates could be lower.

No consistent reporting system exists

The personnel requirements data we analyzed were provided by DOD medical mobilization planners and were the best available data.

at the time of our review. However, the data regarding both total requirements and constrained requirements were generated through special data requests made by the Office of the Assistant Secretary of Defense for Health Affairs to the services and were not regularly available to DOD medical planners.

A major limitation of the total requirements data resulted from the services' differing methodologies in computing requirements. Further, the services were inconsistent and incomplete in reporting the number of available personnel, making meaningful analyses of DOD-wide shortages difficult. Development of the tri-service model and planning factors—if they are used to generate estimates of near-term requirements—and more explicit instructions to the services on how to report information on available personnel may allow considerable improvement in the data available concerning total requirements. These data should be periodically reported to medical mobilization planners.

**Constrained requirements data important but incomplete**

DOD does not have complete, reliable estimates of personnel requirements as constrained by available medical facilities. Such data are vital for effective planning for near-term contingencies and are necessary to assure maximum efficient use of DOD facilities. They are also necessary for effectively planning for assistance from the civilian sector. For example, using constrained requirements allows more realistic planning for Selective Service calls. DOD should only request the Selective Service to plan to induct medical personnel if it has medical facilities for them to work in. Some needed field facilities do not exist, and realistically, DOD would not need to induct people to operate them in a near-term conflict. As additional field facilities are obtained, the number of inductees needed will increase.

DOD medical mobilization planners had recognized the need for these data, but the data they had developed were incomplete. Early in our review, we asked DOD for data showing personnel necessary to fully operate currently available wartime beds. The officials explained that personnel, bed, and equipment requirements traditionally have been calculated independently to meet the entire expected military medical caseload—that is, each requirement is calculated assuming all other resources are available. The officials pointed out that the War Posture Study calculated a constrained requirement—for physicians—projected for 1985. However, DOD officials could not identify constrained personnel requirements for currently available facilities. During our review DOD medical mobilization planners did request some constrained requirements data from each service. They requested data on expected requirements for officer and enlisted specialties the services believed would be obtainable from the Selective Service System. They
instructed that the services limit these requirements to those needed for the current force structure, excluding units not in existence and limiting CONUS personnel requirements to those needed to fully staff currently available and rapidly obtainable facilities. The data were to be used to identify more accurately potential requirements from the Selective Service System.

The data the services provided to DOD did not provide a complete picture of constrained requirements. For example, two of the services did not include all specialties. One service strongly objected to reporting data on constrained requirements and stated that they are not a true assessment of total wartime needs. Further, there is no reliable assessment of CONUS bed availability. Without such an assessment, personnel estimates based on "beds available" must be used with caution. 1/

In September 1980, the Assistant Secretary of Defense for Manpower, Reserve Affairs and Logistics issued an instruction recognizing the concept of constrained requirements for all manpower needs. As a result, better data may be available for use by medical planners. The instruction requires that, in addition to calculating total requirements based on required deployment and employment or projected workload, the services must also calculate a requirement based on scheduled deployment and employment or projected workload. However, the instruction emphasizes determining requirements based on scheduled unit deployment, employment, or projected workload. While this addresses the issue of timing of deployable requirements, interpretation of CONUS hospital requirements is less clear. DOD medical planners were not sure how it would affect calculations of CONUS requirements, especially whether scheduled employment refers to personnel required to accomplish projected CONUS workload, or that portion of the workload that DOD facility capacity will allow to be done in-house.

Other factors affect interpretation of data

In addition to the limitations discussed above, other factors can influence interpretation of the data. Some are not necessarily data weaknesses, and others are relevant to all DOD requirements estimates, not just medical requirements planning. As noted earlier, the aggregate impact of these factors is difficult to determine, but DOD officials believe medical personnel shortages would continue.

1/"DOD Needs Better Assessment of Military Hospitals' Capabilities To Care For Wartime Casualties" (HRD-81-56, May 19, 1981).
Although identification and analysis of all such factors was beyond the scope of our review, we noted that some factors could increase the size or effect of the projected medical personnel shortages. For example:

---Attrition rates for medical personnel were not considered, and shortages could be greater than indicated.

---The usefulness of some personnel reported as potentially available resources may be somewhat limited, thus, worsening the effects of the shortages. For example, many people counted as potential resources in the Selected Reserve may not have completed training. According to data provided by the Army Reserve and the Army National Guard, during fiscal year 1980 only 70 percent of enlisted personnel were qualified in their assigned skill area.

Other factors could reduce the shortages or have an indeterminate effect. For example:

---A major factor in determining casualties is the size of the total force at risk. Medical requirements were calculated assuming that 100 percent of combat unit authorizations would be filled, even though these units are also experiencing shortages.

---During our review, DOD officials told us that DOD-approved estimates for overall wartime personnel requirements were questionable. /1/ DOD has issued new guidance concerning requirements estimates and as new requirements are developed, medical requirements could change.

/1/This subject is discussed more fully in "Can the Individual Reserves Fill Mobilization Needs?" (FPCD-79-3, June 28, 1979).
CHAPTER 3

CONTINGENCY PLANS FOR OVERCOMING

POSTMOBILIZATION SHORTAGES ARE INCOMPLETE

DOD needs contingency plans to deal with postmobilization shortages. Much of its medical readiness planning emphasis has focused on long-range goals and objectives to effectively address anticipated changes in threat, personnel, and other factors in future years. However, plans for dealing with medical personnel shortages expected to occur if the Nation went to war tomorrow, especially during the early months after mobilization, are incomplete.

Areas where further analysis and improvement are needed include

--plans for overcoming DOD-unique skills and early theater shortages,
--plans to mobilize civilian medical personnel,
--plans and procedures for obtaining civilians through the Selective Service System or as civilian employees,
--procedures for interservice assignment of personnel, and
--possible use of Public Health Service (PHS) Commissioned Corps officers.

Many of these areas require input and coordinated effort between DOD and other Federal agencies with responsibilities for medical mobilization planning.

Failure to focus sufficient attention on near-term contingency problems is not unique to medical mobilization planning. In a report on the results of a series of 1978 readiness exercises, 1/ DOD points out that mobilization planning has focused more on projected needs than on near-term contingencies. The report states that

"Early in the long-range strategic planning process, based on threat assessments, estimates of future force 'requirements' for each major contingency are developed. * * * [These are used] in developing the annual revision to the Department's five-year defense program and in formulating the next year's budget request.

"In contrast to the civilian led and military assisted long-term program and budget process, contingency plans for the deployment and employment of U.S. conventional forces to meet possible near-term emergencies are prepared by the military under the guidance of the JCS [Joint Chiefs of Staff]. Too often the contingency planning process assumes that the desired levels of units, manpower, equipment and supplies will be available, without considering what levels are or can readily be made available. As a result, operations plans formulated in such a manner do not provide an accurate basis for assessing current U.S. military capabilities and are only of limited use in allocating future resources."

The report notes that, as a result, program and budget development give less emphasis to correcting current problems, and operations plans assume improvements that might take years to accomplish.

Since the exercises, DOD has taken some actions which could improve overall planning, including medical planning, by putting more focus on near-term contingencies. In August 1980 the Secretary of Defense issued policy guidance requiring that operations plans be developed for near-term contingencies using current assets, i.e., plans cannot assume improvements that may take years to accomplish.

DOD has taken some steps to develop medical personnel data necessary to plan for near-term contingencies. For example, DOD requested that the services identify medical specialties which could be provided through the Selective Service System and determine the number required to fully use available DOD facilities. However, as discussed on page 14, the data available are questionable, and more needs to be done to improve near-term medical readiness planning.

Whether DOD's currently available medical personnel are sufficient to meet mobilization needs depends largely on whether there are enough non-DOD personnel to overcome postmobilization shortages and whether they can be obtained in time. Most mobilization planners believe that (with some specialty exceptions) the Nation has enough medical personnel to meet DOD needs for a major conventional war. The crucial issue is whether they can be obtained in time to prevent serious degradation of the medical combat support mission. Because of weaknesses in requirements estimates both for DOD and the civilian sector and the incomplete status of mobilization plans, DOD cannot assure that personnel could be obtained in time.
Certain factors must be considered in assessing whether these shortages can be overcome. First, personnel requirements are stated in terms of fully trained personnel. The lengthy training for many medical skills dictates that only personnel already trained could be useful in overcoming early postmobilization shortages. Second, postmobilization shortages can be made up only from the civilian sector by using volunteers, draftees, or civilian hires.

SOME EARLY SHORTAGES CANNOT BE MADE UP

Some medical specialties are unique to the military. DOD and service officials believe that some enlisted specialties, especially medics, may constitute DOD's most critical shortage. Medics are responsible for a broad range of duties, the most important of which is to provide first-line emergency medical care on the battlefield. Military medics have no equivalents in the civilian sector. Civilian emergency medical technicians have similar skills but do not have all the skills required of military medics.

Therefore, shortages of medics or other specialties not available in the civilian sector could not be made up until they are trained. In the Army, for example, personnel would receive 7 weeks of basic training followed by additional specialty training. Army medics require 5 weeks of training in their specialty. Thus, even if the draft were reinstated after mobilization, a draftee would not be available as an Army medic for at least 3 months after being inducted.

The 1979 Defense Resource Management Study recognized the special problem presented by shortages of specialties for which no civilian equivalents exist. That report recommended that the reserves emphasize obtaining and training personnel in these unique skills. This practice could be especially useful if, as discussed below, the Selective Service System could induct paraprofessionals by specialty, thus improving the chances of obtaining personnel with needed military skills acquired from civilian sector experience. As of April 1981, DOD officials told us they were still considering the report's recommendation as well as other alternatives to meet the needs for military-unique specialties.

Early shortages in areas of deployment cannot be made up from the civilian sector even if personnel were pretrained in specific areas. Current law requires that, before anyone can be deployed overseas, they must receive at least 12 weeks of training. Theater shortages then must be made up from current personnel resources for at least the first 3 months of war. DOD has proposed, as part of standby legislation being developed with the Selective Service System, that pretrained health personnel be exempted from this 12-week requirement. DOD officials said some training would be
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required, but they had not determined how much. Air Force officials estimate a maximum of 3 weeks' training would be necessary for medical officers, but Army officials believe a somewhat longer time would be necessary. Officials also pointed out that personnel could be used in CONUS without 12 weeks of training, although some training would be needed.

**PLANS INCOMPLETE FOR MANAGING NATIONAL MEDICAL RESOURCES**

During mobilization, civilian medical personnel and other national resources will be allocated between the civilian and military sectors. This allocation includes review and approval of DOD's calls for Selective Service inputs, and the number of civilians it may hire. The lack of data on requirements for civilian sector medical personnel prevents a meaningful assessment of the extent to which DOD shortages could be overcome by postmobilization civilian inputs.

The Federal Emergency Management Agency is responsible for coordinating Federal agencies' planning for wartime use of the Nation's civilian resources. Also, Executive Order 11490, dated October 1969, delegates to HHS responsibility for preparing national emergency plans and developing preparedness programs covering health services and civilian health personnel.

During the 1978 mobilization exercises, responsiveness of many Federal civilian agencies was tested. A DOD report on the exercises concluded that military and civilian personnel (not just medical) must be treated as a single national resource and stated that there are competing demands for personnel and that priorities for assignment must be set. A Federal Preparedness Agency report 1/ on the exercises stated that there was a lack of guidance for planning for using other than DOD health care resources upon mobilization and recommended that DOD, HHS, and the Federal Preparedness Agency develop plans for allocating all available medical resources.

Although steps had begun toward planning for using civilian medical personnel, little progress had been made. Both HHS and FEMA officials told us that no estimate has been made of medical personnel required by the civilian sector in a major conventional war. FEMA officials said that HHS needs data from DOD and other agencies before it could develop such requirements. In August 1980, FEMA sponsored the first in a planned series of monthly

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meetings to plan mobilization of health resources. According to FEMA officials, one goal of the meetings is to agree on the format and content of data HHS will obtain from other agencies. However, in December 1980, a FEMA official told us that little progress had been made and no agreement had been reached.

Without some estimate of total civilian sector requirements and resources, the agencies responsible for planning the wartime use of medical personnel cannot do so, and DOD cannot realistically plan for postmobilization expansion using civilians, as either inductees, civilian hires, or uniformed volunteers.

POTENTIAL FOR OBTAINING MEDICAL PERSONNEL THROUGH SELECTIVE SERVICE UNKNOWN

As currently constituted, Selective Service accessions would not significantly reduce postmobilization shortages that will occur during the first months of a war. DOD and Selective Service officials advised us that there are many "unknowns" that could affect the Service's ability to meet DOD's postmobilization medical personnel needs.

Current legislation does not include authority to register or draft medical personnel. Although the President has the authority to register 18- to 26-year-old males, few medical professionals are in those age brackets. The recently implemented registration, which included only 18-, 19-, and 20-year-olds, is even less likely to include medically trained personnel. Even if it did, information on individuals' occupations or skills is not available, and no planning could be carried out for their use.

DOD and Selective Service have each developed a standby legislative proposal for drafting medical personnel that could be submitted to the Congress in event of mobilization. Although both proposals provide for registration and induction of physicians, dentists, and other health professionals, there are significant differences between them.

During 1979 DOD and Selective Service officials began developing mutually agreeable standby legislation. The Service submitted a proposal to DOD, and in response, DOD submitted an alternative, significantly different, proposal. The DOD proposal provides authority to register and induct female health professionals and medical students, whereas the Selective Service proposal does not. The Selective Service proposal does not include a DOD provision that would exclude health professionals from the 12-week predeployment training requirement.

Unlike past doctor drafts, both also provide for registration and induction of personnel by medical specialty as defined by the President. However, DOD officials told us they intended that
health professionals would include not only the traditionally drafted health professionals, but also various paraprofessionals equivalent to enlisted specialists. Selective Service officials told us they did not intend these people to be included.

Selective Service officials also cautioned that they had no experience with the kind of draft DOD was proposing, either drafting by medical specialty or drafting paraprofessionals. They said they had not studied the issues involved but many problems could be encountered, such as enforcing registration for paraprofessionals if State or professional certification requirements differed.

Although DOD sent its alternative proposal to the Selective Service in September 1979, a mutually agreeable legislative proposal has not yet been developed. Selective Service officials told us they had been busy planning and implementing the July 1980 general registration of males born in 1960 and 1961. They added that they could not determine the feasibility of or develop procedures for registering or inducting medical personnel until DOD notified them of anticipated requirements. DOD officials agreed that this was DOD's responsibility. In June 1980 they requested necessary data from the services, and early in 1981 forwarded requirements to the Selective Service. Selective Service officials told us that the data were sufficient to allow them to assess the feasibility of registering and drafting needed medical personnel and that DOD and Selective Service officials had begun doing so.

DOD health mobilization planners did not have an estimate of when Selective Service medical personnel inputs would begin and had not given any guidance to the services. Within the services, estimates differed. For example, the Air Force had no planning estimates of Selective Service inputs, while within the Army planning assumptions for the first date inductees would report ranged from 44 to 110 days after mobilization.

Selective Service officials told us that they could not estimate how soon after mobilization medical personnel could be provided under current conditions. They pointed out that there is no identified pool of trained medical people, no authority to register medically trained people, and no plans on how such a draft would proceed. However, they estimated that, if preregistration of medical personnel were implemented, first inductees could be provided as early as 13 days after mobilization. A prior estimate of the minimum time required for unregistered inductees from the general population to report for duty was 85 days after mobilization begins. As noted earlier, however, the Selective Service has no experience with drafting by medical specialty or drafting paraprofessionals, and estimates may be different than those for the more traditional doctor draft.
Considering the probable urgency of specialist shortages, a specialist draft seems more likely to meet early critical shortages efficiently. Until legislative and other practical issues are resolved concerning (1) a specialized or expanded draft and (2) required predeployment training time, planning for overcoming postmobilization shortages will be severely impaired.

ALTERNATIVES FOR OVERCOMING SHORTAGES ARE AVAILABLE

There are a number of planning alternatives available to DOD that would help overcome shortages of medical personnel after mobilization. These include better planning for use of civilians in CONUS hospitals, interservice assignment of military personnel, and assignment of PHS officers to DOD. These alternatives should be considered together with establishing the level of support to be obtained from VA and non-Federal civilian hospitals under CMCHS.

Better planning and advance arrangements for civilian medical personnel

Service plans for use of civilians in military hospitals are not based on assessments of the potential availability of civilians to work in such hospitals. Also, the services have not taken steps to assure that civilian personnel will be obtained quickly. No completely reliable assessment can be made of the potential for DOD to obtain civilians through any mechanism without assessment of total civilian sector requirements by HHS in coordination with FEMA, DOD, and other agencies. Also, assessments of the probable availability of civilian hires by geographic area are needed, and many required premobilization steps must be taken.

According to DOD officials, DOD policy requires that civilians be used to the maximum extent possible during wartime. However, current service mobilization plans may make incorrect assumptions about use of civilian personnel. Our assessment of Army plans for CONUS hospital mobilization illustrates this point.

The Army mobilization plan for CONUS hospitals requires that hospitals develop plans for the maximum employment of civilian professional personnel in anticipation of shortages of military professional personnel and that they enter into an emergency employment agreement with the Bureau of Employment Services. Army regulations require that premobilization job orders be placed with the employment service. A February 1980 update of the mobilization plan more specifically requires hospitals to identify critical occupations where civilian incumbents would be required and to determine their potential availability in the local labor market.
Army hospital mobilization plans require development of wartime staffing plans, which include both civilian and military positions. Officials of the Army's Health Services Command I/ responsible for approving these plans said that there is no clear guidance on how to allocate military and civilian positions and that basically the allocation is left to local Army installations. They expect more civilian positions to be included for facilities in high population areas because the probability of civilian hires would be greatest there. HSC officials also said they did not know if the hospitals had taken the premobilization steps discussed above.

We reviewed wartime staffing plans at three hospitals and found that some of the required premobilization steps had not been performed. Personnel who developed the plans told us they did not have a scientific basis for allocating positions, and some hospital officials indicated that, if available, civilians could fill many positions now designated for military personnel.

Wartime staffing plans for the three hospitals contained inconsistencies which we believe demonstrate the questionable nature of current plans for using civilians. For example, two of the hospitals are in the Baltimore-Washington, D.C., area, where a sizable medical community exists. These two hospitals' plans had added only two civilian physician positions although military physician positions increased by over 100. Similarly, one hospital's plan had increased the number of civilian nurse positions by only 15 although military nurse positions were increased by 374. More needs to be done to assess the potential usefulness of civilians to overcome early shortages and to facilitate DOD's hiring of available civilians.

Because of probable geographic variations in availability, local assessments, such as those called for in the Army mobilization plan, are necessary. However, they must be coordinated. Hospitals of two or more services are often collocated in the same geographic areas. Thus, individual assessments could fail to consider plans of other facilities to hire from the civilian sector, thereby resulting in double counting of potential civilian resources. They could also result in duplicate planning efforts. Other geographic considerations include planned commitments of personnel to CMCHS, probable increases in civilian hospital workload resulting from transferring non-active-duty patients from DOD hospitals, and the needs of local, State, and Federal health agencies in the area.

1/HSC's responsibilities include providing health care in CONUS and medical professional education and training to Army Medical Department personnel. HSC includes, among others, Army fixed medical and dental activities in CONUS.
DOD is revising its directive concerning planning for mobilizing civilian personnel. An official responsible for this directive said that, with regard to medical personnel, each facility is responsible for determining the civilian positions to be included in its plan. He also stated that coordination would be accomplished by involving State employment agencies and by submitting estimates of requirements for civilians to HHS. (Under Executive Order 11490 HHS is responsible for geographic assessments of total civilian sector personnel requirements and resources.) He saw no need for more DOD involvement.

DOD health mobilization planners told us that their emphasis with regard to use of civilian resources has been on developing CMCHS. They believed that assessments of civilian personnel availability for CONUS military hospitals would not be useful until CMCHS hospitals are identified and a determination could be made concerning the extent to which DOD facilities in CMCHS areas should or could hire civilians.

We agree that local assessments of availability should consider CMCHS and that HHS' involvement is necessary as part of coordination. Both HHS and FEMA should be aware of the extent to which DOD intends to rely on civilian hires during mobilization, and DOD input is necessary for HHS to determine geographic requirements. However, because current plans must make some assumptions about the potential to hire civilians to work in DOD facilities, we do not believe these assessments should be postponed until the CMCHS system is fully implemented. Further, coordination through employment services and HHS will not necessarily insure that plans include maximum realistic reliance on civilians or prevent duplication of effort at the local facility level.

Assuring maximum flexibility and speed in civilian hiring is critical. Although it is unlikely civilian hires could fill all DOD shortages, civilian hires represent the only major personnel source available to help overcome shortages until Selective Service can induct adequate numbers of personnel. DOD and the services have not fully considered all options for obtaining civilian personnel during wartime. An approach which merits consideration is development of premobilization contracts or agreements with medical personnel to work for DOD during wartime.

One option proposed by an official at one Army hospital was to establish preemergency contracts with physicians. The physicians would receive a predetermined assignment to a fixed non-deployable hospital and a minimal retainer. In turn, they would agree to work after mobilization at the given hospital and to attend biannual weekend medical mobilization conferences.

These premobilization arrangements could take many other forms and could also be developed for nonphysicians, including
people not subject to involuntary induction and deployment. For example, agreements for postmobilization employment could be obtained through a procedure similar to that being used by DOD to obtain agreements with civilian hospitals for participation in CMCHS.

Implementing some form of precontracting or premobilization agreements with civilians could facilitate early access to civilians who have achieved some prior familiarity with their mobilization assignment. It could also facilitate planning at the hospital and service level by allowing a more reliable estimate of at least a minimum number of civilians who would be available. DOD medical mobilization planners said they are considering the possibility of some form of precontracting.

Interservice assignment of military medical personnel

DOD issued policy guidance in August 1979 requiring interservice assignment of military physicians among DOD-operated CONUS hospitals and clinics for meeting wartime objectives. However, procedures have not been implemented by DOD or the services that would insure interchange of medical personnel after mobilization. Although interservice assignment would not reduce the total DOD-wide personnel shortage, it would help assure maximum effective use of facilities and personnel that are available.

Our analysis of DOD's expected medical personnel needs and resources showed that overages could occur in one or more of the services and could be used to lessen shortages in other services. The following table shows, for example, that Air Force and Navy physician specialty overages could be used to fill expected physician shortages in the Army.
Potential Specialty Overages Available for Interservice Assignment to the Army (note a)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Size of Overage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Force:</td>
<td></td>
</tr>
<tr>
<td>Pediatricians</td>
<td>b/291</td>
</tr>
<tr>
<td>Internists</td>
<td>229</td>
</tr>
<tr>
<td>Pathologists</td>
<td>66</td>
</tr>
<tr>
<td>Radiologists</td>
<td>61</td>
</tr>
<tr>
<td>Dermatologists</td>
<td>44</td>
</tr>
<tr>
<td>Neurologists</td>
<td>20</td>
</tr>
<tr>
<td>Navy:</td>
<td></td>
</tr>
<tr>
<td>Family practitioners</td>
<td>b/142</td>
</tr>
<tr>
<td>Internists</td>
<td>200</td>
</tr>
<tr>
<td>Neurologists</td>
<td>16</td>
</tr>
<tr>
<td>Pediatricians</td>
<td>b/260</td>
</tr>
<tr>
<td>Psychiatrists</td>
<td>92</td>
</tr>
</tbody>
</table>

a/ The overages shown are after substitutions among specialties were made within each service's shortage areas. The Air Force and Navy did not have defined substitution criteria, and our medical consultant identified possible cross-specialty substitutions. Changes in assumptions about medical casualties, transients, show rates, and reserve assets in personnel estimates could change actual overages. Also, different patterns of substitutions could change the distribution of overages.

b/ Army does not have wartime requirements for pediatricians or family practice physicians but could use these personnel in other medical categories. Overages shown here are after substitution within the assigned service for other essential specialty needs, as appropriate.

The preceding analysis is based on service calculations of total requirements. It illustrates that, even assuming each service's maximum needs, selected overages are possible. An analysis of requirements constrained to what each service can actually use shows an increased probability of some overages. The data show overages in more specialties, both physician and nonphysician, some of which begin soon after mobilization. Because these data were time-phased and requirements fluctuate over time, some overages occur in the surgeon category. This emphasizes the need for procedures to insure interservice assignment to maximize use of DOD's currently available facilities in a near-term contingency.

A DOD medical planner told us that procedures had not been developed to implement interservice assignment. He said that probably, upon mobilization, the services would notify DOD of requirements and resources, and if overages occurred, DOD would
reassign personnel. Unless DOD policies and procedures are developed before mobilization concerning such issues as allowable substitutions and how the services should determine when overages and shortages exist, we believe opportunities to maximize efficient use of medical personnel could be missed during mobilization.

The services are likely to perceive that they should retain all medical resources as a mobilization scenario unfolds and, therefore, are unlikely to voluntarily report specialty overages without established procedures. For example, an Air Force mobilization planner advised us that he did not expect personnel to be assigned to other services' facilities. He said as first priority the Air Force would use its personnel wherever possible within the Air Force, providing cross-training if necessary, to fill needs for other specialties. For example, another official suggested that, if the Air Force had more pathologists than necessary, pathologists might be able to reduce the impact of surgery shortages by assisting at surgery. Such substitutions may be useful; however, if another service has a significant shortage in a specialty area, it may be more beneficial to use those specialists in their primary field. This kind of determination should be made at the DOD level.

DOD's August 1979 policy on interservice assignment of physicians to CONUS facilities does not cover opportunities for interchange of nonphysician personnel or of personnel in theater areas. Our analysis showed that selected overages can also occur in nonphysician categories, such as nursing and enlisted specialties. Further, inadequate in-theater treatment capability can result in substantially increased evacuation to CONUS and possibly in increased morbidity and mortality. Interservice assignment, most frequently of Air Force and Navy personnel to overcome Army in-theater as well as CONUS shortages, could be a potentially useful management policy, especially until the services obtain all their needed deployable medical facilities.

Assigning PHS officers to DOD

The PHS Commissioned Corps represents a resource pool with special potential to help meet early DOD shortages. Unlike draftees or potential civilian hires, Corps officers are on-board with the Federal Government and subject to call for mobilization. Although there are limitations on the help the Corps could provide to DOD, the potential for its use should be considered by DOD and HHS.

Although PHS has certain mobilization responsibilities, including providing care for the Coast Guard and American seamen and assuring continued civilian sector health care, current law recognizes that the Corps could also be used in support of military
missions. Under the law (42 U.S.C. 215), the Secretary of HHS is authorized, upon request of the head of an executive department, to detail officers or employees of PHS to other departments. Officers detailed for duty with the Army, Navy, Air Force, or Coast Guard are subject to the rules of the service to which they are detailed.

The law also states (42 U.S.C. 217) that in time of war, or emergency involving the national defense proclaimed by the President, the President may declare PHS' Commissioned Corps to be a military service, subject to the Uniform Code of Military Justice. It also provides that the Commissioned Corps shall continue to operate as part of PHS "except to the extent that the President may direct as Commander in Chief." In past mobilization exercises, in response to DOD's request for assistance, HHS has agreed to detail a limited number of Corps officers to DOD.

As of June 30, 1980, there were 7,359 active duty commissioned officers in the Corps, including 2,546 doctors and 624 nurses. PHS also has an inactive reserve corps which is subject to call and detail to DOD. Two years ago there were about 16,000 people listed as inactive reservists. HHS officials realized data on these individuals were outdated and instituted a program to contact reservists, notify them of their obligations, determine whether they actually could be mobilized, and if not, remove them from the reserve. This project had not been completed as of February 1981, but HHS officials told us the number of reservists was being greatly reduced because people were resigning, being terminated because of poor health or other factors which would prevent their mobilization, or being terminated because they could not be contacted. They anticipated that about 4,500 will remain in PHS' inactive reserve when the project is complete and that about 2,300 of these would be physicians.

Although PHS has few surgeons, many PHS officers specialize in fields where DOD expects wartime shortages, such as internal medicine, or fields, such as family practice, which could substitute for other DOD shortage specialties. HHS officials estimated that, with the improved data base regarding the inactive reserve, they could mobilize most of the reserve in 2 weeks, thus increasing the usefulness of PHS in overcoming early DOD shortages. However, plans to activate the reserve have not been tested since 1967, and HHS officials told us they have not decided how frequently they will update the data on inactive reservists. Thus, the quality of the data may deteriorate, increasing problems in the activation process.

Although the law provides for PHS assistance to DOD and PHS has almost 5,000 commissioned active or reserve physicians, HHS and PHS officials told us they did not anticipate providing significant assistance to DOD during wartime. They cited PHS' own
expanded mobilization mission, the expected draw-down of civilian sector physicians for DOD, and the shrinking inactive reserve as major factors preventing substantial assistance. They also questioned whether DOD really needed the people it said, citing weaknesses in DOD's requirements development process.

A 1979 report prepared for the Assistant Secretary of Defense for Health Affairs by MAXIMUS, Inc., 1/ identified the advantages of PHS assistance, suggesting that

"** PHS Reserve Physicians might prove to be a valuable source of medical manpower in a wartime situation. All of the physicians would be in uniform, subject to orders, and already in officer positions, including security checks and orientation. They could theoretically be made available by the Secretary of [Health and Human Services] upon the request of the Secretary of Defense."

However, the report concluded that, given PHS' expanded wartime mission, these physicians might not be available. The report also cited as factors limiting the usefulness of PHS in providing assistance to DOD (1) the reduction in the size of the reserve and (2) the ability of reservists to resign their commissions any time before receiving mobilization orders.

HHS and, specifically, PHS have many responsibilities concerning health care during war or national emergency. However, PHS has not defined its own personnel requirements. PHS includes six agencies: Health Services Administration; Centers for Disease Control; Food and Drug Administration; Alcohol, Drug Abuse, and Mental Health Administration; Health Resources Administration; and National Institutes of Health. Part of PHS' peacetime role includes operating eight PHS hospitals, which provide medical care primarily to American seamen and members of the Coast Guard, and Indian Health Service hospitals. A PHS mobilization planner expects hospital workloads and requirements for support of the Coast Guard to increase during wartime. In addition, Federal emergency regulations assign several civilian sector health functions to HHS, such as

--developing and directing a national program to train health manpower in both medical and civil defense skills;

--developing and coordinating programs of radiation measurement and assessment;

--developing and coordinating programs for the prevention, detection, and identification of human exposure to chemical and biological warfare agents;

--planning and directing national programs for the purity and safety of food, drugs, and biologicals; and

--preparing national plans for emergency operation of vocational rehabilitation and related agencies.

Both HHS and PHS officials told us that they did not know how many people would be required to perform HHS' emergency health functions. They said they had not fully defined the mobilization missions for each of the PHS agencies. A PHS mobilization planner told us that PHS mobilization plans require an assessment of personnel requirements after mobilization begins.

Although PHS' mobilization missions increase, FEMA officials told us that some peacetime missions might be curtailed. The National Institutes of Health, for example, have over 500 Commissioned Corps physicians. FEMA officials indicated that research not directly related to the war effort would be curtailed. Premobilization identification of personnel requirements and activities which could be curtailed could enable better mobilization planning and help determine the potential for PHS assistance to DOD.
CHAPTER 4

MANY ARMY MEDICAL PERSONNEL ARE NOT ADEQUATELY TRAINED FOR WARTIME ROLES

Many Army medical personnel are not receiving adequate training to perform combat support missions. Training requirements are unclear, and many obstacles hamper improvement of training.

We focused primarily on the Army active duty programs because the Army has the largest medical personnel requirements. Also, Army active duty medical personnel represent almost 45 percent of its total medical personnel resources.

Under present Army training programs

-- a substantial portion of enlisted medical personnel are unable to pass basic skills qualification tests in their medical specialties and

-- not enough in-hospital and combat-related medical skills training is being provided.

ARMY MEDICAL PERSONNEL PROFICIENCY IN WARTIME SKILLS IS LOW

Many Army medical personnel, both officers and enlisted, are not proficient in tasks necessary to provide combat medical support. The training manuals developed for the Army's enlisted medical specialties emphasize the importance of training for preparedness.

"A unit undergoing training today could quickly find itself in a combat situation tomorrow. In addition, personnel in [hospitals] will be the fillers, on very short notice, for committed [field units]. Unit commanders can no longer depend upon time for mobilization and training between the outbreak of hostilities and their commitment in battle. The Army cannot anticipate receiving advance warning of any major emergency. Therefore, all unit commanders take on the awesome task of preparing for battle now."

The manuals specify tasks required of each enlisted specialty and each skill level within the specialty. Army skills qualification tests have been developed to measure how well soldiers can perform a sample of those tasks. Soldiers must pass 60 percent of
the tasks tested to pass the test. Soldiers who fail to pass the test are considered unqualified in their military occupational specialty at their current skill level and are required to retake the test the next year. A second failure could result in the soldier's reclassification, inability to reenlist, or dismissal from the Army. The fiscal year 1980 test results show that many are not proficient in essential tasks, as shown in appendixes VII and VIII. Army officials told us that preliminary fiscal year 1981 results show significant improvement in active duty test results.

We obtained data on specific tasks tested for the four commands to which most Army enlisted medical personnel are assigned. We analyzed the test results for the tasks in the two most basic skill levels for the four military occupational specialties with the greatest numerical shortages. Tests on many basic clinical and field-related skills were not passed. The following examples from appendix VIII illustrate tested skills which 50 percent or more of the personnel in all four commands did not pass.

--Medical Specialists did not know required procedures for applying a dressing to a head wound, making heat applications to patients, or sorting medical patients for care (triage).

--Clinical Specialists did not know required procedures for emergency treatment of a chemical agent casualty, bandaging a knee amputation, or triage.

--Operating Room Specialists did not know required procedures for preparing patients for anesthesia, fabricating splints, sterilizing equipment, or administering emergency care to a chemical agent casualty.

Poor test results take on added significance in light of the fact that many medical personnel in the Reserve and Guard forces were not qualified in their military occupational specialty. Further, at least 60 days before tests are administered, personnel are notified of the portion of the required skills that will be tested, and afforded ample opportunity to train for the tests.

Officers are also ill-prepared for combat operations. In June 1979 an Army Surgeon General's memorandum pointed out that the results of a recent military exercise indicated a need for additional combat environment transition training for all medical department officers. One of the reports on that exercise stated that, for the most part, medical corps resources within HSC had no training or experience on the realities of field medical service as well as the internal organization problems of living and operating in a field environment. The report concluded that such training is of particular significance if a deployed division is to be self-sufficient upon arrival in a theater of operations.
IN-HOSPITAL MEDICAL SKILLS SHOULD BE EMPHASIZED

Field unit and hospital commanders are not providing the individual training to Army enlisted medical personnel that is necessary to perform the skills required to care for wartime casualties. Enlisted medical personnel receive their first training in the basic skills required for their specialty before being assigned to field units or hospitals.

Army policy makes the unit commander responsible for determining the content of his unit's training program, using such guidance as training manuals listing specific tasks required of each enlisted specialty. The unit or hospital commander is responsible for insuring that the soldiers master tasks for higher skill levels and for refreshing skills previously taught.

The Army Academy of Health Sciences sets training standards for Army medical personnel. Officials of the Academy advised us that enlisted personnel are not expected to be proficient in all tasks upon graduation from initial specialty training, but should establish proficiency in their duty specialty as soon as possible after graduation. They indicated that some military occupational specialties are extremely complex and may require extensive on-the-job training before proficiency can be attained.

Training manuals for enlisted medical specialties state that individual skills must be practiced frequently in order to maintain peak proficiency. They state that to "only practice a skill on a once-a-year basis is to settle for mediocrity and to gamble with readiness."

Our visits to Army hospitals and units showed that:

--Enlisted medical personnel in field units frequently are not given opportunities to practice clinical skills in hospitals.

--Hospitals do not provide adequate opportunities for all enlisted medical personnel to practice the full range of clinical skills.

Few field unit personnel receive in-hospital training

Most Army field unit medical personnel are assigned to the Army Forces Command in the United States or the Army command in Europe. Both commands have recognized the benefit of in-hospital training for field unit personnel and have established goals for this training. European command regulations state that one purpose of medical proficiency training is to maintain and develop skills
and knowledge of personnel who have little opportunity to function in their primary occupational specialty in their parent unit.

**Goals for refresher training vary**

No minimum amount of refresher training has been prescribed by the Army, and the goals for the two field commands are different. Forces Command regulations state that all medical personnel assigned to Forces Command units should receive a maximum of 90 days' training annually in a fixed medical facility. The European command regulations establish a goal of providing enlisted medical personnel 90 days' in-hospital training during a normal tour of duty—usually 2 or 3 years. Both regulations provide substantial flexibility in the content of the training.

The differences in the goals set by the commands raise a question about their adequacy. If 90 days per year is desirable for CONUS personnel, is 90 days every 2 or 3 years sufficient for personnel in Europe who would be the first line of defense under some wartime scenarios? Academy officials told us that they could not estimate the rate of skill deterioration, but that they had made a followup study of Medical Specialists trained at the Academy, which showed that skills deteriorated rapidly without reinforcement.

**Goals for refresher training not met**

The Forces Command does not monitor or keep records on the number of people who receive in-hospital training. However, Forces Command officials told us the goals for in-hospital training are not being met. Responses to a 1979 Forces Command survey of unit in-hospital training programs indicated that many units can provide in-hospital training to only a fraction of their personnel. Officials emphasized that the goal is not a requirement and that in-hospital training should be given to the extent that the unit commander believes each individual needs it. We found that factors other than individual needs are determining the amount of in-hospital training given.

All CONUS medical field units are located within commuting distance of military hospitals, and the Forces Command training regulation refers to 90 days' training in the unit's local hospital. Forces Command officials told us that hospitals cannot accommodate all of the personnel who need training. Most CONUS hospital officials we talked to, although agreeing that there was a limit to the number of personnel the hospital could accept, said their hospitals could take more people than were being assigned.

Forces Command officials said that allowing 90 days each year for in-hospital individual training allowed a balance between individual medical skill training, unit training, and duties in support of their installations. However, the responses to the Forces Command survey indicated individual training is not being given
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Forces Command officials said that allowing 90 days each year for in-hospital individual training allowed a balance between individual medical skill training, unit training, and duties in support of their installations. However, the responses to the Forces Command survey indicated individual training is not being given
adequate attention. Eighteen of the 28 units responding to the survey indicated that work details hinder training. Those who offered additional comments listed post support duty, reserve unit training support, and unit training as other factors limiting individual training. One unit's response said work details limit medical training to the point that it is ineffective.

The commander of one CONUS medical field unit located on a post having a hospital advised us that medical personnel shortages made it difficult for him to send many people to the hospital for training. We also noted that this unit was responsible for filling a certain number of hospital staff positions, a practice built into many hospital staffing patterns. A hospital training official told us these people are not considered to be in the hospital for training but are considered to be staff. While they do get some hands-on experience, no effort is made to insure broad skill familiarization. This practice may increase problems of personnel shortages and further limit the number of unit personnel who could receive in-hospital training designed to expand skill knowledge. Where such arrangements exist, periodic rotations of staff between hospitals and field units, coupled with an in-hospital training program designed to meet individual soldiers' needs, could afford an effective method of increasing the combat-related clinical skills of field unit personnel.

Units in the European command face other problems because field units are not generally colocated with hospitals. There are problems with obtaining travel funds and space to billet soldiers detailed to hospitals. However, some units in Europe are within commuting distance of hospitals. One unit we visited had significantly increased the number of people receiving in-hospital training by expanding use of the commuter concept. Doing so required developing a system to arrange hospital schedules and provide transportation.

In-hospital training may not cover all clinical skills

Even if personnel are assigned to hospitals, they are not assured of receiving hands-on training in all clinical tasks needed.

Field unit personnel detailed to hospitals for medical proficiency enhancement receive various types of training. We found that certain units and hospitals have established specific plans for the training, but many others have not. At some hospitals unit personnel are rotated to several assignments and given broad skill exposure. At others they remain at one or two assignments to gain more proficiency in a limited number of skills.
Personnel assigned to hospitals for regular duty may also not receive training in all clinical tasks. We discussed approaches to in-hospital training with responsible officials at a large medical center and at two smaller post hospitals in CONUS. Individual skill training was largely limited to on-the-job training and training in preparation for skills qualification tests.

Skills included in on-the-job training depend largely on the specific needs of patients and on particular duty assignments of individual soldiers. The scope of on-the-job training varies depending upon the hospital and its patient-mix, but it is unlikely that all clinical skills would be experienced as part of normal duty. For example, according to the training officer at one medical center, of 110 basic tasks for Clinical Specialists only 54 percent would normally be practiced as part of normal duty by all personnel at the center. The training officer at one of the smaller hospitals told us only 26 percent of the tasks would be included in normal on-the-job training for all personnel. Tasks not performed by all personnel as part of normal in-hospital duty included clinical skills, such as applying a leg splint, administering emergency medical care for burns, removing sutures, or immobilizing a fracture.

Training beyond on-the-job training conducted as part of normal duty is apparently limited largely to preparation for skills qualification tests. However, personnel are notified in advance of the sampled tasks to be included in the tests. Training is oriented to the sampled tasks and, therefore, covers only a portion of all the tasks required for each specialty. For example, of 110 basic tasks required for Clinical Specialists, only 36 percent were tested in fiscal year 1980.

If tested tasks are added to tasks normally done on the job, numerous tasks may still not be included. For example, only 55 percent of the 110 Clinical Specialists tasks were included in either the test or the on-the-job training for most people at one of the post hospitals. Army individual training in field units also focuses heavily on skills to be tested. 1/

The Commander, HSC, told us that he believes local hospital commanders have to stop focusing on test-oriented training and begin focusing on all skills required of their personnel. We discussed the limitations involved in in-hospital training with

1/A recent GAO report "The Army Needs To Improve Individual Soldier Training In Its Units" (FPCD-81-29, Mar. 31, 1981) concluded that individual training in Army units should be improved and made recommendations appropriate for medical as well as other types of units.
commanders and training officials at three of the hospitals visited. Although the conditions differed at each, the problem most frequently identified was that the peacetime workload of both trainees and trainers was too great to allow time for broader training. Another factor frequently mentioned was that, because of the general decline in recruit quality, more training time is necessary to maintain proficiency in skills necessary for normal duty, thus allowing less time to train in additional skills.

**COMBAT-ORIENTED MEDICAL SKILLS TRAINING SHOULD BE INCREASED**

Many medical personnel are not being adequately trained for potential combat support missions through field and other combat-oriented medical training programs. Although the Army Surgeon General has emphasized the need for combat-related training since 1976, required annual field training is often not given. Initiatives have been undertaken that could improve the content of combat-related training for physicians, but it will be many years at the current rate of implementation before new programs reach all eligible personnel. Other medical personnel often are not included in these initiatives.

Army officials stated that Army medical personnel receive combat-related training in many ways, including daily hospital duties, Continuing Health Education Program courses—many of which include military and wartime related topics and some of which are specifically related to combat issues—professional conferences, and in-field training. In spite of this training, many may not be adequately trained. Personnel assigned to hospitals are the most difficult to reach with field combat training programs. In a June 1979 memorandum, the Army Surgeon General stated that

"Review of recent [military exercise] after-action reports indicates a need for an on-going, up-to-date, combat environment transition training program for all AMEDD [Army Medical Department] officers. The need is particularly great for officers who are assigned or attached to [hospitals] because of their potential deployment as fillers for [field] units.

* * * *

"Providing effective field medical support during periods of intense hostilities depends greatly on the adaptability of individual AMEDD officers. The transition from providing health services in a safe, fixed medical treatment facility to a highly mobile, less sophisticated, hostile environment dictates
individual readiness of all AMEDD officers. The focus of CETT [combat environment transition training] should be to minimize the adverse impact of such transitions."

Although our review focused primarily on Army combat-related training, difficulties experienced by the Army apparently also exist in the Navy and Air Force. Inadequate training in wartime medical skills in all services was a major problem identified at a January 1980 conference on medical readiness sponsored by the Office of the Assistant Secretary of Defense for Health Affairs. The conference reported that (1) without special training it is unlikely that medical personnel could properly manage casualties resulting from modern conventional, chemical, nuclear, or biological weapons and (2) medical personnel commonly have no opportunity to become familiar with the equipment or environment of deployable medical units. The report also noted that cutbacks in formal training, shortages of military physicians since the end of the draft, increased emphasis on peacetime health care delivery, and other interacting factors have resulted in many cases of inadequate training in wartime medical skills.

**Army-required field training is not being given**

In 1976 the Surgeon General directed the Commander, HSC, to insure that all medical officers receive annual field training. Although the length and content of such training was not specified, the Surgeon General stated that training should preferably be provided during scheduled field exercises.

In response, the Commander, HSC, directed hospital commanders to initiate a program to insure that Army medical personnel participate in annual field training. The Commander's 1977 memorandum stated that to make the program meaningful each individual should spend a minimum of 3 days with a field unit in a field environment. The Commander stated that it is extremely important that Army medical personnel be oriented as to what will be expected of them during combat operations, what equipment would be available, and what working conditions they may expect to encounter.

HSC does not require commanders to report the status of their training programs. However, survey data available indicated participation was low. In January 1979, the Commander, HSC, notified his commanders that the

"** HSC Inspector General ** reported that involvement has been less than satisfactory at many locations and, in some cases, no training had been conducted since inception of the program. This lack of involvement is certainly contrary to the
policy outlined by the Surgeon General and myself. I strongly urge that a reasonable program be implemented immediately at all activities."

A year later, HSC polled its hospitals to determine how many people received field training in 1979. It found that almost 75 percent of the facilities reported field training participation at 25 percent or less. HSC-wide, less than one-third of the personnel received training or were otherwise exempt because of an alternative field experience. In March 1980, the Commander, HSC, notified his commanders that he was concerned about the lack of support that had been given the field training program. HSC officials told us that their goal for 1980 field training was 50 percent participation.

The structure and content of the field training that has been given varies significantly.

--Certain medical personnel participated in major exercises during 1- or 2-week periods, while others accompanied field medical units on shorter 3- or 4-day exercises.

--Certain medical personnel accompanied field medical units, while others accompanied nonmedical units.

--Certain medical personnel attended hospital-sponsored programs which do not involve field units.

--The use of actual or practice patients for treatment differed.

--Sometimes field medical equipment was not set up or used.

Many of these exercises do not meet the goal set out in the 1977 implementing memorandum to orient personnel to "what will be expected of them during combat operations, what equipment would be available and working conditions they may expect to encounter."

Hospital officials told us they were not equipped or did not have the resources to comply with field training requirements. HSC officials advised us that there are several practical impediments to accomplishing field training.

--Field training is not separately budgeted and must be funded from the operating budget of the hospital.

--Hospitals are not authorized combat field medical equipment and must borrow from other commands. Extensive coordination can be required.
--Planning for annual field training can become an overwhelming logistical burden because of the lack of facilities or training sites.

Officials at the hospitals we visited generally agreed that periodic field training for officers and enlisted medical personnel is important, but opinions varied regarding the amount and types of training necessary and the consequences--for combat support--of not providing that training. For example, some emphasized the need to orient personnel to the battle environment the patients come from. Other officials stressed the importance of being familiar with the limits of field medical facilities. Still others believed it was important to have real or simulated patients participate in the exercise. There was no agreement on the necessary frequency of field training, but some clearly questioned the usefulness of only 3 days of training as usually conducted under current guidelines.

New initiatives do not assure hands-on training for all medical personnel

Although new training initiatives have been undertaken that can potentially improve combat-related training for all of the services, it will be many years before all eligible personnel can be reached. These initiatives focus primarily on physicians, with limited coverage of other officers or enlisted personnel. Without increased emphasis and expanded coverage, the chances of meaningfully improving combat medical skills will be limited.

One major initiative, the Combat Casualty Care Course, was developed by a triservice steering committee to provide triservice training for military physicians to function with today's equipment in a battlefield environment predicted for conflicts in Western Europe or in the Middle East. The course is designed for physicians, especially entry-level physicians, and is administered by the Army's Academy of Health Sciences. During the course, participants live in the field, where they attend lectures and participate in specialized exercises on topics relative to combat medicine, such as surgical skills necessary for high and low velocity missile injuries, chemical decontamination, triage, philosophy of medical support of combat operations, and preparation of casualties for aeromedical evacuation.

The Combat Casualty Care Course was first given in April and May 1980 and is partly an outgrowth of Air Force Medical Red Flag exercises. These exercises provide combat-related training to officers in a series of half-day sessions on the grounds of Air Force medical centers. The Combat Casualty Care Course lasts for 1 week and is premised on the assumptions that

--it is preferable to experience training while living in the field rather than in fixed billets and
--hands-on experience and small group problem solving sessions are superior to traditional lectures.

Combat Casualty Care Course classes are comprised of 60 Army, 40 Navy, and 20 Air Force physicians. The course is scheduled to be given four times during 1981 and, if funds are available, at least nine times a year by 1983. An Army training official told us no decision had been made on who beyond entry-level physicians would be required to take the course. Even at the expanded rate, it would be many years before all physicians could be reached.

Army training officials told us that they are considering the possibility of developing similar courses for nonphysicians. One official said a complete assessment of nonphysician combat-related training needs had not been done. The course for physicians was developed first because they were considered to be in most critical need of field training. One reason cited for this was that many physicians, almost 30 percent, currently on-board had not even had entry level Officer Basic Training, which does include some field training.

According to a DOD mobilization planner, holding 9 or 10 Combat Casualty Care Courses per year will allow all new military physicians to participate, but will not permit all physicians already on-board to participate. The planner said video-tapes of portions of the Red Flag exercises and Combat Casualty Care Course were being developed for use in training nonphysicians and providing refresher training to all personnel.

The extent to which periodic refresher training should and can include hands-on training is not clear. The report on the January 1980 medical readiness conference indicated periodic hands-on training is necessary, but did not define the frequency or content of such training. The video-tapes and other initiatives currently underway do not emphasize hands-on refresher training, especially for nonphysicians. Service requirements differ concerning periodic hands-on training. One Air Force official told us that, for economy reasons, more emphasis is being placed on classroom-type refresher training. Only the Army requires personnel to receive annual in-field training but, as discussed earlier, the Army has not provided this training to all personnel.
CHAPTER 5

CONCLUSIONS, RECOMMENDATIONS, AND AGENCIES' COMMENTS

CONCLUSIONS

Our analysis of DOD data shows that the number and types of medical personnel in the active duty and reserve forces fall far short of the total projected personnel requirements for the current most-demanding wartime planning scenarios. DOD expects shortages in critical medical specialties to continue throughout the decade.

To effectively plan for wartime contingencies, DOD planners need data not only on total medical personnel requirements, but also on what portion of those requirements DOD can actually use in its own military hospitals. Although DOD capability estimates are not complete, available data indicate that shortages could prevent maximum use of available DOD facilities.

Postmobilization shortages are expected to be greatest in physician, nurse, and enlisted personnel categories. Current DOD assessments indicate that shortages will occur soon after mobilization begins, will significantly limit operations in CONUS, and will limit the availability of critical specialties in the theater of operations.

Shortages of nurses, surgical personnel, and some enlisted specialists could be especially critical because they will be difficult to fill quickly after mobilization. DOD has made little progress toward implementing plans and initiatives to increase its capabilities in these personnel shortage areas. Without such efforts to preclude these postmobilization shortages, they could seriously reduce treatment capability.

DOD needs better criteria to use in assessing the validity of medical requirements data prepared by the services. A triservice model and planning factors are being developed for medical readiness planning which will provide a uniform method of preparing service personnel requirements estimates. However, more should be done to improve service personnel requirements estimating procedures. DOD should develop a more effective method of estimating (1) yield rates for reservists and (2) near-term medical personnel requirements based both on total needs and on needs constrained by available military hospital facilities.

DOD's medical readiness planning has focused on long-range goals and objectives to address anticipated changes in threat, personnel, and other factors in future years. Plans for dealing with medical personnel shortages expected to occur if the Nation
went to war tomorrow, especially during the early months after mobilization, are incomplete. Federal mobilization planners believe the civilian sector has enough medical personnel to augment most military mobilization needs for a major conventional war. However, a reliable assessment of how civilian medical personnel should be used to meet both military and civilian commitments after mobilization has not been made. Without such an assessment, planners cannot adequately determine the extent to which the civilian sector can provide medical personnel to fill DOD shortfalls.

Obtaining medical personnel from the civilian sector after mobilization must be carefully planned and coordinated. DOD has begun implementing programs under which substantial amounts of medical care to be provided in CONUS after mobilization would come from VA hospitals and civilian hospitals committed to provide care under CMCHS. To assure continuity of care at these hospitals and at other civilian facilities, a coordinated effort is needed to identify remaining medical professionals that could be used to staff military facilities in both CONUS and the theater of operations.

Selective Service System planners have not determined the rate at which medical personnel could be drafted into the military if mobilization occurred. Currently, there is no specific legal authority to register or induct doctors or supporting medical personnel, nor is there agreement among Federal planners concerning the details of legislation that would be needed for obtaining such authority for wartime. The law requires that at least 12 weeks of predeployment training be provided to inductees. This requirement could significantly limit the potential usefulness of the Selective Service process in overcoming early in-theater shortages. With the potential for shortages of surgeons and skilled medical technicians, a specialty draft, if properly planned, may be an effective means to overcome critical early shortages.

Some planning alternatives available to DOD could be beneficial in overcoming shortages of medical personnel after mobilization, including prearrangements

-- with civilian medical professionals for immediate assistance,

-- for interservice assignment of medical personnel, and

-- with HHS for assignment of PHS officers that could be committed for mobilization support.

These alternatives should be considered together with establishing the level of support to be obtained from VA and CMCHS.

Army medical personnel are not receiving adequate training to perform combat support missions. Requirements for training are unclear, and many obstacles hamper improvement of training. Under
present Army training programs, a substantial number of enlisted medical personnel are unable to pass basic skills qualification tests in their medical specialty. Enough in-hospital clinical skills training and combat-related field training are not being provided.

Medical personnel skills training needs to be given a higher priority by both Army hospital and unit commanders, and a system should be developed to ensure that clinical skills training is being accomplished. The current practice which allows post support duties to reduce the amount of in-hospital training given field unit personnel is one area where military priorities should be modified. The Army's in-hospital training of medical personnel in combat-related clinical skills could be improved through

--adopting uniform criteria for the frequency and duration of training to be given in hospitals,

--increasing in-hospital training for field unit personnel located within commuting distance of military hospitals,

--providing needed skills training programs for field staff on loan to hospitals, and

--structuring in-hospital training programs to provide broad exposure to needed skills training.

Army requirements that in-hospital medical personnel receive 3 days of field training annually are generally not being met, and these programs have no specific structure. Although new training initiatives have been undertaken that can potentially improve combat-related field training for all of the services, it will be many years before all eligible personnel can be reached. These initiatives focus primarily on physicians, with limited coverage of other officers and enlisted personnel. Without increased emphasis and expanded coverage, the chances of improving combat medical skills will be limited.

RECOMMENDATIONS TO THE SECRETARY OF DEFENSE

To improve medical mobilization planning, particularly with respect to estimating postmobilization personnel requirements, we recommend that the Secretary of Defense direct the services to:

--Develop consistent estimates of near-term medical personnel requirements based on total needs and needs as constrained by available military facilities. The estimates of constrained personnel requirements should be developed together with complete assessments of the availability of other medical resources, such as hospital beds, equipment, and logistic support.
--Develop a consistent and systematic method to estimate the rate at which reserve medical personnel can be expected to report for duty after mobilization.

--Periodically report their requirements estimates to DOD medical mobilization planners for developing overall medical mobilization plans.

To improve DOD's posture with respect to precluding postmobilization shortages in critical health personnel categories, we recommend that the Secretary

--identify and implement specific initiatives to recruit and retain nurses while continuing its initiatives to recruit and retain physicians and

--develop specific plans to meet DOD's early postmobilization requirements for (1) surgeons and other surgical personnel in-theater and (2) medical personnel in military-unique specialties.

To improve DOD's capability to overcome postmobilization shortages, we recommend that the Secretary plan for near-term contingencies by evaluating alternatives for overcoming postmobilization medical personnel shortages which could occur before Selective Service inductees report and are trained for military duty. For example, the Secretary should

--obtain advance agreements with civilian medical personnel to fill key hospital shortages,

--make prearrangements for interservice assignments, and

--make arrangements to use those PHS officers the Secretary of HHS determines could be committed to DOD.

To improve the level of clinical and combat-related skills among Army medical personnel, we recommend that the Secretary of Defense require the Army to

--establish firm criteria for the frequency and duration of in-hospital training to be given to field unit personnel,

--increase in-hospital training programs for field unit personnel located within short distances of military hospitals,

--provide needed clinical skills training programs to field personnel on loan to hospitals,

--structure in-hospital training programs to provide exposure to the full range of needed skills,
--develop a system for monitoring both clinical and combat-related training to insure that they are given a high priority and are effectively accomplished, and

--provide guidance to unit and hospital commanders giving increased priority to medical readiness training.

We further recommend that the Secretary

--ascertain the extent to which courses, such as the recently developed triservice Combat Casualty Care Course, should be expanded to provide training to medical personnel not now eligible and assure that such training is provided to all appropriate categories of military medical personnel and

--evaluate the applicability of our recommendations regarding the Army's medical personnel training programs to the programs of the other services and, where appropriate, assure that the other services take steps to implement them.

RECOMMENDATIONS TO THE
SECRETARY OF DEFENSE AND THE
DIRECTOR, SELECTIVE SERVICE SYSTEM

We recommend that the Secretary of Defense and the Director of the Selective Service System jointly develop provisions to be included in a standby legislative proposal for a postmobilization draft of medical personnel and submit the proposal to the Congress as soon as possible. The development of such legislation will require resolution of already surfaced issues relating to whether

--preregistration of civilian medical personnel would significantly increase the usefulness of the Selective Service System in overcoming early shortages,

--doctors and other medical professionals could be inducted by specialty, and

--training requirements could be reduced to allow earlier overseas deployment of medical inductees without adversely affecting individual performance and safety.

The development of this legislative proposal should also be coordinated with the Director, FEMA, because of FEMA's planning responsibilities for mobilization of civilian personnel and other resources.

RECOMMENDATION TO THE
SECRETARY OF HHS

Since it is HHS' responsibility to ascertain the extent to which civilian medical resources will be needed in the civilian
sector during mobilization, we recommend that the Secretary as-
certain the extent to which (1) civilian medical personnel will
be required and available in the civilian sector during mobiliza-
tion and (2) DOD can rely on civilian medical personnel as it plans
its mobilization efforts. This assessment should include HHS' de-
definition of PHS' mobilization mission and the extent to which
PHS medical officers are needed to carry it out. HHS' activities
should be closely coordinated with those of FEMA which is charged
with planning for the use of all types of civilian resources in
the event of mobilization.

AGENCIES' COMMENTS AND OUR EVALUATION

We requested comments on a draft of this report from DOD, HHS,
Selective Service, and FEMA. DOD provided oral comments. We re-
ceived written comments from the other agencies.

DOD comments

DOD officials concurred with our conclusions and recommenda-
tions. They offered some suggestions for clarifying or expanding
the report. These suggestions have been incorporated in appro-
priate sections of the report.

They also pointed out several actions DOD has taken to address
problems identified in this report and commented specifically on
two of our recommendations. They noted that, to allow DOD to prop-
erly plan to use PHS officers, HHS must inform DOD of the number
and specialty mix of those PHS officers that could be committed
and of when, after mobilization begins, they would be available.
DOD officials also stated they have already evaluated the appli-
cability of our recommendations concerning the Army's medical per-
sonnel training program and decided that they should apply to all
services.

HHS comments

In a letter dated May 4, 1981, HHS' Acting Inspector General
(see app. IX) stated that HHS generally agreed with our conclusions
and recommendations. With respect to our recommendation that HHS
determine the number of PHS officers that could be committed to DOD,
he said that by September 1981 PHS should have completed identify-
ing the mobilization needs of HHS components and should be able to
identify the number of PHS officers that could be committed to DOD.
However, HHS believes that PHS offers little potential to help meet
early DOD needs because of PHS' own wartime mission.

We recognize there are limits to PHS' potential to assist DOD.
However, because of the Corps' unique position as a pool of trained,
quickly obtainable personnel who could be assigned wherever most
needed, we believe it should be seriously considered as a potential
source of personnel to help overcome early DOD shortages. We sup-
port PHS' efforts to assess its mobilization needs and recommend
these be coordinated through FEMA to assure national priorities,
both civilian and military, are considered when planning the ex-
tent to which PHS officers could be assigned, even temporarily,
to DOD during wartime.

HHS also pointed out that the administration is considering
reducing or eliminating the PHS Corps and closing PHS hospitals.
If such actions are taken, the potential of the Corps as a mobili-
ization resource for DOD would have to be reassessed.

HHS made several other suggestions for expanding our recom-
mendations. HHS stated that the contents of DOD's personnel esti-
mating model should be made available to HHS to allow cross-agency
comparisons of estimative techniques. As we noted on page 24, HHS,
DOD, and other appropriate agencies need to reach agreement on the
content and format of data to be provided to HHS to allow meaning-
ful estimates of medical personnel requirements. The extent to
which each agency needs access to estimating techniques and as-
sumptions of others should be discussed among agencies and coor-
dinated with FEMA in its role as coordinator and adjudicator. We
do not believe all progress toward a national needs assessment
should be halted pending agreement on this issue.

HHS also suggested that FEMA, HHS, and VA be included in
DOD and Selective Service deliberations concerning a health per-
sonnel draft. We recognize that all of these agencies will be
involved in mobilizing health personnel. We have recommended that
DOD and Selective Service coordinate with FEMA on this issue and
believe that, through FEMA, all other appropriate agencies should
be included.

Selective Service comments

In a letter dated May 13, 1981 (see app. X), the Director of
the Selective Service System stated that he concurred with our
findings and recommendations as they relate to the Service. He
said DOD and Selective Service are making progress in developing
the standby legislation for a health personnel draft and that the
approach being developed is in accordance with that recommended in
our report.

He said that the legislative proposal and a plan for imple-
menting it should be completed by February 1982 and that he intends
to submit the legislation to the Congress after it is coordinated
with FEMA, other Federal agencies, and the medical community.
In a letter dated May 8, 1981 (see app. XI), the Acting Director of FEMA agreed with our conclusions and recommendations. He stated that, in order to coordinate and plan for the allocation of civil medical personnel, FEMA will need (1) reliable estimates from DOD on how civil personnel should be used to meet both civil and military commitments, (2) information from the Selective Service System concerning the steps it must take to meet DOD requirements and the anticipated rate of withdrawal of civilian medical personnel, and (3) data from HHS on the availability of civilian medical personnel and PHS officers to meet civil and military needs.

The Acting Director stated that DOD, the Selective Service, HHS, and FEMA were actively developing a legislative proposal for a health personnel draft. He said the agencies were still studying whether the proposal should be submitted for congressional approval before a contingency arises or, as in prior mobilizations, when an emergency arises. We believe that, considering the short warning in some current wartime scenarios and the urgency with which medical personnel shortages may occur, prior approval by the Congress offers greater potential to allow efficient and rapid initiation of a draft when mobilization begins. As stated above, the Director of the Selective Service System said he intends to submit the proposal to the Congress after it has been coordinated with other agencies and the medical community.
HOSPITALS AND FIELD UNITS
INCLUDED IN THE REVIEW

CONUS

34th Medical Battalion, Ft. Benning, Georgia
85th Medical Battalion, Ft. Meade, Maryland

Kenner Army Community Hospital, Ft. Lee, Virginia
Kimbrough Army Community Hospital, Ft. Meade, Maryland
Brook Army Medical Center, Ft. Sam Houston, Texas
Walter Reed Army Medical Center, Washington, D.C.

EUROPE

47th Medical Battalion, Nuremberg, Germany
3rd Medical Battalion, Wurzburg, Germany
8th Medical Battalion, Bad Kreuznach, Germany
45th Medical Battalion, Frankfurt, Germany

2nd General Hospital, Landstuhl, Germany
97th General Hospital, Frankfurt, Germany
U.S. Army Hospital, Nuremberg, Germany
## ESTIMATED MEDICAL PERSONNEL SHORTAGES

AS COMPARED TO TOTAL WARTIME REQUIREMENTS (note a)

<table>
<thead>
<tr>
<th></th>
<th>Army</th>
<th>Navy (note b)</th>
<th>Air Force</th>
<th>DOD-total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Num-Per-</td>
<td>Num-Per-</td>
<td>Num-Per-</td>
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<td>ber short</td>
<td>ber short</td>
<td>ber short</td>
<td>ber short</td>
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<tr>
<td>Physicians</td>
<td>12,134  65</td>
<td>1,886  31</td>
<td>2,282  31</td>
<td>16,302  51</td>
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<tr>
<td>Nurses</td>
<td>23,984  75</td>
<td>3,548  55</td>
<td>4,739  43</td>
<td>32,271  65</td>
</tr>
<tr>
<td>Dentists</td>
<td>1,768  35</td>
<td>(c)</td>
<td>(589)  (44)</td>
<td></td>
</tr>
<tr>
<td>Veterinarians</td>
<td>147  21</td>
<td>(e)</td>
<td>256  57</td>
<td>403  36</td>
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<tr>
<td>Medical administrators</td>
<td>3,292  26</td>
<td>832  28</td>
<td>872  35</td>
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<td>Other medical officers</td>
<td>2,335  64</td>
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<td>895  35</td>
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<td>Enlisted personnel</td>
<td>88,399 55</td>
<td>12,228 32</td>
<td>33,031 46</td>
<td>133,658 49</td>
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<tr>
<td>Total</td>
<td>132,059 56</td>
<td>18,494 34</td>
<td>41,486 42</td>
<td>d/192,039 50</td>
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</table>

a/ The data shown in this table were prepared between October 1979 and February 1980 by each service under general guidance from DOD. The data, according to DOD, represent the best available estimates at the time they were made and represent useful estimates of medical personnel shortages. As discussed in chapter 2 of the report, however, because of weaknesses in current estimating procedures and differences in the services' reporting methods, these data should be considered with caution.

b/ The Navy did not report personnel resources in the Individual Ready Reserve, Standby Reserve, or retiree categories. As shown on page 5, without adjusting for anticipated yield rates, there are approximately 16,000 officers and enlisted personnel in these categories.

c/ Not provided.

d/ This total does not include Navy dentists.

e/ Not applicable.
### SPECIALTIES SHORT 50 PERCENT OR MORE AS COMPARED TO TOTAL ESTIMATED WARTIME REQUIREMENTS (note a)

<table>
<thead>
<tr>
<th>Physician specialty</th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
</tr>
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<tbody>
<tr>
<td>Pathology</td>
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<td>Radiology</td>
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<td>Surgery</td>
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<td>Urology</td>
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<td>Anesthesiology</td>
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<tr>
<td>Physical medicine</td>
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<tr>
<td>Ophthalmology</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ear, nose, and throat</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Preventive and occupational medicine</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Neurology</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nurse specialty</th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating room</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Anesthetic</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Medical-surgical</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrator</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flight</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Others (note b)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enlisted specialty</th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>repairer</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthotics and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>orthopedics</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Dental laboratory</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optical laboratory</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient administra-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tion</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical supply</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical corpsman</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Operating room</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Dental</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental care</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Occupational and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>physical therapy</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
### Enlisted Specialty

<table>
<thead>
<tr>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiopulmonary laboratory</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X-Ray</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Ear, nose, and throat</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Eye</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Medical laboratory</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Hospital food service</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

---

**APPENDIX III**

This table is based on data prepared by the services between October 1979 and February 1980. (See notes a and b in app. II.)

b/Includes students and many specialties for which the Navy did not provide specific data, such as clinical specialist nurse, outpatient care nurse, charge nurse, nursing service administrator, and staff nurse.
## COMPARISON OF DOD PEACETIME AUTHORIZATIONS AND TOTAL ESTIMATED WARTIME MEDICAL PERSONNEL REQUIREMENTS (note a)

<table>
<thead>
<tr>
<th></th>
<th>Army</th>
<th>Air Force</th>
<th>Navy</th>
<th>DOD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Re-</td>
<td>Auth-</td>
<td>Re-</td>
<td>Auth-</td>
</tr>
<tr>
<td></td>
<td>quired</td>
<td>orized</td>
<td>quired</td>
<td>orized</td>
</tr>
<tr>
<td>Officer</td>
<td>71,783</td>
<td>31,726</td>
<td>63</td>
<td>b/15,412</td>
</tr>
<tr>
<td>Enlisted</td>
<td>161,939</td>
<td>84,865</td>
<td>45</td>
<td>53,817</td>
</tr>
<tr>
<td></td>
<td>233,722</td>
<td>116,591</td>
<td>50</td>
<td>96,971</td>
</tr>
</tbody>
</table>

## COMPARISON OF ARMY MEDICAL DEPARTMENT OFFICER CORPS

### PEACETIME AUTHORIZATIONS AND TOTAL ESTIMATED WARTIME REQUIREMENTS (note a)

<table>
<thead>
<tr>
<th>Medical Corps</th>
<th>Required</th>
<th>Authorized</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Corps</td>
<td>18,740</td>
<td>9,024</td>
<td>48</td>
</tr>
<tr>
<td>Dental Corps</td>
<td>5,099</td>
<td>3,029</td>
<td>59</td>
</tr>
<tr>
<td>Nurse Corps</td>
<td>31,812</td>
<td>10,138</td>
<td>32</td>
</tr>
<tr>
<td>Veterinary Corps</td>
<td>685</td>
<td>505</td>
<td>74</td>
</tr>
<tr>
<td>Medical Service Corps</td>
<td>12,541</td>
<td>8,057</td>
<td>64</td>
</tr>
<tr>
<td>Medical Specialist Corps</td>
<td>2,906</td>
<td>973</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>71,783</td>
<td>31,726</td>
<td>44</td>
</tr>
</tbody>
</table>

*a/Requirements are based on data prepared by the services between October 1979 and February 1980. (See note a in app. II.) Authorizations are for active duty and Selective Reserve personnel for fiscal year 1980.

*b/Does not include dentists.
## REDUCTION IN ESTIMATED WARTIME REQUIREMENTS FOR

**SELECTED MEDICAL PERSONNEL IF CONSTRAINED BY AVAILABLE MEDICAL FACILITIES** (note a)

<table>
<thead>
<tr>
<th>Personnel category</th>
<th>Percent reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARMY:</strong></td>
<td></td>
</tr>
<tr>
<td>General surgeons</td>
<td>18</td>
</tr>
<tr>
<td>Internists</td>
<td>43</td>
</tr>
<tr>
<td>Orthopedic surgeons</td>
<td>50</td>
</tr>
<tr>
<td>General medical officers</td>
<td>38</td>
</tr>
<tr>
<td>Anesthesiologists</td>
<td>47</td>
</tr>
<tr>
<td>Medical-surgical nurses</td>
<td>45</td>
</tr>
<tr>
<td>Clinical nurses</td>
<td>36</td>
</tr>
<tr>
<td>Operating room nurses</td>
<td>37</td>
</tr>
<tr>
<td>Nurse anesthetists</td>
<td>37</td>
</tr>
<tr>
<td>Nurse administrators</td>
<td>35</td>
</tr>
<tr>
<td>Clinical specialists</td>
<td>35</td>
</tr>
<tr>
<td>Medical laboratory specialists</td>
<td>35</td>
</tr>
<tr>
<td>Operating room specialists</td>
<td>30</td>
</tr>
<tr>
<td>Hospital food service specialists</td>
<td>34</td>
</tr>
<tr>
<td>Patient administration specialists</td>
<td>39</td>
</tr>
<tr>
<td><strong>AIR FORCE:</strong></td>
<td></td>
</tr>
<tr>
<td>Physicians</td>
<td>37</td>
</tr>
<tr>
<td>Nurses</td>
<td>47</td>
</tr>
<tr>
<td>Enlisted</td>
<td>54</td>
</tr>
<tr>
<td><strong>NAVY:</strong></td>
<td></td>
</tr>
<tr>
<td>Physicians</td>
<td>34</td>
</tr>
<tr>
<td>Nurses</td>
<td>34</td>
</tr>
<tr>
<td>Enlisted</td>
<td>23</td>
</tr>
</tbody>
</table>

a/This table is based on data which were provided by the services to the Office of the Assistant Secretary of Defense for Health Affairs in August 1980 and were the best available at the time. The data were prepared to identify potential requirements from the Selective Service System (see p. 17). However, as discussed in chapter 2, because of weaknesses in the services' estimating and reporting procedures these data should be used with caution.

Army data included only specialties in which shortages were expected to occur, and for which pre-trained medical personnel were considered to exist. Therefore, no totals could be calculated for each Army personnel category. This table is not a complete analysis of requirements reductions but includes some of the most significant shortage specialties and categories.
### ESTIMATED MEDICAL PERSONNEL OVERAGES AND SHORTAGES AS COMPARED TO CONSTRAINED WARTIME REQUIREMENTS FOR SELECTED PERSONNEL SPECIALTIES AND CATEGORIES (note a)

<table>
<thead>
<tr>
<th>Army</th>
<th>Number short</th>
<th>Percent short</th>
</tr>
</thead>
<tbody>
<tr>
<td>General surgeons</td>
<td>1,413</td>
<td>64</td>
</tr>
<tr>
<td>Internists</td>
<td>749</td>
<td>38</td>
</tr>
<tr>
<td>Orthopedic surgeons</td>
<td>683</td>
<td>73</td>
</tr>
<tr>
<td>General medical officers</td>
<td>41</td>
<td>2</td>
</tr>
<tr>
<td>Anesthesiologists</td>
<td>202</td>
<td>61</td>
</tr>
<tr>
<td>Medical-surgical nurses</td>
<td>6,257</td>
<td>58</td>
</tr>
<tr>
<td>Clinical nurses</td>
<td>2,154</td>
<td>66</td>
</tr>
<tr>
<td>Operating room nurses</td>
<td>1,037</td>
<td>60</td>
</tr>
<tr>
<td>Nurse anesthetists</td>
<td>849</td>
<td>64</td>
</tr>
<tr>
<td>Nurse administrators</td>
<td>286</td>
<td>55</td>
</tr>
<tr>
<td>Clinical specialists</td>
<td>6,941</td>
<td>36</td>
</tr>
<tr>
<td>Medical laboratory specialists</td>
<td>2,156</td>
<td>37</td>
</tr>
<tr>
<td>Operating room specialists</td>
<td>2,168</td>
<td>38</td>
</tr>
<tr>
<td>Hospital food service specialists</td>
<td>1,783</td>
<td>45</td>
</tr>
<tr>
<td>Patient administration specialists</td>
<td>730</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Net overage or shortage</th>
<th>Gross overage</th>
<th>Gross shortage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Force</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physicians</td>
<td>1,423</td>
<td>1,332</td>
</tr>
<tr>
<td>Nurses</td>
<td>1,512</td>
<td>749</td>
</tr>
<tr>
<td>Enlisted</td>
<td>4,684</td>
<td>1,623</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Net overage or shortage</th>
<th>Gross overage</th>
<th>Gross shortage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physicians</td>
<td>1,149</td>
<td>1,198</td>
</tr>
<tr>
<td>Nurses</td>
<td>(b)</td>
<td>(b)</td>
</tr>
<tr>
<td>Enlisted</td>
<td>(b)</td>
<td>(b)</td>
</tr>
</tbody>
</table>

a/This table is based on data which were provided by the services to the Office of the Assistant Secretary of Defense for Health Affairs in August 1980. Army data included only specialties in which shortages occur, so no total by Army personnel category and no net shortage could be calculated. This table is not a complete analysis of shortages, but includes some of the most significant shortage specialties and categories. (See note a in app. V and note b in app. II.)

b/Not provided.
### APPENDIX VII

**SKILLS QUALIFICATION TEST RESULTS FOR**

**SELECTED SPECIALTIES—FISCAL YEAR 1980**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Skill level</th>
<th>Active</th>
<th>Reserves (note a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number tested</td>
<td>Number tested</td>
</tr>
<tr>
<td><strong>91B Medical specialist</strong></td>
<td>1</td>
<td>3,754</td>
<td>1,278</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2,666</td>
<td>1,312</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1,164</td>
<td>509</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>787</td>
<td>(b)</td>
</tr>
<tr>
<td><strong>91C Clinical specialist</strong></td>
<td>1</td>
<td>1,167</td>
<td>146</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>904</td>
<td>326</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1,096</td>
<td>391</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>963</td>
<td>(b)</td>
</tr>
<tr>
<td><strong>91D Operating room specialist</strong></td>
<td>1</td>
<td>359</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>238</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>232</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>106</td>
<td>(b)</td>
</tr>
<tr>
<td><strong>92B Medical laboratory specialist</strong></td>
<td>1</td>
<td>459</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>174</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>188</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>180</td>
<td>(b)</td>
</tr>
</tbody>
</table>

*a/Includes Reserve and National Guard personnel tested.

b/No personnel were tested at this skill level.*
SKILLS QUALIFICATION TEST TASKS FAILED BY
AT LEAST 50 PERCENT TESTED IN FOUR COMMANDS

91B Medical specialist (47 tasks tested)

- Determine patient categories for aeromedical evacuation
- Apply dressing to a head wound
- Perform medical sorting (triage)
- Apply heat application to patient
- Assist patient with postural drainage
- Disinfect a 36-gallon water purification bag
- Set up and maintain a human waste disposal facility
- Load, reduce stoppage, unload and clear M16 Al Rifle
- Initiate U.S. field medical card

91C Clinical specialist (45 tasks tested)

- Emergency medical care for chemical agent casualty
- Perform medical sorting (triage)
- Irrigate colostomy
- Apply heat applications to patient
- Perform Foley catheter care
- Set up isolette for use
- Bandage a patient with knee amputation
- Disinfect a 36-gallon water purification bag
- Set up and maintain human waste disposal facility
- Administer oxygen therapy by oxygen (simple) mask
- Apply Bryant's traction
- Initiate U.S. field medical card

91D Operating room specialist (69 tasks tested)

- Perform head draping procedures
- Perform orthopedic extremity draping procedures
- Prepare patient for administration of anesthesia
- Place patient in Trendelenburg position
- Fabricate extremity plaster splints
- Perform cardiopulmonary resuscitation
- Prepare surgical instruments for sterilization
- Prepare rubber goods for sterilization
- Sterilize materials
- Prepare medication for administration
- Remove sutures
- Perform terminal cleaning of operating room suites
- Prepare special procedure needles for sterilization
- Administer emergency medical care to a chemical agent casualty
- Issue equipment and sterile supplies
- Prepare bone for storage in bone bank
- Disinfect a 36-gallon bag of water
92B Medical laboratory specialist (55 tasks tested)

- Take a donor's medical history
- Disinfect a 36-gallon bag of water
- Perform direct antiglobulin test
- Perform urea nitrogen determination
- Set up and maintain human waste disposal facilities
4 MAY 1981

Mr. Gregory J. Ahart
Director, Human Resources Division
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Ahart:

The Secretary asked that I respond to your request for our comments on your draft report entitled, "Will There Be Enough Trained Medical Personnel in Case of War?" The enclosed comments represent the tentative position of the Department and are subject to reevaluation when the final version of this report is received.

We appreciate the opportunity to comment on this draft report before its publication.

Sincerely yours,

Bryan B. Mitchell
Acting Inspector General

Enclosure
COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES
ON THE COMPTROLLER GENERAL'S DRAFT REPORT,
"WILL THERE BE ENOUGH TRAINED MEDICAL PERSONNEL IN
CASE OF WAR"

General Comments

Due to the expansion of health manpower training programs, severe shortages of physicians and other health personnel which existed during past mobilizations for conventional war are not expected to occur in the future. The supply of health manpower should meet both military and civilian mobilization requirements barring nuclear attack on the U.S.

The report however correctly identifies the lack of a system for rapid mobilization of health manpower and the need to estimate the time required to mobilize and deploy personnel. The country cannot, during peacetime, maintain levels of military staffing equal to those needed during war so the focus of planning must be (1) on the location and identification of medical personnel in terms of their skills and (2) on the design of mobilization plans. Additionally, it needs to be determined what kind and how much specific military training medical personnel will need, if any, in such a situation.

The report also correctly identifies the need for DOD to estimate military requirements for health personnel more precisely and for DHHS subsequently to assess the probable impact on the civilian sector.

GAO Recommendation

Since it is DHHS' responsibility to ascertain the extent to which civilian medical resources will be needed in the civilian sector during mobilization, we recommend that the Secretary ascertain the extent to which (1) civilian medical personnel will be required and available in the civilian sector during mobilization, and (2) DOD can rely on civilian medical personnel as it plans its mobilization mission and the extent to which PHS medical officers are needed to carry it out. DHHS' activities should be closely coordinated with those of FEMA which is charged with planning for the use of all types of civilian resources in the event of mobilization.

Department Comment

We concur that DHHS should ascertain the extent to which (1) civilian medical personnel will be required and available in the civilian sector during mobilization, and (2) DOD can rely on civilian medical personnel in planning its mobilization efforts.
PBS is presently identifying the mobilization needs of DHHS components in light of the anticipated mission expansion and workload increases which we would encounter in time of war. This task should be completed by the end of this Fiscal Year and should allow us to estimate how many, if any, PHS Commissioned Officers can be committed to DOD.

However, even though we concur with the specific recommendation, we believe the overall contention that PHS can serve as a reserve pool with special potential to help meet early DOD shortages is invalid for the following reasons.

EO 11490 assigns to the Secretary the responsibility to manage the civil sector health resources. This includes assuring that adequate medical care capability exists in the civil sector after allocation of health resources to DOD. DOD currently plans to hospitalize a significant proportion of its casualties in civilian hospitals in accordance with the provisions of the Civilian-Military Contingency Hospital System (CMCHS). While we have supported the development of CMCHS, we still must consider that such a system would create somewhat of a drain on the civil sector. If a draft of health professionals occurred, the supply of health professionals in the civil sector would be reduced. DOD's activation of the reserves and its diminution of support to its U.S. medical facilities would concurrently shrink the supply of health professionals in the civil sector while forcing DOD retirees and dependents into the civilian health care system.

Increased PHS support for the Coast Guard and the maritime industry are anticipated as the result of their respective mobilization missions. PHS resources will also be required to support the Department's emergency repatriation program. This would require PHS to place medical teams at reception points for our citizens returning from overseas. Lastly, we anticipate increased requirements for medical surveillance as the result of the potential for chemical/biological sabotage and other terrorist activities associated with war.

All of the above factors lead us to believe that PHS' mission and workload will increase to the extent that we will be an unlikely source of health professionals for DOD. However, we will continue to work with DOD, FEMA, and others to assist in resolving health personnel supply problems.
In addition, it should be noted that the Administration is considering two proposals which could most significantly affect PHS' ability to provide health services during an emergency: (1) reducing or eliminating the Commissioned Corps, and (2) closing the PHS hospitals.

**Technical Comments**

It is stated that DOD is in the process of developing a model for medical readiness planning which would provide a uniform method of preparing medical personnel requirements. We believe that such a model should certainly be applied across DOD; however, its contents should also be shared with PHS so that we can compare DOD's estimative techniques with our own and those of our other claimants such as the VA.

We suggest that the report be revised to recommend that FEMA, DHHS, and VA be included in DOD/Selective Service System deliberations on the issue of a draft of health personnel. We also suggest that the report recommend that these Departments and agencies together explore alternatives to a draft such as additional incentives and improved methods of recruitment and training for health personnel in both active and reserve military forces.

We suggest that sections (1) and (2) of page iv be reworded as follows:

(1) only standby legislation to register and induct medical personnel exists, as was the case also in past wars,

(2) a need for Federal planners in DOD, Selective Service System, DHHS, VA and FEMA to revise the standby legislation.

Also, on page 41 the second sentence of the second paragraph should be reworded as follows:

Members of the recognized health professions can be readily identified but persons in less well-defined skill groups and occupations would be difficult to identify as a potential draft pool. Standby draft legislation regulations and procedures need to be revised after DOD more precisely identifies its requirements for health professionals and paraprofessionals.

**GAO note:** Page reference may not correspond to page number in the final report.
Mr. Clifford I. Gould, Director
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Gould:

We have reviewed your draft report, "Will There Be Enough Trained Medical Personnel In Case of War?" I concur in your findings as they pertain to the Selective Service System. I also agree with your recommendations as they apply to this Agency.

As you may know, we work closely with Dr. John Moxley, Assistant Secretary of Defense for Health Affairs, and members of his staff on issues relating to the mobilization of health and medical personnel in a national emergency. We agree on an approach to resolving many of the problems involved in this important area. Our approach, details of which are still being developed, is consistent with the recommendations of your draft report.

Continuing to work closely with representatives of the Department of Defense, we expect to complete the development of a standby legislative proposal for a post-mobilization draft of medical personnel as well as a comprehensive plan for the implementation of that draft by February 1982.

My intention is to submit the proposed legislation to the Congress at the proper time for enactment after coordinating it with FEMA, other selected federal agencies and the medical community.

Again let me express my thanks for the opportunity to review this report.

Sincerely,

Bernard Rostker
Director
Mr. Henry Eschwege  
Director  
Community and Economic Development Division  
General Accounting Office  
Washington, D.C. 20548

Dear Mr. Eschwege:

Thank you for the opportunity to comment on your draft report, "Will There be Enough Trained Medical Personnel in Case of War?" HRD-81-67.

The Federal Emergency Management Agency (FEMA) is responsible for the coordination of, and policy determination for, plans and programs for emergency health services and management of health resources. One principal role in preparing for war is to coordinate plans for the allocation of national health resources, particularly for the utilization of trained medical personnel between military and civilian users.

Our primary national concern is to develop a capability to provide emergency health personnel and to effectively manage and restore health resources through an equitable distribution between military and civilian users.

We agree that the numbers and types of medical personnel in the military active duty and reserve forces fall short of projected personnel requirements for current worst case wartime planning scenarios. We feel that combat casualty care training for medical personnel has been inadequate and could jeopardize the performance of some wartime missions.

We agree with your report that the civil sector has sufficient medical personnel to augment most anticipated military shortfalls. The principal wartime problem which still needs to be resolved concerns availability and distribution of portions of the health personnel pool for war-related service. For example, we agree that Department of Health & Human Services (DHHS), Selective Service System (SSS) and DOD should authenticate numbers and types of medical personnel on active duty and in the reserve forces needed for the projected worst case scenario.
Further high priority steps should be taken to train health personnel in combat casualty care. We agree that many of the skills needed to perform wartime missions effectively are not available in the military health profession. In time of war, these skills should also be acquired by civil health professionals as well. War theatre operations will be particularly short of physicians, nurses, and enlisted medical and surgical personnel since no pretrained pool exists in the civilian sector to service this requirement.

We agree that in order for FEMA to coordinate and plan for the allocation of civil medical personnel, it will need reliable estimates from DOD on how civil medical personnel should be used to meet both civil and military commitments in a post-mobilization situation.

We agree with your report that a substantial portion of health professionals would come from the Veterans Administration and civil hospitals under the Civilian Military Contingency Hospital System (CMCHS).

SSS will also need to indicate to FEMA the steps it must take to provide DOD with medical personnel and the rate of withdrawal of civilian medical personnel it can normally assure the services after M-day. We agree that specific steps need to be taken to assure the standby legal authority to register and induct physicians and allied health personnel, taking into consideration the statutory requirement for 12 weeks of training prior to an overseas assignment.

DOD must continue to prearrange interservice assignments with civilian medical personnel, taking into consideration the continuing requirements for DHHS to maintain a maximum acceptable health care system for the civil population.

DOD utilization of PHS personnel for mobilization support could be jeopardized if current proposals to limit the PHS medical care program are carried out. Although the CMCHS is expected to be operative by 1982, it is still anticipated that DOD will need to provide wartime skills training to participating health professionals. This training should be in both hospital and combat related clinical skills.

The GAO recommendation to develop a legislative proposal for a post-mobilization draft of medical personnel is currently under active review by DOD, DHHS, SSS, and FEMA, and this interagency effort is taking into consideration the issues raised by your report. The Government position in previous mobilizations was to have available draft legislation ready for submission to Congress. The current need for Congressionally approved, prepositioned legislation is under study.
FEMA also supports the need for a DHHS detailed assessment of:

- Availability of civilian medical personnel for assignment in the civil sector in the event of a mobilization.
- Availability of civilian medical personnel for assignment to DOD in the event of a mobilization.
- PHS's mobilization mission and the utilization of PHS medical officers.

FEMA will utilize this information in order to evaluate the impact on the civil sector of military requirements and to provide an effective accounting of essential civil needs well in advance of any attempt to allocate medical resources.

FEMA will continue to develop and provide appropriate guidance to DOD, DHHS and SSS and will work closely with them to expand emergency planning for health personnel to meet the worst case wartime contingencies presently contemplated.

Sincerely yours,

John W. McConnell
Acting Director