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Report to Congressional Requesters

September 1988

DOD HEALTH CARE

Requirements for Emergency Services Adequate and Generally Attainable

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being implemented, we contacted officials and reviewed appropriate documents in the Office of the Assistant Secretary of Defense for Health Affairs, the offices of the services' Surgeons General, and at various other command levels. We also visited eight judgmentally selected military hospitals, at which we spoke to officials and reviewed pertinent records. Further details of our scope and methodology are discussed in appendix I. For a list of the military and civilian hospitals we visited, see appendixes II and III.

Results in Brief

Civilian experts agree that DOD's requirements in all five areas meet or exceed minimum civilian sector standards. Quality assurance programs were in place and significant progress was being made in two other areas—staffing and training. Staffing requirements are attainable, although the requirement for minimum physician experience may be subject to misinterpretation by hospital and command officials. Likewise, most training requirements can be met, with the exception of those for technician training and certification. DOD and service officials agree these may not be met by the directive's September 1989 deadline. At the time of our visits—which sometimes were before the hospitals' receipt of the services' instructions implementing the directive—hospitals had not implemented the requirements for treatment protocols, and six of the eight did not have written patient transfer agreements with nearby civilian hospitals. We are making several recommendations to help assure that DOD's requirements are clearly understood by hospital officials and effectively implemented.

Principal Findings

Physician Staffing

DOD's directive sets minimum experience requirements for emergency services physicians and specifies that at least one such physician be in the hospital at all times. These requirements exceed those of the Joint Commission on Accreditation of Healthcare Organizations. At the time of our visits, hospitals generally met these requirements.

However, the directive requires emergency room physicians to have, within the past 2 years, 1 year's experience in a primary or patient care specialty, such as internal medicine or family practice. This requirement may not have been met at two hospitals we visited and there was some confusion about what constitutes sufficient experience.

GAO

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Human Resources Division

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The Honorable Beverly B. Byron
Chairman, Subcommittee on Military
Personnel and Compensation
Committee on Armed Services
House of Representatives

The Honorable Daniel K. Inouye
United States Senate

The Honorable Claiborne Pell
United States Senate

The Honorable Jim Sasser
United States Senate

This report responds to your April and May 1987 requests concerning implementation of Department of Defense (DOD) Directive 6000.10, which sets forth minimum requirements for the provision of emergency care in military hospitals. Your requests were among a series in which you expressed concern about the quality of military health care and a desire that we continue to monitor DOD efforts to improve such care. Regarding the emergency services directive, your offices requested that we determine (1) how the requirements in the directive compare with standards in the civilian sector and (2) the status of and plans for its implementation.

Scope and Methodology

Our review focused on five key aspects of the directive that represent significant changes in DOD and service requirements. These requirements relate to (1) physician staffing, (2) staff training, (3) use of diagnostic and treatment protocols,[1] (4) written patient transfer agreements between military and civilian facilities, and (5) quality assurance programs.

We contacted several civilian medical professional organizations, such as the Joint Commission on Accreditation of Healthcare Organizations, and officials of two civilian multihospital systems to obtain information about civilian sector standards. To determine how the directive was

[1]The directive states that protocols should provide basic guidelines for the diagnostic and therapeutic measures that may be applied by health care providers whose primary expertise may not be in emergency care. It lists specific conditions, such as gunshot wounds and suspected child abuse, for which protocols should be developed.

instructed each facility to develop protocols reflecting national standards; no service-wide approach was intended. A DOD official said that because of the controversy around protocols, DOD had decided to allow each service to implement the requirement as it deemed necessary.

Written Transfer Agreements

DOD's directive requires each military hospital in the United States and overseas, where appropriate, to develop written working agreements with nearby civilian hospitals. Among other things, these agreements are to set forth requirements for patient transfers. DOD officials initially told us each hospital should have transfer agreements. However, DOD subsequently said that written agreements concerning transfers were appropriate in some cases, for example when the civilian hospital required it, but were not always necessary. Civilian organizations, including the American College of Emergency Physicians, support the usefulness of such agreements. Six of the eight hospitals did not have such agreements. Hospital officials told us that they did not believe such agreements are necessary and some told us they did not know what DOD intended for them to cover.

Quality Assurance Programs

All the hospitals we visited had emergency room quality assurance programs in place. We did not assess their effectiveness, but all included or (in one case) intended to include in the near future all the basic elements specified in the DOD directive.

Conclusions

DOD and service policies are directed to assuring quality of military emergency services. At the hospitals we visited, quality assurance programs that generally met the basic requirements of the directive were in place. Also, progress was being made in meeting both the staffing and training requirements.

DOD's staffing and training requirements exceed civilian sector requirements and we believe most can be met. However, DOD's requirements for minimum physician experience may be subject to misinterpretation. Further, technician training and certification requirements may not be met by the 1989 deadline in all Air Force and Army hospitals, in part because of limited hospital resources. Monitoring of hospitals' progress by DOD and the services would allow additional steps to be taken, if necessary, to meet this requirement.

Staff Training

DOD's directive sets forth requirements for certification of staff in three life-support training courses—basic life support, advanced cardiac life support, and advanced trauma life support. The requirements vary depending on the type of staff; for example, physician, nurse, or technician, and complexity of cases the emergency room is capable of handling. Hospital and service officials expect to meet requirements for training certification by September 1989, the deadline specified in the directive for cardiac and trauma life support. All of the services already require basic life-support certification, but hospitals we visited had not yet fully complied. They all expected to be in compliance by September 1989.

DOD's directive also requires that all technicians working in the emergency room or on ambulances have emergency medical technician-ambulance national certification; this course was developed by the Department of Transportation under authority of the Highway Safety Act of 1966. Navy officials expected to meet the requirement, again by the September 1989 deadline established by DOD. In contrast, an Air Force official told us that small and remote hospitals might have difficulty meeting the requirement for all technicians by the 1989 deadline. Army officials believed the requirement could be met for technicians who work on ambulances but not, by 1989, for those who work in the emergency room.

Diagnostic and Treatment Protocols

DOD's directive requires each service to develop or adopt service-wide emergency care protocols that reflect nationally standardized protocols or the equivalent. We found that no nationally standardized protocols exist. Representatives of the civilian organizations we contacted said that protocols could be useful. But their comments also indicated potential difficulties in developing service-wide protocols, noting that service-wide protocols might be too restrictive or too general to be of use. Service and hospital officials we contacted had varying opinions about the usefulness of protocols. While some said they were good quality assurance and training tools, others said physicians should be sufficiently trained so that protocols would not be necessary.

At the time of our work, the hospitals had not yet implemented the protocol requirement. The services' intended approaches were significantly different. The Air Force was developing service-wide protocols. The Navy originally intended to select a textbook to be used by all hospitals, but in July 1988 officials told us that, instead, they were working with the Air Force to develop service-wide protocols. The Army had

confusion we found. Finally, DOD said that written patient transfer agreements are not always necessary, and indicated that added guidance was not needed concerning such agreements. We continue to believe that additional guidance concerning physician qualifications, protocols, and written agreements would better assure the directive's implementation.

We are sending copies of this report to the Secretary of Defense; the Director, Office of Management and Budget; appropriate congressional committees; and other interested parties, and will make copies available to others on request.

Lawrence H. Thompson
Assistant Comptroller General

The usefulness of service-wide protocols in general, or of the services' different approaches, has not been demonstrated. Also, comments by hospital and service physicians concerning protocols indicate a need for further guidance and education concerning the intended purpose of such protocols, whatever their form, to better assure their appropriate use.

Requirements for written patient transfer agreements had not been implemented at most of the hospitals we visited. Comments by military hospital officials that such agreements are unnecessary and that they are unsure what the agreements should contain indicate the need for additional guidance.

Recommendations

To help assure more effective implementation of the directive at the hospital level, DOD and the services should further clarify

- what constitutes sufficient experience for physicians to serve in emergency rooms and
- the purpose of protocols and the purpose and content of written transfer agreements.

Also, the services' different approaches to implementing the protocol requirement should be assessed to determine whether they are effective, and hospitals' progress in meeting emergency room technician training requirements should be monitored. More information on the status of implementation and our conclusions and recommendations are included in appendix I.

Agency Comments

DOD generally concurred with our findings and noted that significant progress had been made in implementing the directive. (See app. IV.) DOD agreed with our recommendations concerning the need to monitor progress toward technician certification and evaluate the effectiveness of treatment protocols, and said that monitoring mechanisms are in place and that DOD and the services would monitor and evaluate these aspects of the directive's requirements.

DOD disagreed with our recommendations concerning clarifying certain sections of the directive. DOD stated, with regard to the directive's experience requirement, that the services provide consultative support to commanders when they are making decisions on whether physicians should be assigned emergency room duty. Also, DOD said that hospitals' experience with protocols over the next few years should clear up the

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Implementation of Department of Defense Emergency Medical Service Requirements and Comparability With the Civilian Sector

Responding to questions raised by military audit organizations,[1] the Department of Defense (DOD) held a triservice conference in November 1984 to address issues concerning the quality of emergency medical services in DOD emergency rooms. As a result of recommendations made at the conference, DOD issued directive 6000.10, in September 1986, to establish policies, prescribe procedures, and assign responsibilities for the administration and management of military hospital emergency rooms.

The following sections provide (1) background on DOD's emergency rooms; (2) a description of our objectives, scope, and methodology; and (3) a summary of information we developed on five key aspects of DOD Directive 6000.10.

Background

The three major military services operate 164 hospital emergency rooms, which provide services primarily to military beneficiaries.[2] During fiscal year 1986, the most recent year for which complete data were available, about 3.7 million people were treated in military hospital emergency rooms. According to military officials, 10 percent or fewer of these visits involved life- or limb-threatening emergencies.

The directive sets different requirements for emergency rooms based on their designated level of care. Each military hospital designates a level of care for its emergency room based on standards established by the Joint Commission on Accreditation of Healthcare Organizations (formerly the Joint Commission on Accreditation of Hospitals). The Joint Commission sets standards for emergency rooms at levels I through IV, with level I furnishing the most comprehensive services and capable of handling the most complex cases.[3] Differences in levels are determined by various factors, including the qualifications and availability of physicians on the medical staff, number of nurses in the emergency room, type of services supporting the emergency room, hospital operating room capability, and equipment. As shown in table I.1, most DOD emergency rooms are designated as level III facilities.

[1]Office of the Inspector General, DOD, Defense-Wide Audit of Medical Quality Assurance, June 10, 1985.

[2]Military members and—when space, staff, and other resources are available—dependents of active duty members, retirees, and dependents of retirees and of deceased members of the armed forces. Other civilians also may be cared for in emergencies.

[3]The DOD directive states that a hospital providing less than level III services shall not use the word "emergency" to advertise its medical services capability.

Abbreviations

DOD	Department of Defense
GAO	General Accounting Office

Naval Medical Command; Navy Southeast Regional Command; and U.S. Air Forces in Europe.

Because the services have delegated responsibility for meeting most of the directive's requirements to the hospitals, little information was available at service headquarters concerning the hospitals' plans or progress in doing so. Consequently, we relied on information obtained at the hospitals we visited for information on such matters as staff qualifications and training.

We judgmentally selected for review eight military hospital emergency rooms, primarily according to their level-of-care designations and hospital size (the number of beds). Because most military emergency rooms are level IIIs, we chose five level III emergency rooms in small hospitals with no more than 100 operating beds. We also reviewed three level II emergency rooms in hospitals with more than 100 operating beds. The emergency rooms we visited are listed in appendix II.

At these facilities, we examined pertinent documents concerning emergency room staffing and patient care. To determine the status of training certification, we reviewed credential files and training certificates, and interviewed responsible officials. We obtained staffing and training information for personnel assigned to the emergency rooms during April 1987, a month emergency room chiefs agreed was typical. To determine the plans for implementing the DOD directive, we interviewed each hospital commander and director of emergency medical services. Although at the time of our visits, emergency rooms at Fort Hood and Nuernberg Army Base had not yet received the Army's implementing document for the directive, officials at these facilities were able to discuss the potential for meeting the directive's requirements.

We also visited seven civilian hospitals located near the military facilities we visited in the United States (see app. III). At the civilian facilities, we discussed the adequacy of coordination of emergency medical services with the local military hospital. We also obtained general information on civilian hospital policies for and practices in operating emergency rooms.

Our audit work was done from April 1987 to March 1988, in accordance with generally accepted government auditing standards. Information obtained at the hospitals we visited is not projectable to other hospitals.

Table I.1: Number of Emergency Rooms at Each Level of Care, by Service

Level of care	Air Force	Army	Navy	Total
I	1	1	2	4
II	7	9	10	26
III	74	37	23	134
Total	**82**	**47**	**35**	**164**

Source: Offices of the services' Surgeons General.

Although by September 1986 each of the services had implemented some of the recommendations from the 1984 conference, the DOD directive required additional changes in service regulations. The directive allowed hospitals until September 1989 to meet some requirements for emergency room staffing and qualifications and training. Other requirements were effective at issuance. Implementing documents were issued by the Air Force on March 3, 1987; by the Navy on May 12, 1987; and by the Army on June 25, 1987.

Objectives, Scope, and Methodology

To determine how requirements in the DOD directive compared with standards in the civilian sector, we visited four professional medical associations: the American College of Emergency Physicians in Dallas and, in Chicago, the American College of Surgeons, the American Medical Association, and the Joint Commission on Accreditation of Healthcare Organizations. These four were chosen because our previous health care work and other organizations, such as the American Hospital Association, indicated that these professional associations have expertise and knowledge concerning civilian emergency room care. We also visited the headquarters of two centrally managed, civilian multihospital systems—Hospital Corporation of America in Nashville, and Humana, Inc., in Louisville. In discussions with officials of these organizations, we provided copies of DOD's directive or described its requirements and obtained the officials' opinions concerning how DOD's requirements compared with standards and practices in the civilian sector.

To determine the status of and plans for implementation of the DOD directive, we reviewed service directives and regulations and interviewed DOD and service officials to obtain information concerning the intent and proper interpretation of the directive and how its requirements differed from prior service requirements. We interviewed knowledgeable officials from the Office of the Assistant Secretary of Defense for Health Affairs; the offices of the services' Surgeons General; Army Health Services Command; Army Seventh Medical Command, Europe;

care is enhanced when a smaller group of physicians is assigned part-time emergency room duty.

Steps Toward Goal Being Taken

The hospitals we visited had a variety of emergency room staffing policies for physicians that generally met the directive's requirements. Hospitals were also taking steps to meet the goal of staffing emergency rooms with physicians who serve primarily in emergency medicine. Although not required to do so, some had assigned full-time emergency services physicians to one or more shifts; others had designated a group of physicians responsible for one or more shifts (e.g., weekdays) rather than periodically assigning all of the hospital's physicians to emergency duties during those hours. However, in two cases, according to a DOD official, the adequacy of the physicians' primary patient care experience was questionable.

Emergency rooms at the two Navy hospitals we visited were staffed with physicians who met the directive's experience requirements and were assigned to the emergency room on a full-time basis. In addition, both Navy hospitals were in the process of contracting for civilian physicians to staff the emergency rooms full time, replacing the military physicians. At both facilities, officials stated that contracts would require physicians to have experience that meets or exceeds the requirements specified in the DOD directive.

At the three Army hospitals we visited, physicians who staffed the emergency rooms met the directive's experience requirements. At Fort Hood, the emergency room was staffed with six board-certified emergency physicians and one physician board-certified in internal medicine. All were assigned to the emergency room full time.[1] At Nuernberg and Fort Stewart a group of physicians was assigned full time to staff the emergency rooms. Nuernberg had six physicians covering all shifts. Fort Stewart had four physicians covering the day and evening shifts. Contract physicians were staffing Fort Stewart's emergency room during the night shift and on weekends and holidays. At the time of our visit, 19 contract physicians were credentialed to work there.

[1]Fort Hood is unusual because it has one of the few military residency training programs in emergency medicine. This program requires the use of board-certified staff physicians in emergency medicine for teaching purposes.

Physician Staffing Has Improved

Progress is being made toward meeting DOD's requirements for emergency room physician staffing. Civilian organizations noted that the requirements exceed current minimum standards for civilian hospitals.

Requirements Exceed Civilian Standards

The DOD directive requires that, by September 1989, all emergency rooms be staffed with emergency medical services physicians. The directive defines an emergency medical services physician as one who is assigned to the emergency care area and has had, within the past 2 years, a minimum of 1 year's experience in a primary or patient care specialty, such as obstetrics/gynecology, pediatrics, family practice, general surgery, internal medicine, emergency medicine, or any combination of these specialties. The directive also specifies that an emergency medical services physician's primary assignment or responsibility must be to emergency medicine. It requires that at least one emergency medical services physician must be on duty at all times in the emergency room in level I and II facilities, and that an emergency services physician must be in the hospital, not necessarily in the emergency room, in level III facilities.

An official of the American College of Emergency Physicians said that ideally all physicians working in emergency departments should be board-certified in emergency medicine. Officials of other medical associations said, however, that DOD's requirements meet or exceed acceptable standards for physician qualifications. For example, DOD's requirement exceeds that of the Joint Commission, which does not require a physician to be in the hospital at all times for level III emergency rooms. Also, officials at several civilian hospitals and the Hospital Corporation of America stated that emergency medicine is a relatively new specialty, and full-time staffing with board-certified emergency physicians is not possible in all civilian sector hospitals and should not be expected in all military hospitals. These officials said that assigning physicians from other hospital departments to part-time duty in the emergency room is an acceptable practice, although staffing with physicians assigned to the emergency room on a full-time basis is preferable because of the increased experience they attain.

The Deputy Assistant Secretary, Professional Affairs and Quality Assurance, told us that a goal of the directive is to staff emergency rooms with a group of physicians who serve primarily, if not full time, in the emergency room. He noted that not all hospitals may be able to do that. An Army Quality Assurance official also noted that consistency of

experience requirement. DOD officials said that each case has to be individually assessed, but generally such part-time assignments would not constitute sufficient experience for specialists such as radiologists, psychiatrists, and dermatologists.

Military Services Expect to Meet Most Training Requirements

The DOD directive sets forth requirements for certification of staff in three life-support training courses—basic life support, advanced cardiac life support, and advanced trauma life support. Requirements vary depending on the type of staff (e.g., physician, nurse, or technician) and level of facility. DOD also specifies training for emergency medical technicians. Service and hospital officials we interviewed said that by 1989, all staff would likely have the required life-support certifications. But, as discussed on pages 18-20, Air Force and Army officials anticipate some problems in meeting training requirements for emergency medical technicians.

Officials at the medical associations we contacted generally agreed that DOD's training requirements were satisfactory. Officials at the Joint Commission on Accreditation of Healthcare Organizations said they exceeded the Joint Commission's standards. On the other hand, officials of the American Medical Association and the American College of Surgeons suggested that requirements for certification in advanced trauma life support be extended to more physicians. The DOD directive requires, by September 1989, advanced trauma life-support certification for all physicians who work in level I emergency rooms.[5] We did not visit a military level I emergency room because only 4 of DOD's 164 emergency rooms are designated as level I. Many physicians at the level II and III emergency rooms we visited were certified, even though the directive does not require it at those levels.

DOD and the military services did not have data on the number of emergency room staff who had obtained the training and certifications required in the directive. The status of training at the hospitals we visited is summarized in table I.2. Additional information on the training requirements and the status of implementation follows the table.

[5]The American College of Surgeons developed the advanced trauma life-support course to establish standards for trauma care and practical life-support skills. The 2-day course combines lectures and laboratory work. Recertification is required every 4 years.

All three Air Force hospitals had physicians from other hospital departments assigned part time to the emergency room. At Bitburg, all 29 hospital physicians were assigned some emergency room duty, but coverage of weekday daytime shifts had been limited primarily to family practice physicians. Until recently, the two Air Force hospitals we visited in the United States also had assigned all hospital physicians part-time duty to cover all shifts in the emergency room. At the time of our visits, both hospitals had assigned a group of physicians to cover all weekday shifts, with at least one physician assigned full time to the emergency room. Weekend shifts were covered by other hospital physicians assigned on a part-time basis.

Two of the three Air Force hospitals, however, assigned physicians to the emergency room who, according to a DOD quality assurance official, may not have met the directive's experience requirements. At the time of our visit to Bergstrom Air Force Base, a dermatologist was assigned emergency room duty once or twice a month, according to the director of the emergency room. At Bitburg Air Force Base, a radiologist and a psychiatrist were among physicians assigned part-time emergency room duty on weekends. (Dyess Air Force Base had recently stopped assigning emergency room duty to the hospital's radiologist.)

DOD has not specifically defined what specialties constitute primary or patient care—beyond the examples given in the directive—or what constitutes 1 year's experience in such specialties. Thus, we could not conclusively determine whether these physicians met the requirements or not. However, from discussions with DOD officials it appears that these physicians did not meet the requirements and that hospital and command officials could misinterpret the directive's intent.

DOD and service officials emphasized that in all cases the local hospital commander is responsible for determining if a physician is qualified to work in the emergency room. According to DOD quality assurance officials, some specialties, such as dermatology, ophthalmology, psychiatry, and radiology, would not constitute primary or patient care. But, they cautioned, that physicians in these fields could obtain sufficient patient care experience in addition to their specialty experience to meet the directive's standards.

Both the Hospital Commander at Bergstrom Air Force Base and the Chief of Clinical Medicine, U.S. Air Forces in Europe, stated that assignment of part-time duty in the emergency room may meet the directive's

increase the frequency of the course and training would be better monitored. They also said that they would change their contract requirements for civilian emergency room physicians to require basic life-support certification.

Advanced Cardiac Life Support

The DOD directive and the service implementing documents require advanced cardiac life-support certification for all emergency medical service nurses and physicians by September 1989. The advanced cardiac life-support course, designed by the American Heart Association, consists of about 16 hours of training in such matters as basic life support, electrocardiograph monitoring, and treatment of heart attacks. Certification lasts for 2 years.

At the eight military hospitals, about 77 percent of physicians and nurses assigned to the emergency room were certified in advanced cardiac life support. Each of the hospitals we visited offered the course regularly, either in the facility or through local civilian hospitals. The hospital commanders and training coordinators we interviewed said they foresee no problems in meeting the advanced cardiac life-support certification requirement by the September 1989 deadline. They also anticipated meeting the recertification requirement.

Emergency Medical Technician Certification

Hospital and service officials had varying expectations for meeting the training and certification requirements for emergency medical technicians.[7] Because of prior service-wide emphasis on technician training, Navy officials expected to reach full compliance by 1989. In contrast, Air Force and Army officials did not expect to meet these requirements by September 1989, in part because of limited hospital resources. Also, Army officials believed the requirement could not be met because they include not only technicians who work in ambulances but those who work in emergency rooms.

The DOD directive requires that, by September 1989, technicians working in emergency medical services and/or assigned to ambulance duty have "Emergency Medical Technician-Ambulance" national certification from the National Registry of Emergency Medical Technicians. The national emergency medical technician course consists of a minimum of 110 hours of classroom training, which is based on a curriculum established

[7] In this report we use "technicians" as a generic term to include Air Force technicians, Army medics, and Navy corpsmen.

Table I.2: Percentage of Personnel With Required Training Certification at Eight Military Hospitals Visited

Location	Personnel with required certification			
	Basic life support	Advanced cardiac life support	Advanced trauma life support	Emergency medical technician-ambulance
Bergstrom Air Force Base	100.0	92.3	48.0	6.7
Bitburg Air Force Base	95.7	73.3	58.6	26.7
Dyess Air Force Base	92.3	61.9	47.4	0.0
All Air Force hospitals visited	**96.2**	**77.6**	**52.1**	**11.4**
Fort Hood	98.6	86.1	96.2	2.9
Fort Stewart	46.8	57.9	92.3	0.0
Nuernberg Army Base	95.3	86.7	100.0	87.5
All Army hospitals visited	**77.3**	**74.2**	**95.0**	**16.9**
Naval Hospital Beaufort	63.6	76.5	44.4	68.8
Orlando Naval Training Center	88.0	83.3	87.5	93.8
All Navy hospitals visited	**78.3**	**80.0**	**64.7**	**85.4**

Source: Credentialing and training records at the hospitals visited.

Basic Life Support

DOD and the services currently require that all emergency medical services personnel working in an emergency care area maintain certification in basic life support.[1] The 4-hour basic life-support course teaches the participants processes for externally supporting the circulation and ventilation of a victim of cardiac or respiratory arrest through cardiopulmonary resuscitation. Annual recertification is required.

About 84 percent of emergency room personnel in the eight hospitals we visited had basic life-support certification. Percentages varied among hospitals, however, from about 47 to 100 percent.

According to hospital commanders and other hospital personnel at the hospitals we visited, the basic life-support course is taught regularly at their facilities, and efforts will be made to assure that all personnel have the required training. For example, officials at Beaufort Naval Hospital said their training department had recently undergone significant turnover but in the future they would assure that the training department keeps accurate records and training and certifications are kept current. Likewise, officials at Fort Stewart's hospital said that they would

[1]Although the DOD requirement became effective when the directive was issued in September 1986, the requirement was already in force at the service levels at that time.

According to an official of the Army Surgeon General's office, DOD's technician training requirements could be met for ambulance technicians, but not for emergency room technicians not assigned to ambulance duty. As discussed below, ambulance technicians in U.S. hospitals were required to have the training even before the DOD directive. In contrast to Air Force and Navy practice, Army hospitals in the United States generally use civilian technicians to staff ambulances and military technicians, who do not work on ambulances, to staff emergency rooms.

According to Nuernberg hospital officials, 87.5 percent of the technicians at the facility were nationally certified. However, at Nuernberg, military technicians from the emergency room also accompanied ambulance runs, a practice similar to that in the Air Force and Navy. The director of the emergency room explained that classroom training for military medical technicians was obtained from the City Colleges of Chicago. She saw recertification to be somewhat of a problem because technicians would have to take the entire course again, and this would be costly and time-consuming. She said the hospital was looking into the feasibility of getting qualified trainers to teach the course in-house.

Previous Army Health Services Command regulations, applicable to Army hospitals in the United States, required ambulance technicians to be trained (not certified) as emergency medical technicians by Department of Transportation standards or appropriate state standards, whichever were more stringent. Hospital commanders at the Army facilities we visited in the United States said they did not anticipate problems in meeting the DOD deadline for national certification of ambulance technicians. They said that the ambulance staffs at these hospitals would need to take only an emergency medical technician refresher course and pass the national examination.

Officials in the Army Surgeon General's office and at the Army hospitals we visited in the United States were concerned, however, that they would not be able to meet the certification requirement for emergency room technicians. Health Services Command officials said that although they knew the hospitals would not be able to meet the national certification requirement, they believed it was a goal that the hospitals should strive for. Like the Air Force, the Health Services Command was developing a plan to include the emergency medical technician training as part of the basic technician course, but they did not anticipate doing this until 1990.

by the Department of Transportation.[8] To become nationally certified, a technician must have emergency medical technician state certification, complete the classroom portion of the national emergency medical technician course, pass a national examination, and complete 6 months of hospital experience.

Overall, the Air Force and Army facilities we visited had significantly lower rates of certification than the Navy facilities (see table I.2). According to Navy officials, the Navy's Health and Science Education and Training Command had given emergency medical technician-ambulance national certification a high priority. Since 1983, the 110 hours of training required to take the national certification test has been included in the Navy's 10-week basic technician training. According to a training command official, to further improve the certification rate, in 1985 the Navy required that trainees receive hospital experience and then repeat the 110 hours of emergency medical technician training before taking the emergency medical technician national certification test. Hospital commanders at the two Navy facilities, along with officials from the Navy Surgeon General's office, were confident that technicians would have the required training by the September 1989 deadline.

Air Force Surgeon General officials were not as confident that the requirement could be met, although hospital officials at the three facilities we visited expected to meet the requirement through in-house training. Each of the facilities had an emergency medical technician trainer approved by the National Registry of Emergency Medical Technicians. The Air Force Consultant to the Surgeon General for Emergency Medicine said it was unusual to find approved trainers at the many small Air Force hospitals. Where there are no trainers, hospital commanders must arrange for technicians to take the course at local colleges. The Air Force consultant believed that although most Air Force hospitals are located near colleges that offer the course, certification would be difficult at overseas and remote Air Force hospitals because courses are not readily available. At such locations, he said, the requirement might not be met by the 1989 deadline. He pointed out that, as a long-term solution, in 1986 the Air Force began including the 110 hours of emergency medical technician training as part of the basic technician course so that recruits could be certified.

[8]Under the Highway Safety Act of 1966, the Department of Transportation has responsibility for a nationwide emergency services system.

services to address the protocol requirement as they see fit. For example, although he originally told us that the use of textbooks was not within the intent of the directive, in later meetings he said that this approach was satisfactory. The services' approaches are summarized below.

- The Air Force was issuing standardized protocols to each of its hospitals. As of March 1988, it had issued 15 and others were being developed. Hospitals may supplement these as necessary.
- The Navy originally planned to select and distribute a textbook to each of its hospitals. The textbook was to represent the best available medical information on diagnosis and treatment in emergency room care, and would include all conditions mentioned in the DOD directive. However, in July 1988, Navy officials told us they had changed their plans. The Navy was working with the Air Force to develop service-wide protocols. At that time, 23 draft protocols were being reviewed by the Naval Medical Command for approval.
- The Army, rather than developing standardized protocols, was requiring each hospital to develop or adopt and utilize its own protocol guidelines, reflecting national standards.

Requirements for Written Patient Transfer Agreements Not Fully Implemented

DOD's directive requires each military hospital in the United States and those overseas, where appropriate, to initiate written working agreements with surrounding civilian medical treatment facilities. Among other things, the working agreements are to specify the requirements for patient referral and transfer. At the time of our visits, the hospitals had just received or were still awaiting service implementing documents and only two of eight hospitals had agreements concerning transfers.

The professional medical organizations we contacted believe that there should be transfer agreements between facilities. Guidelines by the American College of Emergency Physicians state that emergency departments should have written agreements with community hospitals covering patient transfer.

DOD has not provided guidance as to the purpose or desired content of such written agreements. Initially, when we informed the Deputy Assistant Secretary of Defense, Professional Affairs and Quality Assurance, that some hospitals we visited did not have patient transfer agreements, he said each hospital should have one. He told us that the intent of requiring written agreements was to assure a general understanding

Requirements for Protocols Not Yet Implemented

The DOD directive requirement for service-wide diagnostic and treatment protocols had not been implemented at the time of our review. Both civilian and military officials had varying opinions about the usefulness of service-wide protocols, and the services were taking significantly different approaches to implementing the requirement.

The DOD directive requires the military services to develop or adopt service-wide protocols that provide basic guidelines for the diagnostic and therapeutic measures that may be applied by health care providers whose primary expertise may not be in emergency care.[1] The directive states that service-wide protocols should reflect nationally standardized protocols or the equivalent, but that they can be supplemented locally by the individual hospitals and are not intended to replace medical judgment.

According to representatives of the medical associations and hospital systems we visited, no nationally standardized protocols existed. While the officials said that protocols could be valuable, they, as well as physicians and administrative officials at the civilian and military hospitals we visited, had varying opinions as to the usefulness of service-wide protocols. For example, officials from the American College of Emergency Physicians stated that service-wide protocols might be too general to be useful; officials from the American Medical Association stated that service-wide protocols might be beneficial, but should not be too restrictive because of variations in staff and equipment.

At the time of our visits, the hospitals had just received or were awaiting guidance from the services concerning protocols required by the directive. The emergency room chiefs at the hospitals had differing opinions about the usefulness of protocols. For example, according to the emergency room chiefs at Fort Hood and Bitburg, physicians working in the emergency room should be sufficiently trained so that protocols are unnecessary, whereas the emergency room chief at Fort Stewart said that, although protocols should not replace clinical judgment, they are useful as a quality assurance and learning tool.

The Deputy Assistant Secretary of Defense, Professional Affairs and Quality Assurance, told us that, because the use of protocols is a much debated topic in the medical community, DOD had decided to allow the

[1]The directive lists specific conditions, such as chest pain, gunshot wounds, and suspected child abuse, for which protocols should be developed.

Although the extent of the programs varied, all but one of the hospitals we visited used some form of occurrence screening. For example, most screened records to identify such occurrences as a patient's return to the emergency room within 48 hours of treatment or unexpected laboratory results. The exception, Fort Hood, was not using occurrence screening at the time of our visit, but planned to do so.

When questionable provider practices were identified through reviews or occurrence screening, each hospital had an established system for taking action to correct problems. As required in the directive, each hospital had an established system for documenting provider error in the provider's activity profile.

Conclusions

DOD and service policies represent valid efforts to assure quality care in military emergency rooms. Civilian experts agree that the 1986 DOD directive sets forth requirements that meet or exceed minimum civilian sector standards for emergency care. From information provided by DOD, service, and hospital officials, we believe the requirements for staffing, quality assurance, and life-support training can be met. However, to better assure implementation of the directive, we believe further guidance concerning some of the requirements and monitoring are necessary.

Requirements for physician staffing exceed minimum civilian standards and are attainable. One requirement, however—that all emergency services physicians have at least 1 year's experience in a primary or patient care specialty—needs clarification. Comments by some hospital and command officials we spoke to indicate that they may misinterpret the requirement. A clear understanding is especially important where, like some hospitals we visited, a large number of physicians of varying specialties are required to staff the emergency room on a part-time basis.

Although most of the training requirements can be met, DOD and service officials agree that the requirement for technician certification might not be met, especially by 1989. Because there are questions concerning meeting the certification requirements, some DOD-wide or service-wide monitoring of progress is needed so that appropriate actions can be taken if hospital efforts are not sufficient.

Additional guidance and monitoring are also needed concerning emergency room protocols. Because the usefulness of service-wide protocols has not yet been demonstrated, we believe steps should be taken to

with nearby civilian hospitals that would avoid delays in patient transfers. However, in a later meeting, he said that signed agreements are not necessary and that it is sufficient for hospitals to have written plans for patient transfers. Nonetheless, implementing instructions for the Army and Navy specify that each facility have a written transfer agreement with nearby civilian hospitals. The Air Force's instructions repeat the wording of the DOD directive.

Of the military hospitals we visited, only Beaufort Naval Hospital and Bergstrom Air Force Base had written agreements with nearby hospitals concerning patient transfers. Officials at the other military hospitals we visited saw no need for written agreements. Several physicians stated that agreements for patient transfer should be made between physicians, not hospitals, because individual physicians rather than hospitals accept the patients. Officials at both civilian and military hospitals we visited stated that the informal system is effective and written agreements are not necessary. Some military hospital officials also said they were not sure what DOD intended the agreements to cover.

Quality Assurance Programs Are in Place

Quality assurance is the process of monitoring and evaluating the quality and appropriateness of patient care, pursuing opportunities to improve care, and resolving identified problems. The DOD directive requires all emergency rooms to have quality assurance programs. It specifies, among other things, that they include occurrence screens specific to the emergency room and that occurrence screening[10] and quality assurance review results confirming provider error be considered in assessing each physician's performance. All the medical associations we contacted agreed that quality assurance programs are necessary and occurrence screening is a useful tool.

Although we did not evaluate their effectiveness, each of the emergency rooms had a quality assurance program and review systems. All emergency rooms had regularly scheduled quality assurance committee meetings to discuss issues affecting quality of care. The issues were identified through established reviews of medical treatment records, special audits by emergency room personnel, or the occurrence screening process.

[10]Occurrence screening is a quality assurance technique used to identify unexpected patient treatment results. Patient records are screened against specified criteria to identify occurrences, such as an unexpected return to the emergency room, that could indicate problems in care. Records with such occurrences are then reviewed to assess adequacy of care.

more definitive departmental or service-level guidance is needed concerning several aspects of the directive's requirements.

Concerning our proposal regarding what constitutes 1 year's experience in primary or patient care, DOD said that a recently issued credentialing directive makes clearer the requirement that physicians should be granted privileges based on their training, experience, health, and performance. DOD's comments said that privileging is the responsibility of the hospital commanders and their staffs, and that the services provide administrative and consultative support to commanders. DOD further stated that service Inspectors General evaluate implementation of the requirement.

The emergency services directive sets a minimum acceptable level of experience for emergency services physicians—1 year's primary or patient care experience within the last 2 years. In discussions with Health Affairs officials concerning DOD's comments, we were told that they did not know how to more clearly define this requirement. We agree that setting a minimum experience requirement is a valid approach to quality assurance. While we recognize that judgment will continue to be necessary in assigning privileges, additional guidance concerning the extent of necessary training and experience would reduce the possibility of misinterpretation. For example, DOD could define what specialties constitute primary or patient care and provide examples of how physicians in other specialties could gain sufficient experience.

In our draft report we proposed that DOD and the services provide military hospitals more specific guidance concerning which military facilities should be permitted to continue to assign physicians on a part-time basis to staff emergency rooms. DOD stated that the directive does not require full-time assignment of physicians to emergency rooms. Instead, DOD requires that during any period in which a qualified physician is assigned to staff the emergency room, the physician be excused from other duties that might conflict with the physician's ability to be available immediately to the emergency room. Our review at the offices of the Surgeons General and at the hospitals we visited indicated that the services were moving beyond this limited interpretation of the directive's requirement toward accomplishing the intent as originally stated to us by the Deputy Assistant Secretary for Professional Affairs and Quality Assurance; that is, that emergency rooms be staffed by a group of physicians who serve primarily in emergency medicine. We have revised the report to reflect DOD's comments and, in view of the services' actions, we

are making no recommendation. DOD should, however, reinforce the services' ongoing efforts to meet the intent as originally stated to us.

Regarding emergency medical technician training, our draft report proposed that DOD and the services clarify which technicians must have national emergency medical technician-ambulance certification. We made that proposal primarily because, during our review, DOD Health Affairs officials told us and service officials that DOD did not intend the certification requirement to apply to technicians who do not work on ambulances. DOD's comments on our draft report indicate that clarification is not needed because the directive accurately states the requirements for certification; that is, all emergency services technicians should be certified. In discussions with Health Affairs officials concerning DOD's comments, we were advised that the earlier statement as to the intent of the directive was incorrect, and that the statement was the result of disagreement within the Department about interpretation of the requirement. We have revised the report, and are not recommending clarification of who should be certified.

DOD also indicated that the services have committed resources to implementing this requirement and concurred with our recommendation that hospital programs should be monitored and steps taken to assure compliance. DOD said that monitoring mechanisms, such as inspections by the service Inspectors General and surveys by the Joint Commission on Accreditation of Healthcare Organizations, are in place. DOD also stated that it will work with the services to assess the impact of the requirement, and added that any changes that may become necessary will result from their cooperative evaluation. In discussions concerning the comments, Health Affairs and service officials indicated that data concerning implementation would be collected and implementation monitored.

DOD concurred with our findings on protocols and stated that it believes the appropriate use of protocols can help ensure safer and more complete health care. DOD did not specifically address the need for additional guidance concerning the intent and use of protocols. However, DOD said that experience with emergency room protocols over the next few years will resolve most of the problems and misunderstandings we found. DOD concurred with our recommendation to assess the effectiveness of the differing service approaches. It said monitoring mechanisms and forums for discussion, such as Inspector General inspections and the Joint Service Quality Assurance Committee, are already in place and that DOD

and the services plan to monitor the approaches and evaluate their effectiveness.

We continue to believe that some added guidance concerning the intended use of protocols and how they could help ensure safer and more complete care could help reduce resistance to protocols and speed their effective implementation. Clearer statements of expectations would also facilitate evaluation of their effectiveness.

Our draft report proposed that DOD provide guidance concerning the purpose and content of patient transfer agreements. DOD stated that written patient transfer agreements with civilian hospitals are required only where appropriate, such as when civilian hospitals require them. Where not deemed appropriate, it is sufficient that hospitals have written plans for transfers. DOD also indicated that the Department does not agree with our recommendation that additional guidance be provided to hospitals concerning the purpose and content of transfer agreements. It stated that the service Inspectors General will evaluate the adequacy of these documents.

Although DOD said agreements are not appropriate in all facilities, Army and Navy instructions require every hospital to have them. We continue to believe, based on comments by hospital officials, that additional guidance concerning the purpose and content of such agreements would improve the implementation of the directive. Such guidance should also clarify when such agreements are appropriate for both U.S. and overseas hospitals.

Operating Beds, Emergency Room Visits, and Levels of Care at Eight Military Hospitals Visited

Facility	Emergency room level[a]	Hospital operating beds (FY 1986)[b]	Emergency room visits (FY 1986)[a]
Air Force:			
67th Medical Group Hospital, Bergstrom Air Force Base, Austin, Texas	III	35	19,999
U.S. Air Force Hospital Bitburg, Bitburg Air Force Base, Bitburg, West Germany	III	40	13,806
96th Strategic Hospital, Dyess Air Force Base, Abilene, Texas	III	35	21,594
Army:			
Darnall Army Community Hospital, Fort Hood, Killeen, Texas	II	180	66,154
Winn Army Community Hospital, Fort Stewart, Hinesville, Georgia	III	95	43,155
U.S. Army Meddac Nuernberg, Nuernberg Army Base, Nuernberg, West Germany	II	117	35,583
Navy:			
Naval Hospital Beaufort, Beaufort, South Carolina	III	59	15,691
Naval Hospital Orlando, Orlando Naval Training Center, Orlando, Florida	II	114	27,249

[a]Information provided by offices of the services' Surgeons General.

[b]DOD's 1987 Health Facilities Planning Review.

Civilian Hospitals Visited

Facility	Emergenc room leve
Beaufort Memorial Hospital Beaufort, South Carolina	
Brackenridge Hospital Austin, Texas	
Hendrick Medical Center Abilene, Texas	
Humana Hospital Abilene, Texas	
Humana-Lucerne Hospital Orlando, Florida	
Scott and White Hospital Temple, Texas	
Winter Park Memorial Hospital Winter Park, Florida	

[a]Information provided by hospitals.

Comments From the Department of Defense

ASSISTANT SECRETARY OF DEFENSE

WASHINGTON D C 20301

3 AUG 1988

HEALTH AFFAIRS

Mr. Lawrence H. Thompson
Assistant Comptroller General
Human Resources Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Thompson:

This is the Department of Defense (DoD) response to the General Accounting Office Draft Report, "DoD HEALTH CARE: Emergency Service Standards Adequate But Implementation Varies," dated June 17, 1988 (GAO Code 101322/OSD Case 7689). The DoD generally concurs with the GAO findings, but does not agree with all of the recommendations.

Guidance for appropriate standards in granting clinical privileges has been detailed adequately in DoD Directive 6025.11, "DoD Health Care Providers Credentials Review and Clinical Privileging," which was signed on May 20, 1988. The DoD stresses that the requirement for Emergency Medical Technician-Ambulance certification was established with full recognition that this requirement would lead to resource commitments because of the belief that this requirement will result in better trained active duty medical technicians. Finally, the DoD has elected to implement recommendations of the many medical authorities who find benefits in the use of protocols for guidance in medical therapy decision making.

The DoD is pleased that the GAO found the Services have already made significant progress toward implementation of DoD Directive 6000.10, which was signed on September 18, 1986. (The GAO audit team began gathering data less than seven months later). The Directive calls for implementation by September 18, 1989. The DoD is also pleased that civilian authorities found the Directive requirements to be laudatory. The DoD goal is to continue improving all aspects of health care for DoD beneficiaries. The Department is aware that some of the requirements of this Directive exceed those of many civilian communities. Military health care has a number of unique aspects, however, and many of the policies address these unique challenges to health care. Some of the staffing and clinical privileging requirements of this Directive were established specifically with the military-unique features in mind.

The detailed DoD comments on the report findings and recommendations are provided in the enclosure. The Department appreciates the opportunity to comment on the GAO draft report.

Sincerely,

Bud Mayer

William Mayer, M.D.

Enclosure
As stated

GAO DRAFT REPORT-
DATED JUNE 17, 1988

(GAO CODE 101322) OSD CASE 7689
"DoD HEALTH CARE: EMERGENCY SERVICE STANDARDS
ADEQUATE BUT IMPLEMENTATION VARIES"

DEPARTMENT OF DEFENSE COMMENTS ON FINDINGS

* * * * * *

FINDING A: Staffing Goals May Not Be Reached But Improvement Has Occurred. The GAO reported that the DoD Directive 6000.10, issued in September 1986, establishes policies, prescribes procedures and assigns responsibilities for the administration and management of military hospital emergency rooms. The GAO further reported that this Directive requires at least one full-time emergency services physician to be in the hospital at all times. The GAO observed, however, that the staffing requirement exceeds that of the Joint Commission on Accreditation of Healthcare Organizations (JCACO) and may be too ambitious. The GAO noted that small hospitals may not be able to staff emergency rooms in this way; instead, the small hospitals may have to continue to assign physicians (whose primary assignments are to other hospital departments) to part-time duty in the emergency room, a practice acceptable in the civilian sector. The GAO also reported that the Directive also requires emergency room physicians to have one year of experience in a primary or patient care specialty. The GAO concluded that (1) this requirement was not always met at the hospitals and (2) there was some confusion about what constitutes sufficient experience. The GAO further concluded, however, that DoD and Service policies represent valid efforts to assure quality of care in military emergency rooms. (p. 3-4, pp.6-12/GAO Draft Report)

Now on p. 2 and pp. 13-16.

DoD Response: Partially concur. Physician staffing of emergency services for hospitals has been a resource challenge for many years. In both civilian and military emergency departments, it has been a common practice to assign emergency duty based on a "fair and equal" schedule. In many cases, emergency duty has been added to an already full schedule. The DoD recognizes that the requirements of DoD Directive 6000.10 exceed those of the JCAHO. It is the DoD position, however, that the diverse problems encountered in Military Treatment Facility (MTF) emergency rooms justify these requirements. Practitioners assigned to the emergency department should not be assigned concurrent responsibilities elsewhere in the MTF. The GAO has misinterpreted the meaning of "full-time"; DoD does not require full-time assignment to the emergency department.

Rather, it requires excusing the practitioner from other duties in the hospital that might conflict with the practitioner's ability to be available immediately to the emergency department, i.e., to permit devoting his/her full-time to the emergency department during the period assigned there. This is necessary to ensure the best possible quality of care for emergency department patients. This requirement can be achieved; however, the cost of fulfilling it may be a decrease in productivity for physicians assigned to emergency duty. The improved quality of care in urgent and emergency cases will justify this resource expense and resource allocation algorithms should take this into account.

Granting of clinical privileges in emergency health care should be based on the individual practitioner's training, experience, expertise, health, and current performance. DoD Directive 6000.10 refers to DoD Directive 6025.4 for standards on clinical privileging. On May 20, 1988, DoD Directive 6025.11, "DoD Health Care Provider Credentials Review and Clinical Privileging," was issued. It replaced DoD Directive 6025.4 and is intended to provide clear guidance on procedures in credentials review and clinical privileging. DoD Directive 6025.11 makes more clear the requirement that clinical privileges are to be granted as applicable to each individual and are to be based on that individual's training, experience, health, and performance. DoD Directive 6000.10 also adds a requirement that, as a minimum, physicians in the emergency department must have had one year of training or experience in a primary or patient care specialty within the immediately preceding two years. The intent of this requirement is to provide guidance to hospital commanders in assigning to the emergency department physicians whose training and clinical experience qualify them for such assignment. Credentials review and clinical privileging are the responsibility of commanders and their staffs. The Military Services provide administrative and consultative support to their commanders and the Service Inspectors General evaluate the effectiveness of compliance with this requirement in their routine inspections. Additional compliance monitoring is available from the JCAHO accreditation surveys.

FINDING B: Military Services Expect To Meet Most Training Requirements. The GAO found that DoD Directive 6000.10, dated September 1986, also sets requirements for certification of staff in three life support training courses: basic life support, advanced life support and advanced trauma life support. The GAO reported that hospital and Service officials expect to meet the requirements for training certification by September 1989, the deadline specified in the Directive for cardiac and trauma life support. According to the GAO, all of

the hospitals included in its review have not yet fully complied with this requirement, but expected to meet the September 1989 deadline. The GAO referenced requirements developed by the Department of Transportation under authority of the Highway Safety Act of 1966, which mandate that technicians working on ambulances have the National Emergency Medical Technician-Ambulance Certification (EMT-A). The GAO pointed out that the Navy expects to meet the DoD requirement by September 1989, but that the Army and Air Force do not expect to meet the requirement by September 1989. According to GAO, the importance of this training is not clear. The GAO reported that civilian organizations said they were not sufficiently familiar with the use of technicians in emergency rooms to assess the need for the training, and DoD officials interviewed during the review said that they never intended the requirement to apply to emergency room technicians who do not work in ambulances. The GAO reported that, according to Army officials, however, the training could be valuable for emergency room technicians as well as ambulance technicians, although they are concerned that the requirement cannot be met by the 1989 deadline. The GAO concluded that (1) clarification is needed concerning which medical technicians should have National Emergency Medical Technician-Ambulance Certification and (2) some DoD-wide or Service-wide monitoring is needed so appropriate action can be taken if hospital efforts are not sufficient. The GAO generally concluded, however, that the requirements for quality assurance and life support training can be met. (p. 4-5, pp. 12-22/GAO Draft Report).

Now on p. 3 and pp. 16-20.

DoD Response: Concur. The DoD is aware of the fact that not all MTFs have fully implemented the training requirements of DoD Directive 6000.10. These requirements impose a high standard for qualifying personnel to work in emergency departments. Military readiness missions and the challenges of emergency departments justify these standards. At the same time, the DoD recognizes that, in some cases, full compliance may not be possible by the required September 1989 date. The DoD and the Services will evaluate those cases where compliance is not possible and will investigate ways to provide additional resources or grant exceptions to policy, where justified. Implementation monitoring will be a responsibility of the Service Inspectors General.

The Services have taken steps to increase training in advanced life support and advanced trauma life support for military physicians and personnel in pertinent clinical positions. Emergency Medical Technician-Ambulance (EMT-A) training is being included in the curriculum of each of the Service medical corpsman basic courses. Certification of EMT-A trained medics will be more difficult since it requires clinical

experience and successful completion of an examination. The Services have committed resources to implementing this requirement and will continue to watch for obstacles to achieving full implementation.

FINDING C: Requirement For Protocols Not Yet Implemented. The GAO found that, in addition, DoD Directive 6000.10, dated September 1986, requires each Service to develop or adopt Service-wide emergency care protocols that reflect national standardized protocols or the equivalent. The GAO reported, however, that it was unable to find any nationally standardized protocols. The GAO also reported that representatives of civilian organizations it contacted said that protocols could be useful, but their comments indicated potential difficulties in developing Service-wide protocols, noting that Service-wide protocols might be too restrictive or too general to be of use. According to the GAO, Service and hospital officials contacted during the review had varying opinions about the usefulness of protocols, with some claiming they were good quality assurance and training tools and others taking the position physicians should be sufficiently trained so protocols should not be necessary. The GAO found that the hospitals have not yet implemented the protocol requirement and the intended approaches for each Service were significantly different. The GAO observed that the Air Force was developing Service-wide protocols, while the Navy intended to select a textbook to be used by all hospitals. The GAO further observed, however, that the Army has instructed each facility to develop protocols reflecting national standards; no Service-wide approach is intended. The GAO reported that, according to DoD officials, because of the controversy surrounding protocols, they had decided to allow each Service to implement the requirement as it deemed necessary. The GAO concluded that additional guidance and monitoring are needed concerning emergency room protocols. The GAO further concluded that, because the usefulness of Service-wide protocols has not been demonstrated, steps should be taken to assure some assessment of the significantly different Service approaches. (p. 5-6, pp. 22-24/GAO Draft Report)

Now on pp. 3-4 and pp. 21-22.

DoD Response: Concur. The DoD recognizes the controversy surrounding protocols in emergency departments. The JCAHO has, however, required protocols for guidance in treating a number of patient categories for several years. The Department has, therefore, adopted the protocol approach as its policy. It is the DoD position that such protocols should be established and made the basic standard of care in MTFs. Clinical judgment may dictate deviation from the protocol, but one should be able to document from the clinical record why the deviation occurred. An important function of protocols is in helping to prevent

omission of key tasks in providing care, especially in those instances where emergency services coverage is provided by a physician who has not had extensive experience in that emergency department. The DoD is confident that, over the next few years, experience with Emergency room protocols will lead to the resolution of most of the problems and misunderstandings encountered by the GAO. The DoD is also aware of the varying proposed means of implementing the protocol requirement. The Services and the Office of the Secretary of Defense plan to monitor the approaches and evaluate their effectiveness. Service Inspector General reports will provide data on protocol implementation. In addition, information available from the Civilian External Peer Review Program will also provide indirect evidence of protocol implementation by outcome assessment.

FINDING D: Requirements For Written Patient Transfer Agreements Not Fully Implemented. The GAO reported that the DoD Directive requires each military hospital in the United States and overseas to develop written working agreements, where appropriate, with surrounding civilian hospitals. The GAO explained that, among other things, these agreements are to set forth requirements for patient transfers. The GAO found, however, that six of the eight military hospitals it visited did not have such agreements. The GAO reported that officials of both military and civilian hospitals said they did not believe such agreements are necessary. In a meeting with GAO at the conclusion of the audit field work, DoD officials reportedly told the GAO that (1) they did not believe written agreements were necessary and (2) it should be sufficient for each facility to have a written plan for transfers. The GAO pointed out, however, that organizations, including the American College of Emergency Physicians, support the usefulness of such written agreements. The GAO concluded that clarification is needed concerning the intent and content of transfer agreements. (p 6-7, pp 24-25/GAO Draft Report)

Now on p. 4 and pp. 22-23.

DoD Response: Concur. DoD Directive 6000.10 requires that MTFs establish written agreements for transfer of emergency patients where appropriate. The DoD recognizes, however, that written agreements are not appropriate or required in all facilities. Some civilian facilities require written agreements as part of their relationship with other facilities. The Directive is intended to authorize the establishing of such agreements where they may be of benefit to patients and the MTFs. On the other hand, written plans (protocols) for patient transfers are mandatory and should be available at every facility caring for urgent or emergency patients. The purpose of transfer protocols and agreements is to expedite management of such patients and make less likely the chance of inadvertent missed steps in care. The JCAHO reviews these documents in its surveys and the Service Inspectors General will also evaluate them for adequacy.

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GAO Draft Report 7689
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FINDING E: Quality Assurance Programs Are In Place. The GAO found that all of the hospitals it visited had emergency room quality assurance programs in place. The GAO did not assess their effectiveness, but reported they all included (or, in one case, intended to include in the near future) all the basic elements specified in the DoD Directive, as follows:

- all emergency rooms had regularly scheduled quality assurance committees meeting to discuss issues affecting the quality of care;
- the issues were identified through established review of medical treatment records, special audits by emergency room personnel, or the occurrence screening process;
- though the extent of the programs varied, all but one of the hospitals were using some sort of occurrence screening (with the one exception, Fort Hood, planning to do so in the near future);
- when questionable provider practices were identified through review or occurrence screening, each hospital had an established system for taking action to correct problems; and
- as required in the DoD Directive, each hospital had an established system for documenting provider error in the individual provider activity profile. (p 7, pp. 27/GAO Draft Report)

Now on p. 4 and pp. 23-24.

DoD Response: Concur. The DoD agrees that recent inspections and audits consistently document that quality assurance programs are functioning and that they include multiple parameters of monitoring and evaluating health care. While the DoD is gratified to see that the GAO found these programs have established systems for taking action to correct problems in care, it is important to stress that the purpose of quality assurance is to search for and implement ways to improve health care. Identification of substandard personnel is only one aspect of quality assurance programs. The DoD suggests that the GAO substitute the following definition of quality assurance for the one provided on page 26 of the draft report.

Now on p. 23.

> Quality assurance is the formal and systematic exercise of monitoring and reviewing health care delivery and outcome; designing activities to improve health care and overcome identified deficiencies in providers, facilities, or support systems; and, carrying out follow-up steps or procedures to ensure that actions have been effective and that no new problems have been introduced.

The suggested definition leads to positive activities, the objective of which is to gather and analyze data on patient demographics, provider productivity, accessibility of care, morbidity, mortality, occurrence screens, outcomes of care, malpractice, risk management, resource management, and management effectiveness. This definition is consonant with the goals and objectives of the Directive 6000.10.

RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommended that the Secretary of Defense direct the Service Secretaries, in conjunction with the Assistant Secretary of Defense for Health Affairs, to provide hospitals further guidance clearly distinguishing between goals and requirements and clarifying the purpose of some of the requirements. Specifically, the GAO suggested that such guidance should include:

Now on pp. 5 and 25.

- what constitutes "1 year's experience in primary or patient care specialty";

See pp. 26-27.

- which facilities should be permitted to continue assigning physicians on a part-time basis to staff the emergency room;

See p. 27.

- which technicians must have emergency medical technician-ambulance certification; and

Now on pp. 5 and 25.

- the purpose of emergency room protocols and the purpose and content of patient transfer agreements. (p. 8-9, p 30/GAO Draft Report)

DoD Response: Partially concur. Directives should provide policy and procedures that are realistic and achievable. If a goal is provided in a Directive, it should be identified as such and should not be subject to implementation monitoring. The Emergency Medical Services Directive provides a set of requirements. It is important to note, however, that this audit began less than seven months after the Directive was signed and before full efforts at implementation had begun. Despite this, the GAO found substantial compliance with the requirements. Admittedly, full implementation will be difficult to achieve and, in some circumstances, may require a redistribution of resources. Assessment and redistribution of resources is a characteristic of quality assurance programs. The following paragraphs are intended to address each of the five suggested guidances:

- It is DoD policy that physicians who have had no training or experience in patient care specialties should not be granted privileges in emergency departments. It has been a practice in the past to assign emergency department duty to all physicians on a "fair and equal" basis. The DoD is aware that some civilian facilities continue to follow this practice. The policy in this Directive is intended to reinforce the DoD policy (as detailed in DoD Directive 6025.11) that clinical privileges are to be based on the individual physician's training, experience, health, performance, and current expertise.

- Assigning physicians to the emergency departments on a part-time basis is acceptable in all facilities, at the commander's discretion. It is the policy of the DoD that physicians assigned to work in the emergency department consider that assignment as their primary (full-time) task during the hours they are so assigned. Such physicians must either be able to remain in the emergency department during the hours assigned, or to leave any other tasks in the MTF and go immediately to the emergency department when called, without compromising patient safety.

- The Directive states that technicians "... working in the emergency medical service and/or assigned to ambulance duty shall have a minimum of Emergency Medical Technician-Ambulance (EMT-A) current certification from the National Registry for Emergency Medical Technicians (NREMT)." All three military medical departments have incorporated the same phrase in implementing documents. While achieving this requirement will require a significant expenditure of resources, the result will be better trained and qualified military medical technicians. These same technicians are the first line health care providers in combat. This is considered to be a wise investment of resources for both peace time emergency services and military readiness. The DoD also recognizes that it may not be possible to meet this requirement fully in all cases. The Office of the Secretary of Defense and the Military Services will work together to assess the impact of the requirement and any changes that may become necessary will result from this cooperative evaluation.

- It is the DoD position that protocols and written transfer agreements and/or plans are an important means of achieving standardized health care of acceptable quality. Centrally developed protocols and written transfer agreements may well require institutional variation. Central standardization helps to ensure consistency throughout the system, while allowing for regional variations. Appropriate use of

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GAO Draft Report 7689
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protocols helps ensure safer and more complete health care. Military Service Inspectors General will make these documents an element of military treatment facility inspections. The Office of the Secretary of Defense and the Military Medical Departments have worked together in developing ways to implement such protocols and agreements. While recognizing there are a number of health care authorities who question the effectiveness of protocols and written agreements for improving quality of health care, the DoD has chosen to agree with those authorities who support the use of such documents.

Now on pp. 5 and 25.

RECOMMENDATION 2: The GAO recommended that the Service Secretaries, in conjunction with the Assistant Secretary of Defense for Health Affairs, should assess the effectiveness of the differing Service approaches to diagnostic and treatment protocols. (p. 9, p. 30/GAO Draft Report)

DoD Response: Concur. This recommendation is essentially moot, however, since monitoring mechanisms are in place with existing inspections by military Service Inspectors General, surveys by the JCAHO, and assessment of outcomes of care by the Civilian External Peer Review Program. The Joint-Service Quality Assurance Committee has also provided an excellent forum for exchange of information between and among the Services and the Office of the Secretary of Defense on material such as this.

Now on pp. 5 and 25.

RECOMMENDATION 3: The GAO recommended that the Service Secretaries, in conjunction with the Assistant Secretary of Defense for Health Affairs, should monitor hospitals' progress in attaining National Emergency Medical Technician-Ambulance Certification and, if necessary, take steps to assure compliance. (p. 9, p. 30/GAO Draft Report)

DoD Response: Concur. Again, this recommendation is essentially moot, however, since mechanisms for monitoring this requirement implementation exist through the Service Inspectors General and accreditation surveys by the JCAHO. The civilian external peer review program and internal MTF quality assurance programs also provide additional monitoring and evaluation mechanisms.

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