United States General Accounting Office

GAO

Report to the Honorable
Daniel K. Inouye, U.S. Senate

September 1988

DOD HEALTH CARE

Pediatric and Other Emergency Room Care

GAO/HRD-88-113

GAO

United States
General Accounting Office
Washington, D.C. 20548

Human Resources Division

B-232320

September 28, 1988

The Honorable Daniel K. Inouye
United States Senate

Dear Senator Inouye:

Recently, we completed a review of the services' implementation of DOD emergency room requirements for military hospitals. The results of our review were communicated to you and other requesters in our report DOD Health Care: Requirements for Emergency Services Adequate and Generally Attainable (GAO/HRD-88-94). In that report we stated that DOD Directive 6000.10 set adequate requirements for emergency room care and the services were making progress in implementing the directive. We pointed out, however, that additional clarification of emergency room requirements coupled with the monitoring of hospitals' progress could better assure maximum implementation of those requirements.

In May 1987, your office also asked us to obtain information about the provision of emergency pediatric[1] care in military hospitals. Also, in November 1987, you asked that we highlight the differences we observed in the services' provision of emergency care. This report responds to those two requests.

Scope and Methodology

In response to your request concerning military pediatric emergency care, we obtained information on (1) the number of pediatric patients seen for emergency care, (2) the policies for involvement of pediatricians in such care, (3) guidance available in emergency rooms for pediatric care, and (4) pediatric equipment available. We interviewed officials and reviewed appropriate documents at the offices of the services' Surgeons General and at the eight hospitals we visited (see p. 2). At your office's suggestion, we also contacted Children's Hospital National Medical Center in Washington, D.C. Officials there reviewed and commented on the information we obtained concerning pediatric supplies and the available equipment at hospitals we visited.

To address your request concerning the services' differences in emergency care, we developed a schedule comparing the services' approaches to implementing DOD's September 1986 emergency medical services directive (see app. I). Our recent report on emergency services (GAO/HRD-88-94) further explains the services' implementation of the directive.

[1] For the purpose of this report, "pediatric" refers to patients less than 14 years of age.

Information we developed specifically on pediatric emergency care is summarized below.

Number of Pediatric Patient Visits

Data on the number of pediatric patients seen in military emergency rooms were not available at service headquarters. At the eight hospitals we visited, we analyzed emergency room logs for the period April 5-18, 1987,[2] to determine the number of pediatric cases treated in each emergency room. Hospital officials told us that the periods used were representative of caseload mix. At most of the hospitals, emergency pediatric patients accounted for about one-third of all emergency patient visits (see table 1).

Table 1: Pediatric Emergency Visits

Hospital location	No. of visits	Percentage of total patient visits
Bergstrom Air Force Base	287	31.8
Bitburg Air Force Base	251	45.2
Dyess Air Force Base	232	36.1
Fort Hood	790	33.2
Fort Stewart	649	36.4
Nuernberg Army Base	334	35.8
Naval Hospital Beaufort	208	37.5
Orlando Navy Training Center	165	17.9

Involvement of Pediatricians

At the time of our visits, all eight facilities had designated pediatricians to be available to the emergency room for consultation on an as-needed basis. We could not determine the number of calls made to pediatricians or the amount of time it took for them to respond once called, because hospital records generally did not include this information.

In addition to having pediatric consultation available, according to officials at seven hospitals, at the time of our visits pediatricians periodically reviewed records of emergency room pediatric patients to ensure proper care had been given. At five facilities, pediatricians reviewed records for all patients under 14 years of age; at a sixth (Dyess Air Force Base), for all those under 13; and at the seventh (Bergstrom Air

[2]Emergency room logs were unavailable for April 1987 at Fort Stewart; therefore, we used logs for May 5-18, 1987, for our analysis at Fort Stewart.

Force Base), for those under 2. These reviews were part of each emergency room's quality assurance program. At the one hospital that did not have pediatricians review emergency room records (Naval Hospital Orlando), the emergency room director told us that total record review by a pediatrician would be very time-consuming. He said that as part of the facility's other quality assurance measures, all records, including pediatric records, were reviewed by a physician (not a pediatrician), and that review would identify any problems with pediatric care.

Guidance Available for Pediatric Care

DOD's September 1986 Directive 6000.10 on emergency medical services requires that the military services 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. The directive specifies that, if applicable, these protocols are to address differences in treatment corresponding to patient age. At the time of our visits, the hospitals had not implemented the directive; they had just received or were still awaiting guidance from the services' headquarters concerning protocols.

All hospitals we visited had some written pediatric procedures for physicians, nurses, and/or technicians. Although we did not evaluate them, we noted that they varied in format from single documents covering general pediatric procedures to documents covering treatment of specific conditions. In all the hospitals, pediatric dosage and resuscitation information was posted in the emergency room or available in manuals.

Pediatric Equipment Available

We obtained information concerning pediatric equipment at five of the emergency rooms we visited.[3] At your office's suggestion, we contacted officials at Children's Hospital National Medical Center, a regional pediatric trauma center, to discuss pediatric emergency care. According to Medical Center officials, if a hospital holds itself out to the public as an emergency room, sufficient supplies and equipment should be available for pediatric emergencies, even if historically relatively few pediatric emergency patients have been seen at that facility. On the other hand, they told us it would be difficult to develop a list of basic pediatric equipment needed in emergency rooms. They did provide the list of supplies and equipment contained in their emergency room.

[3]Our work concerning pediatric equipment had been completed at Bitburg, Dyess, Fort Hood, Nuernberg, and Orlando hospitals at the time we briefed your office on these issues. Your office requested that we report to you on our detailed work regarding pediatric equipment at these five hospitals.

Although other lists of recommended equipment are available, the Medical Center's list was focused specifically on pediatric care. According to Medical Center officials, it constituted an optimum, very comprehensive list, and most emergency rooms would not have comparable equipment. Consequently, at the five facilities, we asked officials to review the Medical Center list and indicate which items they had, or we obtained a copy of the facility's emergency room equipment list. We then asked Medical Center officials to review this information.

According to the information provided by the hospitals, all five facilities had most of the equipment on the Medical Center list. But Medical Center officials identified three items missing from the hospitals' lists that they said should be in each emergency room in case of severe pediatric emergencies. In two cases, the hospitals had the items, albumin (a blood substitute) and a neonatal blood pressure cuff, in other parts of the facility. In one case the hospital did not have the item, a pediatric trocar (used in trauma cases). Officials in that hospital said that under local policies and procedures any serious pediatric emergency would be taken directly to another facility. Service officials said not all emergency rooms could be equipped to meet all possible emergencies. They further stated that each facility should be fully equipped to resuscitate or stabilize patients, but other available equipment should depend on the types of problems that historically have occurred at a hospital.

As requested by your office, we did not obtain written comments on a draft of this report. However, we discussed its contents with officials in the offices of the services' Surgeons General and incorporated their comments where appropriate. We are sending copies of this report to the Secretary of Defense; the Director, Office of Management and Budget; and interested congressional parties. Copies will be made available to others on request.

Sincerely yours,

David P. Baine

David P. Baine
Associate Director

Comparison of Service Policies for Implementation of DOD Directive 6000.10

Issue	DOD directive requirements	Air Force implementation	Army implementation	Navy implementation
Physician staffing	By September 1989, emergency medical services shall be staffed with emergency medical services physicians with a minimum of 1 year of experience in a primary or patient care specialty, who have had this experience in the past 2 years. At least one emergency medical services physician must be on duty in the hospital or emergency room at all times.	An emergency services physician must be in the emergency room or in the hospital at all times. Physicians must have specific training in emergency medicine or emergency services, or in some cases family practice. Directive addresses only permanently assigned physicians and does not specify 1 year's primary care experience, but officials said all emergency services physicians must meet DOD's requirement. In addition, the Air Force has developed a 6-week emergency management course.	Sets minimum requirements equivalent to the DOD directive. Encourages higher qualifications, e.g., physicians board-certified in emergency medicine whenever possible.	Requirements are essentially the same as the DOD directive. In addition, permanently assigned physician staff are required for level I and II emergency rooms.
Advanced cardiac life support (ACLS)	By September 1989, all emergency medical services physicians and nurses shall have current certification in ACLS.	In addition to physicians and nurses, physician assistants and nurse practitioners also must have current certification in ACLS.	Requirements are the same as the DOD directive. In addition, ACLS is encouraged for all other emergency medical services personnel.	Requirements are the same as the DOD directive. In addition, ACLS is encouraged for all other emergency medical services personnel.
Advanced trauma life support (ATLS)	By September 1989, ATLS current certification is required for emergency medical services physicians in level I emergency rooms.	The requirements are the same as the directive.	The requirements are the same as the directive. In addition, ATLS is encouraged for level II and III physicians.	ATLS current certification is required for emergency medical services physicians in level II, as well as in level I, emergency rooms.
Staffing and training of emergency medical technicians	By September 1989, technicians or corpsmen working in emergency care area and/or assigned to ambulance duty shall have, at minimum, emergency medical technician-ambulance national certification from the National Registry of Medical Technicians.	The requirements are the same as the directive. Ambulances are staffed with technicians who work in the emergency room.	The requirements are the same as the directive. In U.S. facilities, emergency room technicians do not staff ambulances.	The requirements are the same as the directive. Ambulances are staffed with technicians who work in the emergency room.

(continued)

Issue	DOD directive requirements	Air Force implementation	Army implementation	Navy implementation
Record review	Effective September 1986, emergency medical services physicians should review the records of patients treated by nurse practitioners or physician assistants before the patients depart from the emergency care area. If this will delay the patient, the review will be made within 8 hours of treatment.	The requirements are essentially the same as the directive.	The requirements are essentially the same as the directive, except no 8-hour alternative is provided. Does not specify review required for nurse practitioners.	The requirements are essentially the same as the directive, except no 8-hour alternative is provided.
Protocols	Effective September 1986, each military service is to develop or adopt written diagnostic and treatment protocols that reflect nationally standardized protocols or the equivalent for certain specified patient care emergencies.	Service-wide protocols are being developed.	Each facility is required to develop or adopt protocols that reflect either nationally standardized protocols or the equivalent. No service-level action is being taken.	Each facility is required to develop or adopt protocols that reflect nationally standardized protocols or the equivalent. In addition, service-wide protocols are being developed.
Written patient transfer agreements	Effective September 1986, each facility, where appropriate, shall initiate written agreements with nearby civilian hospitals.	Requirements are essentially the same as the directive.	Requirements are essentially the same as the directive, except there is no option for where appropriate.	Requirements are essentially the same as the directive, except there is no option for where appropriate.

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