United States General Accounting Office

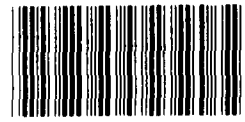
GAO

Report to Congressional Requesters

June 1987

DOD HEALTH CARE

Better Use of Malpractice Data Could Help Improve Quality of Care



GAO/HRD-87-30

GAO

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

Human Resources Division

B-225293

June 4, 1987

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

In response to your requests and agreements with your offices, this report describes, and makes recommendations to improve, the way the Department of Defense uses medical malpractice information to improve the quality of medical care and reduce the risk of malpractice.

Copies of this report are being sent to the Secretary of Defense, appropriate congressional committees, and other interested parties.

Richard L. Fogel
Assistant Comptroller General

Executive Summary

Purpose

In recent years the quality of health care provided by the military health care system has been a matter of concern to the Congress and to users of the system. One reason for this is the publicity given to individual cases of substandard care; another is the increase in the number of medical malpractice claims against the military health care system.

As a result, GAO reviewed the efforts of the Department of Defense (DOD) to collect and analyze information on malpractice claims to identify systemic problems, trends in substandard care, and problem providers. GAO's work was done at the request of the Chairman, Subcommittee on Military Personnel and Compensation, House Committee on Armed Services, and Senators Daniel K. Inouye, Claiborne Pell, and Jim Sasser.

Background

The Assistant Secretary of Defense for Health Affairs is responsible for overall supervision of DOD health activities. The surgeon general in each military service is the key official responsible for overseeing the operation of military hospital quality assurance and risk management programs. (See p. 30.) Military hospitals are required to establish such programs, which are designed to assure quality medical care and reduce the risk of financial loss resulting from medical malpractice. (See p. 12.)

Service regulations require that medical malpractice claims be investigated or reviewed by the three military claims services. Claims services obtain expert medical consultation to assist in these investigations and reviews. Service regulations also require that hospitals identify potential malpractice claims—incidents that could result in claims being filed—and that these potential claims be investigated. (See pp. 13-15.)

Results in Brief

A centralized medical malpractice information system would help identify recurring problems in military medical care and focus attention on needed corrective and preventive actions. The basic information for such a system already exists in the form of investigative reports of malpractice claims and potential claims. A centralized system would complement other DOD efforts to improve the quality of military medical care.

DOD does not have such a centralized system, and of the services, only the Air Force systematically collects data on malpractice claims and feeds it back to its facilities. However, the Air Force system does not include information on potential claims, and the data are not routinely

shared with other services, an advantage offered by a centralized system.

Two major DOD concerns about setting up a system involved the lack of resources and the inability to keep the information confidential. Recent legislation that provides confidentiality for certain DOD medical quality assurance records should help alleviate the latter concern. GAO believes that the benefits of systematically analyzing past mistakes in providing medical care to identify issues needing special attention are worth the additional resources.

Principal Findings

Patterns of Medical Problems Can Be Identified

GAO's analysis of a random sample of files for medical malpractice claims closed by the military in 1984 demonstrated that patterns of recurring medical care problems, such as specific hospitals that are involved in proportionately more claims, can be identified. While these analyses do not by themselves support conclusions about quality of care, such patterns can be further studied to determine if problems in care exist. Where problems are found, actions can be taken to prevent similar incidents in the future. (See pp. 18-26.)

By tracking individual physicians who are involved in malpractice, DOD can identify physicians responsible for substandard care on multiple occasions and focus attention on needed corrective actions. A central tracking system is especially important in the military because military physicians are transferred periodically from one hospital to another. (See pp. 39-42.)

Limited Malpractice Data Collected by DOD

DOD has begun to collect some centralized quality assurance/risk management information. It began collecting some data on malpractice claims in 1982 and, at the time of GAO's review, was considering collecting additional data. However, the malpractice data collected or being considered did not include two kinds of data necessary to identify current, complete patterns of recurring medical problems.

- Potential claims. Often actual claims are filed a year or two after the incident occurred. Information on potential claims as well as actual claims can provide a more current and complete picture of medical care

problems and facilitate more timely actions to improve care. (See pp. 37-38.)

- Specific providers responsible for malpractice. This information could be used to identify health care providers so that problems can be identified and promptly and appropriately addressed.

Also, DOD does not systematically disseminate malpractice information or educational case studies to the services for quality assurance/risk management purposes. (See pp. 31-32.)

Defense Officials' Concerns About a Centralized System

In addition to the issues involving resources and confidentiality, DOD and service officials had several concerns about expanding the malpractice information they collect and analyze. The Assistant Secretary for Health Affairs told GAO that while a central system had merit, the prerogatives of the three services would have to be considered before data could be maintained on a centralized basis. Other concerns included (1) the possible negative effect on physician recruiting and retention of keeping centralized data on individual physicians and (2) whether hospitals would report all potential claims if they knew comparisons with other hospitals were going to be made. (See pp. 42-45.)

GAO believes that the potential benefits of a centralized system outweigh these concerns. Such a system is needed to systematically collect and analyze known problems in medical care and focus attention on corrective and preventive actions, as appropriate. (See pp. 45-47.)

Legislation passed in late 1986 provides that DOD may participate in a federal system that will accumulate information on civilian sector malpractice payments and certain adverse actions taken against physicians. Hospitals are to request this information when granting privileges to individual physicians. GAO believes that DOD should participate but that development of a centralized, more detailed DOD system should not be delayed pending implementation of the civilian sector system. (See pp. 28-29 and p. 47.)

More Complete, Consistent Data Needed

To effectively implement a centralized malpractice system, complete and consistent data are necessary. As a result of service policies and practices, such data are not available.

- Investigation reports do not always identify providers responsible for malpractice. (See pp. 39-40.)

- The services provide either no definition or general definitions of "potential claims," and hospitals GAO visited were using different definitions. Further, service regulations vary concerning which potential claims, once investigated, should be forwarded to headquarters. (See pp. 52-55.)
- Under current service policies and practices, all potential malpractice claims are not investigated by the claims services. (See pp. 56-59.)

Recommendations

The Secretary of Defense should direct the Assistant Secretary for Health Affairs, in conjunction with the service secretaries, to develop a DOD-wide system for collecting, analyzing, and using medical information from malpractice investigations. GAO also makes specific recommendations concerning content and use of the system, which it believes should include data on potential claims and the identification of providers responsible for malpractice. GAO further recommends DOD's active participation in the system to be established under recent legislation on civilian sector reporting. (See pp. 48 and 60.)

Agency Comments

DOD generally concurred with GAO's recommendations and stated that they would be addressed as part of other of DOD's ongoing or planned initiatives in the quality assurance area. DOD's approach focuses on expanding existing systems, especially at the hospital level, and increasing data reported to DOD. (See app. XI.)

GAO is concerned that DOD's approach will not adequately isolate the identification and reporting of actual or potential malpractice claims against its providers and will also require a long-term implementation strategy.

In making its recommendations, GAO envisioned a much simpler approach focused on known malpractice and risk management problems, and GAO continues to believe DOD should focus its near-term efforts on dealing with those issues. Once DOD's expanded quality assurance system is operational, these interim efforts could be phased out if the new system accomplishes the goals of GAO's recommendations. (See pp. 48-50 and 60-61.)

Contents

Abbreviations

DOD	Department of Defense
GAO	General Accounting Office

Introduction

During the past several years the quality of care provided by the military health care system has been a matter of concern to the Congress and the system's users. Much of the criticism stems from publicity given individual incidents of medical malpractice at military hospitals, from reported increases in both the frequency of malpractice claims and the dollar value of settlements, and from findings by the Department of Defense (DOD) Inspector General and service internal auditors that significant weaknesses exist in hospital-level programs designed to assure quality of care.[1]

As a result of these concerns, the Chairman, Subcommittee on Military Personnel and Compensation, House Committee on Armed Services, and Senators Daniel K. Inouye, Claiborne Pell, and Jim Sasser asked us to review several issues pertaining to the quality of care provided in military health care facilities. This report examines one of those issues, medical malpractice, and whether information on malpractice is effectively used to focus attention on potential medical care problems.

Military Health Care System's Medical Malpractice Experience

Health care for members of the U.S. military services is provided by direct care medical facilities operated by the Army, Navy, and Air Force. These facilities provide comprehensive medical care to active duty service members and their dependents, retirees and their dependents, and dependents of deceased members of the military services.

Facilities in the direct care system range from small clinics having limited medical capabilities to large medical centers having extensive capabilities and medical teaching programs. During fiscal year 1985, the military services operated 561 clinics and 168 hospitals. The hospitals admitted over 932,000 patients and had an average daily inpatient census of about 14,000. The hospitals and clinics combined had over 51 million outpatient visits.

Because of inconsistencies among service reports, DOD did not have fully reliable data on the number or types of medical malpractice claims filed against military hospitals. Available data, however, showed that military beneficiaries filed 3,306 medical malpractice claims against the DOD system during fiscal years 1982-85 and that 2,887 claims were closed—1,253 with monetary compensation totaling $166.7 million. Increases were occurring in both the frequency of claims and in the dollar

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

amounts of settlements. Between fiscal year 1982 and the end of fiscal year 1985, the number of claims filed increased by about 35 percent, from 689 to 930. During that same period total payments increased by about 116 percent, from about $29 million to $62.5 million, while the average value of each settled claim increased about 59 percent, from $106,073 to $168,891. (See app. I for more detailed data.)[2]

DOD's experience with the increasing number of malpractice claims is consistent with what is occurring in the civilian health care sector.[3] Direct comparison between military and civilian rates is difficult, however, because the two sectors differ in terms of patient populations and methods by which claims are settled. Further, under a 1950 Supreme Court ruling known as the Feres Doctrine, the government is not liable for injuries to active duty service members that occur in the course of activity incident to service. Consequently, active duty members are not compensated for malpractice injuries they receive in military hospitals. Service members can receive free medical care in military hospitals, and according to Veterans Administration officials, upon discharge from active duty, they can receive free care in Veterans Administration hospitals. Thus, they do not have to bear the expense of any medical care necessary as a result of malpractice.

Because DOD's malpractice data were not fully reliable and were limited in the scope of information about the claims, we analyzed a random sample of military medical malpractice claims closed in calendar year 1984. That analysis, described in appendix II, showed that the three services closed an estimated 496 claims in that year. About 10 percent of those claims were filed by active duty service members, and the other 90 percent by the other beneficiary groups. Payments were made in about 63 percent of those cases and averaged $155,084. Payments ranged from $300 to over $3 million. For claims where malpractice occurred,[4] an estimated 41 percent resulted in permanent total disability

[2]In commenting on a draft of this report, DOD provided some updated information. It reported that in 1986, 895 claims were filed, and malpractice payments totaling $51.2 million were made. Both represent a decrease from 1985. DOD did not provide data on the number of claims closed or the average dollar value of payments.

[3]GAO recently completed work on a series of reports concerning medical malpractice in the civilian sector. Five reports have been issued on such subjects as the nature of the current malpractice situation, alternative ways to resolve malpractice claims, and the medical malpractice situation in selected states.

[4]As discussed on page 67, to assure our data were as complete as possible, we included in our analysis some claims in which investigation reports did not state that malpractice had occurred but for which payments were made.

or death of the patient. Estimates of total payments for each service for 1984 closed claims are shown in table 1.1.

Table 1.1: Military Medical Malpractice Claims Closed and Payments Made
(Calendar Year 1984)

	Claims closed				
	Total number	Percent	Number paid	Percent	Amount paid
Army	180	36	115	37	$19,525,820
Navy	115	23	69	22	11,698,086
Air Force	201	41	124	40	16,542,031
Total	**496**	**100**	**308**	**100[a]**	**$47,765,937**

[a]Total does not add to 100 because of rounding.

More detail on the size of payments made for 1984 closed claims and the severity of injury is presented in appendixes III and IV.[5]

An estimated 93 percent of the 1984 closed claims were filed under the Federal Tort Claims Act (28 U.S.C. 2671), which applies to incidents occurring in the United States, and about 7 percent under the Military Claims Act (10 U.S.C. 2733), which applies to incidents in DOD's overseas facilities. Under the Tort Claims Act, claimants must file an administrative claim before filing suit. If the service has not disposed of a claim within 6 months of the filing date, either through settlement or denial, the claimant may bring suit in federal district court. Claimants filing under the Military Claims Act have no recourse beyond the administrative process. In 1984 about 65 percent of DOD's closed claims were closed through the administrative process, and the other 35 percent through litigation, either through a court verdict or out-of-court settlement. (More detail on disposition of cases through the administrative process or litigation appears in app. V.)

Hospital Programs Designed to Assure Quality of Care and Minimize Malpractice Losses

A major response to the rising incidence of malpractice claims in both civilian and military hospitals has been introduction of hospital-level quality assurance and risk management programs. Together these programs are intended to both assure a hospital's quality of care and minimize its financial loss resulting from incidents of poor quality care. As described in a 1983 DOD report, "quality assurance" emphasizes assuring quality medical care, with a secondary benefit of reducing potentially compensable occurrences due to clinical management misadventures.

[5]The data reported by DOD and the data we developed differ concerning the number of 1984 paid claims and dollar payments made. Differences could be the result of various factors, including inconsistency in data developed by DOD and sampling error in our sample. (See p. 31 and app. I.)

"Risk management," on the other hand, focuses on avoidance of fiscal liability due to potentially compensable occurrences in patient care, with a secondary benefit of improving quality of care through early identification or prevention of such occurrences.

Quality assurance programs are required in all hospitals accredited by the Joint Commission on Accreditation of Hospitals, a private organization that reviews and accredits both civilian and military hospitals. Civilian hospitals also have established risk management programs that operate in conjunction with quality assurance programs and focus on reducing financial liability. The three military services require risk management programs in each hospital.

In recent years civilian multihospital organizations have begun to develop centralized quality assurance/risk management information systems to supplement their hospital-level programs. A major component of those systems is data on malpractice incidents. According to organization officials, analysis of these centralized data allows the organizations to identify potential problem areas, such as individual hospitals, medical providers, or procedures that are most frequently involved in malpractice incidents. They said information generated by these analyses is used to provide feedback to hospitals and to help focus managerial attention on potential problems so that appropriate corrective action can be taken.

The Military Services Investigate Medical Malpractice Claims

Risk management programs form a link between a hospital's concern for quality of care and the legal implications and costs of malpractice incidents. In order to establish liability for medical malpractice, the following three elements must exist: (1) a standard of medical care must have been breached, (2) an injury that resulted in actual damage must have occurred, and (3) the breach of standard must have been the cause (proximate cause) of the injury. Care can be substandard without constituting malpractice if no injury resulted, and injuries can occur that are not caused by substandard care.

Risk management programs, both military and civilian, deal with information not only from malpractice claims filed, but from potential claims. A single definition of potential claim has not been established in the military or civilian sector. Generally potential claims include the more serious incidents that people responsible for risk management programs believe could result in malpractice claims, especially incidents involving injury to patients. Service regulations require that risk managers, those

responsible for hospital risk management programs, identify potential claims, and that they be properly investigated to assure that, if the standard of care has been breached, appropriate action is taken to reduce liability and provide the best defense. As used in this report "malpractice incident" refers to incidents involving both actual and potential claims.

In the military, the Army, Navy, and Air Force claims services, part of the Judge Advocate General's Office in each service, have primary responsibility for disposing of claims. (Litigation involving claims is generally handled for the military by the appropriate U.S. attorney's office.) The services' malpractice investigation procedures are summarized below.

In the Air Force the local base claims office is responsible for investigating all malpractice claims. Investigations include reviewing medical files and interviewing witnesses. The investigation file is reviewed by a medical law consultant (a lawyer assigned to the staff of a regional Air Force medical center), who obtains expert opinions on the treatment, usually from members of the center's medical staff. The base claims office may settle claims up to $7,500. Claims for amounts exceeding local settlement authority are forwarded to Headquarters, Air Force Claims Office, for disposition.

The U.S. Army Claims Service is responsible for investigating and disposing of Army medical malpractice claims. That office may delegate responsibility for investigations to the local base claims office, which is responsible for gathering evidence from medical files and witnesses. Upon receiving all data from the local level, the Army Claims Service usually forwards such information to the Department of Legal Medicine, Armed Forces Institute of Pathology,[6] for a medical-legal opinion. Headquarters, U.S. Army Claims Service, is responsible for disposing of claims over $15,000.

Unlike the Air Force and Army, which use claims officers to conduct their initial investigations, the Navy's initial investigating officer is appointed by the hospital commander and is normally a person with a medical background. The initial investigation report is reviewed by several officials outside the hospital in both the medical and claims system chains of command. On the medical side, the report is reviewed by the

[6]The institute is a joint command under supervision and control of the Army Surgeon General. One of its missions is to assist in resolving medical malpractice claims for DOD.

facility commander, then forwarded to the Naval Medical Command through the regional Naval Medical Command to which the treatment facility reports. The command may consult with medical specialists before commenting on the quality of care rendered.

Within the claims system, investigations are initially handled by the regional Naval Legal Service Offices, which have authority to settle claims up to $20,000. These regional offices generally rely on the investigation performed by the hospital's initial investigating officer, but they receive copies of all investigation files and documents and have authority to gather additional facts or evidence needed to dispose of malpractice claims. Final disposition of claims rests with the headquarters of the claims service, which in the Navy is the Claims Division, Office of the Judge Advocate General. The claims service may also forward cases to the Armed Forces Institute of Pathology for an opinion on the incident.

All three services require that hospitals identify incidents that are potential claims and that these potential claims be investigated. The initial investigation procedures are the same as for actual claims. The services differ concerning further involvement or notification of higher level commands depending on such factors as the seriousness of the incident and the likelihood of a claim being filed.

Objectives, Scope, and Methodology

The objectives of our review were to determine (1) whether patterns of potentially poor care can be identified from investigations of malpractice incidents and (2) whether malpractice data are accumulated, analyzed, trended, and used to educate providers so that improvements in medical care can be made and the number of future malpractice cases reduced.

Our work was performed at the major military medical and claims service headquarters offices, six military hospitals and base or regional claims offices, four civilian multihospital organizations, and a major provider of medical malpractice insurance.

Major headquarters offices visited included the Office of the Assistant Secretary of Defense for Health Affairs; the Army, Navy, and Air Force Offices of the Surgeons General; the Army Health Services Command; the Naval Medical Command; and the Army, Navy, and Air Force Claims Services. We also visited the Armed Forces Institute of Pathology.

At these offices, we analyzed policies and procedures concerning investigation and reporting of medical malpractice incidents. We also examined the extent to which the Office of the Assistant Secretary of Defense for Health Affairs and major medical commands had knowledge of malpractice within military medical facilities and their roles in the management and oversight of medical malpractice incidents. We also discussed the advantages and disadvantages of a centralized DOD system for accumulating, analyzing, and disseminating information from investigations of medical malpractice incidents.

Further, at the military claims offices, we randomly selected and reviewed 260 of the estimated 496 medical malpractice claims closed by the claims services in calendar year 1984 and for which the claims service headquarters had investigation files. We made this review to determine whether potential medical care problems could be identified from malpractice investigation files, and because DOD did not have sufficiently reliable or detailed data to identify medical care trends within the military health care system. Among the items we analyzed from the closed claims were: the medical incidents that gave rise to the claims; the investigations and reviews performed, including conclusions reached about the quality of care provided; the facilities at which the incidents occurred; the severity of patient injuries; and the medical services and specialties involved. Details of the scope and methodology of our closed claims review are discussed in appendix II.

Also, as part of our closed claims analysis, GAO's Chief Medical Advisor reviewed the data we obtained from the files and chose 14 cases he believed represented the kinds of cases that could be used to educate hospital staffs to prevent repetition of problems. He did not attempt to select all cases that had educational value, only to provide examples, and the number of cases selected was not designed to support statistical projections to the claims universe. Physicians at the Armed Forces Institute of Pathology also reviewed these cases and agreed they had educational value. These case studies, along with one developed from potential claims files we reviewed at the hospitals we visited, are presented in appendix VI. We use some of the case studies, in a more abbreviated form, as examples throughout this report.

The six hospitals at which we conducted our review were Martin Army Community Hospital, Fort Benning, Georgia; Reynolds Army Community Hospital, Fort Sill, Oklahoma; Navy Regional Medical Center, Jacksonville, Florida; Navy Regional Medical Center, Oakland, California; Wilford Hall U.S. Air Force Medical Center, Lackland Air Force Base, Texas;

and Sheppard U.S. Air Force Regional Hospital, Sheppard Air Force Base, Texas. These hospitals were selected to include a cross-section of medium to large hospitals (in terms of the number of beds), different geographical sections of the country, and all three military services. (See app. VII for details on the hospitals we visited.) We also contacted the local or regional legal officer assigned as each hospital's legal representative and the local claims office responsible for processing medical malpractice claims or potential claims against that facility.

At the hospitals and claims offices, we reviewed the files of the potential malpractice claims identified by the hospital between January 1, 1984, and June 30, 1985, and discussed these with hospital and claims officials to determine whether the incidents had been investigated through the claims system. We did not attempt to determine whether all potential malpractice claims were being surfaced at the hospitals. DOD and military service internal audit reports issued in 1984 and 1985 had identified weaknesses in hospital incident reporting systems—a prime source from which potential claims are identified. At the time of our review, insufficient time had elapsed to warrant an assessment of whether corrective actions taken as a result of those audit findings were adequate. We focused on what was done once an incident had been identified as a potential or actual claim, including how the hospitals interfaced with the claims systems. The results of our review at the six military hospitals are representative of only the hospitals we visited.

In addition, we visited the headquarters of four centrally managed civilian multihospital systems: Hospital Corporation of America, Nashville, Tennessee; Humana, Incorporated, Louisville, Kentucky; Kaiser Foundation Plan, Oakland, California; and Republic Health Corporation, Dallas, Texas. The four systems are ranked in the top 10 in the nation in terms of the number of beds they operate in acute care hospitals. We also visited the nation's largest provider of medical malpractice insurance, St. Paul Fire and Marine Insurance Company, St. Paul, Minnesota. At these organizations, we obtained an understanding of the programs and information systems in use to minimize financial losses from medical malpractice claims and improve patient care.

Our review, conducted between January 1985 and July 1986, was made in accordance with generally accepted government auditing standards.

Using Malpractice Information Could Help Assure Quality and Reduce Risk

Information from medical malpractice investigations can be a useful part of quality assurance/risk management programs—programs designed to assure quality of medical care and reduce financial loss resulting from malpractice claims. However, as discussed in chapter 3, DOD has not used the results of these investigations to develop a centralized quality assurance/risk management information system and to focus attention on possible problems to help assure that appropriate corrective or preventive actions are taken.

Currently the Army and Air Force require their claims services to investigate malpractice incidents, both actual and potential claims. The Navy requires that hospitals investigate claims and potential claims and that the Navy claims service review the investigations for all claims and some potential claims. The primary purpose of claims service involvement in malpractice incidents is to determine the government's legal liability and to defend the government's interest in malpractice claims and suits. However, our review of investigation files for claims closed in 1984 showed that these files can also provide valuable medical quality assurance/risk management information. For example, data can be abstracted and analyzed to identify facilities or hospital services that have patterns indicating possible medical care problems. The information can be used to focus attention on such problems and to educate medical personnel to avoid repeating the same or similar errors.

Civilian multihospital organizations are moving to establish malpractice data bases for use in improving medical care and reducing financial losses from malpractice suits. Also, recent legislation will require that insurance companies and others making payments as a result of malpractice actions in the civilian sector report that to the Secretary of Health and Human Services.

Analysis of Claims File Data Allows Possible Problems to Be Identified

Information that is useful for medical quality assurance and risk management can be obtained from claims investigation files. Our analysis of such information demonstrated how it could be used to identify possible problems, and thus focus attention on issues needing corrective or preventive actions.

Most of the information we sought was obtained from the investigation files. For example, claims files included information on age and beneficiary category of claimants, hospital and hospital service involved, type of care involved (inpatient, outpatient, or emergency), type of medical error that occurred, and severity of injury. One significant piece of

information—the name of the provider(s) responsible for the malpractice or substandard care—was not always available. This issue is discussed in detail in chapter 3.

Statistical analysis of the data could point to possible medical care problems that need closer examination. For example, the analysis could identify

- facilities, patient age groups, or beneficiary groups that had proportionately more claims or malpractice findings or
- concentrations of claims or malpractice findings among hospital services, types of errors, or severity of injuries (or providers if the information were available).

When used as part of a quality assurance/risk management system, such analysis could highlight areas that should be further investigated to determine whether serious problems exist. Also, reviews of claims files could give insight into some causes of errors and identify case study examples that could be developed to help educate providers to prevent repetition of errors. According to GAO's Chief Medical Advisor, cases are useful for educational purposes if they demonstrate errors, particularly if they have hazardous results, or if corrective or preventive actions are easily identified and taught.

Investigations can also provide information on medical care problems even if malpractice did not occur. The definition of malpractice includes not only that a standard of medical care was breached (i.e., that substandard care was given), but that an injury resulted. Claims investigators sometimes identify incidents where substandard care was given but no injury resulted. In an estimated 31 percent of the 1984 closed claims where investigators concluded malpractice had not occurred, they found substandard care had been provided.

Statistical analyses and case studies can be used not only to identify specific areas requiring high-level attention, but also to help focus hospital-level quality assurance/risk management programs on local problems. For example, statistical data can be fed back to hospitals, allowing each hospital to compare itself with system-wide statistics or statistics on like-size hospitals. Areas of variance can be reviewed by the hospital's quality assurance/risk management program. Case studies can also be used to alert staff to possible problems and train them to

avoid those problems. For example, when investigators make recommendations for action at the hospital involved in an incident, those recommendations could be useful to other facilities as well.

The types of analyses we performed provide insight into general patterns of care and the characteristics of malpractice claims, two areas we consider critical if management is to deal effectively with the complex issues involved in quality of care. The data we developed cover only a sample of 1 year's closed claims. Data collected over several years could contribute to a better understanding of patterns of care.

The following sections of this chapter discuss examples of (1) the types of analyses that can be conducted to obtain insight into patterns of care and to identify possible problems and (2) the types of educational case studies that can be developed. The information presented is not intended to be a complete analysis or to suggest conclusions about the quality of military health care.

Facilities With Proportionately More Claims Can Be Identified

Data from malpractice claims files can be analyzed to identify facilities that are involved in relatively high rates of malpractice claims or potential claims. For example, table 2.1 arrays data for the hospitals in each service with the highest number of claims closed, estimated from our sample of 1984 closed claims. The data show that Air Force hospitals AF-2 and AF-3, with an average daily inpatient census of 30 and 40, respectively, had an estimated 13 claims closed. This was the same number as other much larger hospitals; for example, hospitals AF-4 and A-2, with an average daily inpatient census more than 20 and 16 times greater, respectively, than hospital AF-2. Ratios of claims to inpatient census also point to hospitals with proportionately high rates of claims. In addition to hospitals AF-2 and AF-3, which have high ratios, hospital A-4 has a ratio of 101 claims for each 1,000 average daily inpatient census, much higher than the overall ratio of 37 to 1,000 for the hospitals shown.[1]

[1]DOD officials commented that our analysis could be misleading because we compared the fiscal year 1984 hospital average daily inpatient census with data from calendar year 1984 closed claims and because the closed claims represented medical incidents that occurred over many years (most during 1979 through 1982). They said data should be compared for the year the incident occurred, not the year the claim was closed. We agree that additional analysis could be done, but believe this analysis is sufficient to give general insight into patterns requiring further review. Also, if as discussed in chapter 3, potential claims are included in the data base, the data would be more current.

Table 2.1: Hospitals With Highest Numbers of Closed Claims[a]

Service	Hospital	Average daily inpatient census[b]	Estimated number of closed claims[c]	Ratio of closed claims to 1,000 inpatients[d]
Army	A-1	773	18	23
	A-2	497	13	26
	A-3	431	10	23
	A-4	99	10	101
	A-5	292	10	34
		2,092	**61**	**29**
Navy	N-1	400	15	38
	N-2	443	10	23
	N-3	161	8	50
	N-4	127	8	63
	N-5	160	8	50
		1,291	**49**	**38**
Air Force[e]	AF-1	272	13	48
	AF-2	30	13	433
	AF-3	40	13	325
	AF-4	609	13	21
		951	**52**	**55**
Totals		**4,334**	**162**	**37**

[a]As explained in appendix II, we counted all claims generated by a single incident as one claim.

[b]Fiscal year 1984.

[c]Calendar year 1984.

[d]Ratios were computed using the formula: (Number of claims X 1,000) / average daily inpatient census.

[e]Four Air Force hospitals each had an estimated eight claims closed, the next highest number of claims after hospital AF-4. They had average daily inpatient censuses of 247, 231, 53, and 51.

These data by themselves do not prove that any of these hospitals are providing poor care. However, further investigation might identify problems that could be corrected or help focus preventive education on specific hospitals if necessary. One civilian multihospital organization we visited told us they make this type of comparison and that any discrepancies act as a signal for further review of those facilities.

Hospital Services Involved in the Most Errors Can Be Identified

In reviewing investigation files, one item we extracted was the hospital service (e.g., emergency medicine, pediatrics, or cardiology) where investigators concluded malpractice had occurred. Analysis of this information can help focus attention on the specific hospital services involved in the most errors.

For example, our analysis of 1984 closed claims in which malpractice occurred showed that almost 50 percent of the claims were accounted for by two hospital services—obstetrics/gynecology (about 29 percent) and emergency services (about 16 percent). The services accounting for

the next highest portion of claims where malpractice was found were pediatrics (7 percent) and general surgery (about 6 percent). (See app. VIII.)

These malpractice patterns are generally consistent with experience in the civilian sector, and DOD is paying special attention to the obstetrics/gynecology and emergency services areas. Analysis such as we performed serves to confirm that some attention is needed and to provide specifics of the nature of the problem. Additional analysis could help to determine if particular facilities, for example, were involved in proportionately more of the claims than others and provide case study examples useful in educating staff. For example, the following two cases, taken from more detailed case studies in appendix VI, demonstrate the kind of information that could be used to educate staff about past problems and how to avoid these problems in the future.

Obstetrics/Gynecology (Case Study 11 in App. VI)

A young woman was admitted to a military hospital for the birth of her child. The patient was attended by a first-year family practice resident, who contacted a family practice physician in another service (the patient had received her prenatal care from another service's family practice clinic) when problems developed. The physician arrived at the hospital almost 2 hours later. In the meantime, an obstetrician (who happened to be in the facility) examined the woman, applied a fetal heart monitor, then went back to his other patients. The resident and the obstetrician each thought the other was monitoring the patient. As a result, no one monitored the patient for about 30 minutes, during which time severe fetal distress developed. The baby was finally delivered suffering from heart and respiratory problems. Resuscitative efforts failed, and the infant died shortly after birth.

Improvements recommended by claims investigators included the need to train staff to recognize fetal distress and to provide yearly refresher courses to obstetrics staff in infant resuscitation. GAO's Chief Medical Advisor also pointed to the need to ensure patients in labor are continually monitored.

Emergency Room (Case Study 14 in App. VI)

A 16-month-old infant who had fever, rapid breathing, and rash on the chest and abdomen and who was exuding thick mucus was taken to an emergency room. The physician on duty (a urologist) examined the child and prescribed medication for a respiratory infection. The examination did not include an X-ray. The child was brought to the emergency room

again the next day and seen by the on-duty physician, this time an internist. He contacted the on-call pediatrician for assistance because he did not know how to treat the child's acute respiratory distress. The on-call pediatrician did not arrive to handle the case. The child was seen by a pediatrician about 2 hours later, when the hospital's pediatric clinic opened. The child was then admitted to the intensive care unit, but died the next day from pneumonia and septic shock (infection of the bloodstream).

Claims investigators were critical of the failure to take an X-ray—which might have revealed pneumonia—and of the on-call pediatrician's failure to come to the hospital.

Several other cases presented in appendix VI involve obstetrics/gynecology (cases 2 and 9) and emergency services (case 12).

Most Frequent Errors Can Be Identified

Information can be categorized and analyzed to identify the most frequent types of medical errors. Further review of specific cases can identify some causes of errors to help focus preventive and educational actions concerning the errors. Our analysis of the claims in which malpractice was found showed that an estimated 38 percent involved errors in diagnosis, such as failing to diagnose an abnormal condition or making an incorrect diagnosis. This was twice as many as each of the next two most frequent errors, those in obstetrical treatment (19.1 percent of the claims) and surgical treatment (17.6 percent). (See app. IX.)

Again, further analysis of the data could show particular hospitals, providers, services, etc., responsible for diagnostic errors and help focus remedial and preventive efforts. Analysis of investigation files involving diagnostic errors could also identify causes of errors and specific case studies that could be used to teach staff about those causes and how to prevent them. For example, nine case studies included in appendix VI deal with diagnostic errors and demonstrate several causes of such errors, including failure to consult with physician specialists, misreading X-rays, poor communication, and inadequate supervision.

Lack of Consultation With Specialists Contributed to Diagnostic Errors

In four of the case studies presented in appendix VI that involved diagnostic error, a health care provider did not refer a patient to a specialist to obtain a consultation or did not do so in a timely manner. One such case (case 3) is summarized below.

Between late 1980 and mid-1982, a 55-year-old male visited a medical center family practice clinic on many occasions complaining of a sore throat. The records indicate that the patient was examined by physician assistants and resident staff during these visits. In early 1981, a resident noted that the patient should be referred to the ear, nose, and throat clinic if symptoms persisted. The records show that the patient visited the primary care and family practice clinics at least seven more times with similar complaints, but was not referred to the ear, nose, and throat clinic until May 1982. At that time he was diagnosed as having throat cancer. Because of its advanced stage, the tumor was inoperable. The patient died 7 months after the ear, nose, and throat examination.

Investigators concluded that the health care providers did not recognize the potential seriousness of the symptoms and did not obtain an ear, nose, and throat consultation as soon as symptoms warranted. The investigation report on this case included recommendations that an educational program be undertaken at the facility to increase staff awareness of the possibility of cancer and that the use of specialists available at the facility be increased.

Cases 1, 2, 6, and 10 in appendix VI also concern needed consultations. Three of the four involve diagnostic error.

Misreading X-Rays Contributed to Diagnostic Errors

The case studies in appendix VI include two (cases 4 and 5) in which a misread X-ray led to diagnostic errors. We also identified two additional claims (not selected as case studies) in which the errors were very similar to the case study summarized below (case study 4).

On December 29, 1982, a retired service member visited a hospital screening clinic complaining of fatigue and blood in the stool. As part of the examination, the physician ordered a blood count, which indicated anemia, and a barium enema X-ray. The X-ray, performed on January 28, 1983, was interpreted by the radiologist as normal. The patient continued to have problems and visited the clinic several times during the year. He was usually seen by a nurse practitioner, who continued to treat him for anemia. Finally, on November 7, 1983, the patient was examined by a physician who ordered a number of tests, including a barium enema X-ray, which identified cancer in the colon. The radiologist found that, in retrospect, the January barium enema X-ray also showed a lesion, later diagnosed as cancer. The patient underwent surgery to remove the cancer on December 5, 1983, almost a year after his first visit to the clinic.

Investigators concluded that misreading the January X-ray and not aggressively investigating the cause of the anemia delayed the diagnosis of cancer and the patient lost up to a 50-percent chance of survival.

Inadequate Communication Between Providers Contributed to Diagnostic Errors

The case studies in appendix VI include two (cases 7 and 8) involving inadequate communications between health care providers that led to diagnostic errors. One case (case 7) is summarized below.

In November 1978, a 25-year-old patient, complaining of decreased hearing on the right side, was referred to an ear, nose, and throat clinic. The patient was seen in that clinic on February 20, 1979, at which time the physician requested X-rays, which were performed on February 28, 1979. (Records do not indicate the cause of the delay.) The radiologist noted that the X-ray indicated the possibility of a tumor and that additional tests should be made. However, this information was not properly reported to the patient's attending physician, nor was the patient properly notified of the possibility that she had a tumor.

The records indicated the patient did not return to a military medical facility but was seen by a civilian physician. Almost 2 years after the X-ray indicated the possibility of a tumor, the patient had the tumor removed at a civilian facility. She suffered a total loss of hearing on the right side, partial facial paralysis, double vision, and moderate brain damage causing partial paralysis and loss of coordination.

The claim investigators were critical, given the potential seriousness of the radiologist's findings, of the poor communication between the radiologist and the attending physician and of the lack of notification to the patient. (They also questioned possible liability of civilian health care providers involved.) One investigator recommended that each involved department at the facility have written procedures to assure that the results of diagnostic studies are not filed without review by a physician adequately trained to recognize abnormal events requiring follow-up.

Inadequate Supervision Contributed to Diagnostic Errors

Six of the case studies in appendix VI (cases 2, 3, 4, 5, 6, and 11) demonstrate inadequate supervision of nonphysician providers (e.g., physician assistants) or of physicians in training (i.e., interns). Four cases (3, 4, 5, and 6) involved a diagnostic error; one such case (case 6) is summarized below.

A 41-year-old male service member's high blood pressure was being monitored by a physician assistant. Between January and July 1981, the patient was seen many times in the primary care clinic by a physician assistant. During the first and subsequent visits, the patient complained of being weak and fatigued. The physician assistant adjusted the medication and asked the patient to return for rechecks. On July 1, the physician assistant noted that the patient's blood pressure was very high. The patient had several complaints, including chest pain, a clammy feeling, and numbness in the side. At this time the physician assistant noted that the patient should see an internist, but no appointment was available during this visit.

On July 16, the patient was seen by an internist, who ordered an electrocardiogram and other tests and asked the patient to return for additional evaluation. Again on August 16, the patient was seen by an internist after two visits to the emergency room complaining of pain. The electrocardiogram that had been ordered was not in the file, but the internist did not follow up on it or order another one. Later that day the patient died of a heart attack.

Investigators concluded that the medical care provided by the physician assistant and internist was less than adequate. One problem they noted was inadequate supervision of the physician assistant, noting that the record contained no indication of physician review or agreement with the physician assistant's plan of care. The investigator recommended that the role of the physician assistant be investigated further and, if appropriate, the problem areas be discussed at an appropriate risk management meeting.

Civilian Multihospital Organizations Are Developing Centralized Information Systems

According to civilian multihospital organizations we visited, a centralized information system is a primary component of an effective risk management program. A centralized program can complement hospital-level quality assurance/risk management programs by allowing the organization to collect data and identify potential problems within both the system and individual facilities and, thus, focus managerial attention on the need for corrective or preventive actions.

Systems at the multihospital organizations we visited were in various stages of development. Both the Kaiser and Republic Health systems were still in the planning phase.

Humana, Incorporated's, centralized information system will have three components. At the time of our review, two—occurrence reports and malpractice claims abstracts—were operational, and the third—retrospective medical records abstracts—was being developed. The claims abstract and occurrence reporting components were used to (1) identify problems and trends in the hospitals, (2) indicate where controls were needed, and (3) determine corrective action the hospitals and physicians needed to take.

Humana implemented its claims abstract component in early 1983. It included all malpractice claims data since 1976 to aid in developing complete trending information. Information enters the claims system from two sources:

- lawsuits (claims) and
- occurrence reports that identify incidents that might result in a claim (potential claims).

Data abstracted from each claim, or report of potential claim, and the resulting investigation report show (1) basic claims data, including a description of the incident; (2) claimant information, including personal statistics and what happened during the hospital stay; (3) litigation information; (4) personnel involved, including the physician(s); and (5) witness information.

Officials provided an example of how data from such a system can be used. Humana developed a list of the 10 most common injuries resulting from surgery, and a local university medical school used it to teach about surgical complications and ways to avoid those complications. Humana also gave each facility statistical reports on its own claims by case and type of injury and planned to give the facilities a summary of all claims, system-wide.

Although Hospital Corporation of America's system was still being implemented at the time of our review, the corporation had installed computer systems and was collecting and analyzing its data. It was comparing each hospital's malpractice incident rate—categorized by type of incident, nature and severity of injury, and location where the incident occurred—to that of the average corporate-wide rate. The corporation used this type of information to identify individual facilities that should be visited by risk management staff. It also planned to integrate historical data with current records to allow more comprehensive trending and comparisons among the facilities.

Recent Legislation Requires Central Reporting of Civilian Malpractice Payments

The Health Care Quality Improvement Act of 1986 (title IV of Public Law 99-660, dated Nov. 14, 1986) was enacted in response to congressional concerns about the quality of medical care in the United States. Among the concerns specifically cited in the law was

"... the need to restrict the ability of incompetent physicians to move from State to State without disclosure or discovery of the physician's previous damaging or incompetent performance."

Among other things, the law requires entities (including insurance companies) making a payment as a result of a malpractice action against a physician to report that payment and the circumstances surrounding it to the Secretary of Health and Human Services. Hospitals and other health care entities and boards of medical examiners are also required to report whenever certain types of adverse actions, such as limitation of clinical privileges or license suspension, are taken against physicians and may report if actions are taken against nonphysician health care providers. Hospitals are required to request those data from the Secretary at the time a physician or other licensed health care provider applies to be on the medical staff of, or for clinical privileges at, the hospital and at least every 2 years thereafter.

The law requires data reporting to begin on a date (within a year of the law's enactment) specified by the Secretary of Health and Human Services. The data to be reported concerning malpractice include (1) the name of the provider, (2) the amount of payment, (3) the name (if known) of any hospital with which the provider is affiliated or associated, (4) a description of the acts or omissions and injuries or illnesses upon which the action or claim was based, and (5) other information that the Secretary determines is required. Reported data are to be kept confidential and only disclosed, other than to the physician or health care provider, with respect to professional review activity or malpractice actions, or in accordance with regulations promulgated by the Secretary of Health and Human Services. The law also provides that the information is intended to be used solely for activities in the furtherance of the quality of health care and that a payment in settlement of a medical malpractice action or claim shall not be construed as creating a presumption that medical malpractice has occurred.

During congressional consideration of malpractice reporting legislation, we testified on the need for a central reporting mechanism and recommended that DOD and the Veterans Administration be included in any such system. As enacted, the law directs the Secretary of Health and

Human Services to seek to enter into memoranda of understanding with the Secretary of Defense and the Administrator of Veterans Affairs to apply the reporting provisions to hospitals and other facilities and health care providers under their respective jurisdictions. The Secretary of Health and Human Services is to report to the Congress within 2 years from the date of the act on any such memoranda and on the cooperation among these officials in establishing the memoranda.

Conclusions

Our analysis of closed claims demonstrated that information obtained from malpractice investigation files could be a useful tool in quality assurance/risk management programs. Statistical data can be analyzed to focus attention on patterns indicating possible medical care problems at specific facilities, by specific hospital services, etc. Further investigation of those patterns could identify problems that should be corrected or preventive actions necessary to help improve the quality of care provided. Analysis of more detailed information concerning malpractice incidents can provide both insight into the causes of problems and valuable "lessons learned" educational tools. Feeding information back to facilities could also help them focus their hospital-level quality assurance/risk management programs on areas where they vary from the system norm or average. It could also allow them to use case studies to alert staff to possible problems.

Civilian sector multihospital organizations have begun using central data bases that include malpractice information to supplement hospital-level quality assurance/risk management programs. Their goals in developing these systems are to improve care and reduce financial losses through malpractice suits. Further, under the recently enacted Health Care Quality Improvement Act of 1986, the Secretary of Health and Human Services will establish a system that will help hospitals assess the competency of physicians and other health care providers by making available to the hospitals information about physicians' involvement in malpractice as well as certain adverse actions taken against them. Provision is also made to allow DOD facilities and providers to be included in this information system.

DOD's System for Collecting and Analyzing Malpractice Information Is Limited

Although the DOD office responsible for monitoring the quality of military health care has recognized the need to collect some malpractice data, thus far its system is limited. The system does not, for example, include data on potential claims or on specific medical providers or facilities. Further, DOD does not feed back statistical and case study data to the services or hospitals for use in quality assurance/risk management programs. These are components of malpractice systems considered important by one or more of the civilian multihospital organizations we visited.

Of the services, only the Air Force routinely and systematically collects data on malpractice claims and feeds the information back to its facilities. But these data do not include information on potential claims and are not routinely shared with the other services. The Army and Navy have no centralized, comprehensive systems for collecting and analyzing malpractice data.

At the DOD level, the Assistant Secretary of Defense for Health Affairs is the principal advisor to the Secretary on health policies, programs, and activities. He is responsible for overall supervision of DOD health activities, including medical quality assurance, which is the responsibility of the Office of the Deputy Assistant Secretary for Professional Affairs and Quality Assurance. That office is responsible for monitoring and evaluating the quality of care provided in military medical treatment facilities and for developing policies and programs to maintain and improve the quality of care. In the services, the offices of the surgeons general, and also of the commander of the Naval Medical Command, are responsible for overseeing operation of the hospitals' quality assurance and risk management programs.

DOD and service officials cited various concerns about implementing a centralized malpractice information system. Their concerns included the need for additional resources to implement the system and the inability to keep the information confidential, creating the potential for persons outside the health care system to draw incorrect conclusions from statistical data, without further investigation. These and other concerns are discussed in this chapter.

DOD and Services Could Make Better Use of Malpractice Information

Currently, the Office of the Assistant Secretary of Defense for Health Affairs collects some centralized quality assurance/risk management data, including some malpractice claims data. The Armed Forces Institute of Pathology and the three services' medical commands also receive some data on malpractice incidents. At the time of our review, Health Affairs was considering collecting additional malpractice information that could help focus attention on possible problems. The data being collected or considered, however, are inconsistent and incomplete and, except in the Air Force, not systematically used for feedback or educational purposes.

Data Collected by Health Affairs Are Limited

Since October 1982, the services have been required to report summary information about malpractice claims to Health Affairs. Health Affairs has also begun collecting data on (1) hospital mortalities associated with certain medical procedures; (2) selected hospital medical care complications, such as drug reactions; and (3) data developed by civilian peer reviewers who review selected military patient records. These data collection efforts were being modified or developed during our review.

Health Affairs Collects Statistical Data on Malpractice Claims

Each service reports summary data on malpractice claims quarterly, including the number of claims filed and closed and dollar amounts paid. Closed claims data also are broken into medical specialties, such as surgery, medicine, and obstetrics/gynecology. However, the Health Affairs Office of Quality Assurance could not use the data for trending because they were inconsistent. The Navy reported the number of medical incidents resulting in claims, while the Army and Air Force reported the total number of claims. Because one incident may generate multiple claims, the reported information was not comparable. Further, at the time of our review, officials were not sure whether the data included claims filed by active duty service members, settled through the U.S. attorneys' offices, filed overseas, or settled by local military legal offices.

In October 1985, 3 years after the first directive requiring reporting, Health Affairs established standard definitions for what should be reported beginning in fiscal year 1986, i.e., medical incidents, not total number of claims. Also, overseas and U.S. data were to be reported separately. According to a Health Affairs official, these changes were interim, and a revised reporting directive was being developed.

In July 1986 Health Affairs officials told us that the revised directive was still being developed. They were considering collecting data for each military service that would summarize paid claims according to

- year of medical incident;
- type of care (inpatient, outpatient, and emergency);
- hospital service (surgery, obstetrics/gynecology, other medical, and dental); and
- hospital size (medical centers and other, generally smaller, hospitals).

They also said that, partly in response to concerns we raised during this review, they were considering requiring the services to provide a brief statement of facts, including issues of negligence, for each paid claim.

According to Health Affairs officials, if the revisions are made, Health Affairs would be able to track patterns over time and make comparisons among services. They said the data could be used to identify, on a broad scale, possible problems. For example, they said trends in outpatient surgery could be monitored. According to the officials, they also plan to feed some information back to the services.

Plans for revising malpractice reporting were incomplete during our review, so we could not fully assess them, and in October 1986, officials told us they did not know when or if the revisions would be made. If Health Affairs collects the information under consideration, it could help focus attention on possible problems. This information would, however, have the following limitations.

- Not all useful types of analysis could be accomplished; e.g., analysis by individual facility and development of case studies (which we demonstrated in ch. 2 to be useful products of a centralized malpractice data base). Hospital data will be combined into two groups by hospital size, and information on individual facilities will not be collected. Also, the "brief statement of facts" about each case appears to be insufficient to provide convincing case studies. Detail is necessary in case studies to make them convincing to medical personnel, according to physicians with whom we spoke at the Armed Forces Institute of Pathology.
- No information on potential claims or providers responsible for malpractice or substandard care will be collected (as we discuss on pp. 37-42).

Other Centralized Data Collection Is Limited

Health Affairs has required reporting of statistics on mortality and on selected hospital medical care complications since 1983 and 1984,

respectively. In 1986 the office began implementing a program of external civilian peer review in DOD hospitals. These efforts were still being developed at the time of our review, but the data that are now or will be collected lack some of the advantages of a comprehensive centralized malpractice information system.

The services report data to Health Affairs annually on mortalities associated with 26 selected surgical procedures performed in the facilities and on medical care complications identified through the hospitals' occurrence screening programs.[1] Data collection on mortalities began in 1983 and on complications in 1984. Since 1985, both sets of data have been reported on individual facilities as well as in summary form to Health Affairs. Information on specific health care providers involved is not reported. Moreover, according to Health Affairs officials, data on complications have not proven very useful. In October 1986 they told us major changes were being planned. The DOD occurrence screening checklist was to be revised and hospitals allowed more discretion in developing additional screens. Health Affairs will continue to receive some data, but at that time officials were unsure about what data they would collect and how they would use it.

Under the external peer review program, civilian reviewers under contract to DOD abstract and analyze data from patient medical records involving selected high-risk diagnoses or procedures, such as hypertension or primary caesarean sections, and selected hospital events, such as unexpected returns to the emergency room. In some cases random samples are taken; in others 100 percent of the records for specific diagnoses, etc., are reviewed. Health Affairs estimates that about 15 percent of each hospital's discharges will be reviewed monthly. Patterns of care identifying potential problems are subsequently reviewed by a physician peer review panel, which may then examine specific cases. The contractor provides monthly reports of the analysis of care to the hospitals, the three services, and Health Affairs. In October 1986 a Health Affairs official told us that, as a cost-saving measure, they were considering reducing the scope of the work in terms of the number of diagnoses, etc., covered or the number of records reviewed.

[1]Occurrence screening is a monitoring technique in which inpatient records are reviewed by hospital staff to identify specific occurrences that are deviations from normal procedures or expected outcomes. Eighteen "occurrences," such as blood transfusion reaction, cardiac arrest, or unexpected return to the operating room, are included in the DOD-developed occurrence screening checklist.

These systems may provide data useful for centralized quality assurance/risk management efforts. At least one civilian multihospital organization we visited included data from other sources, in addition to malpractice data, in its information system. We believe malpractice data are important in such a system because they have the benefit of a full investigation of events by persons not associated with the care provided and allow broad coverage of hospital activities because they are not limited to specific procedures or complications. For malpractice claims or potential claims where malpractice occurred, there is also demonstrated effect because they involve injury to patients and, often, payment.

Pathology Institute Reviews Many Claims Files

All services can ask the Armed Forces Institute of Pathology to review malpractice incident investigations. One of the institute's missions is to help DOD resolve medical malpractice claims. In that capacity, it provides medical-legal opinions on the merits of claims and some potential claims.

According to institute officials, the Army Claims Service sends most of its claims investigations to the institute to obtain a medical-legal opinion. However, institute and claims service officials told us the institute has a backlog of active claims. An April 1986 Army claims service bulletin states that, normally, potential claims will not be sent to the institute for review. Historically, the Navy has sent most (officials estimate 80 to 90 percent) of its malpractice investigations to the institute for review. However, Navy officials told us that, recently, they had reduced the number of incidents sent because the institute was not able to respond in a timely manner. Institute officials also told us they believe they are seeing a lower number of Navy cases. The Air Force generally relies on its own medical law consultants rather than sending cases to the institute. Air Force and institute officials told us that the Air Force began using its own consultants because the institute was taking too long to complete investigations.

In addition to the institute's role in providing medical-legal opinions on malpractice incidents, triservice regulations currently require that copies of all medical malpractice claims and related medical records be sent to it and maintained as a consulting service, whether or not an opinion on the claim is needed. Institute officials told us, however, that they do not receive copies of all claims. The chairman of the Department of Legal Medicine explained to us that one institute responsibility is to analyze malpractice data to identify and alert medical officials to patterns of substandard care and to provide educational feedback to the services and hospitals. He said current resources allow this to be done

on only a limited basis. For example, institute staff sometimes publish analyses of malpractice case experience in medical journals. The chairman further told us that they are computerizing their caseload and his staff could do some additional abstracting of data from malpractice investigation files to keep computerized statistics. For example, if not required to review and provide an opinion on them, they could abstract statistical data from investigations of Air Force incidents (which they currently do not usually receive). However, resources for more extensive analysis would be limited.

Services' Use of Malpractice Data Varies

All three services gather some data concerning malpractice incidents, but only the Air Force has a system for collecting data from the malpractice claims processing system and providing feedback to facilities.

The Air Force distributes a semiannual report to all its hospitals and base legal offices which includes data on medical malpractice claims filed against the Air Force in each fiscal year since 1963. For each reporting period the report includes the number of claims opened and amounts claimed, the number of claims resolved administratively and through litigation, and the amounts paid under each type of settlement. The reports also include analyses by major command, individual facility, and medical specialty. The data are used to identify trends and increase awareness of the extent of malpractice claims.

The semiannual report also includes summaries of about 15 of the claims closed during the reporting period. These summaries show the amount claimed; the disposition of the case, including the amount of any judgments; the medical specialty involved; the chronology of events leading to the malpractice allegation; and whether health care providers were negligent. According to an Air Force claims officer, these reports are sent to the base claims offices and to Air Force medical facilities. The facilities review these reports and can use the case summaries as "lessons learned" to alert the staff to medical incidents that have resulted in malpractice claims. Officials at the two Air Force hospitals we visited told us they include discussions of these reports in the hospitals' ongoing quality assurance/risk management programs.

Additionally, the Air Force claims service notifies each hospital when a credentialed provider assigned to it is named in a malpractice claim and also notifies the hospital of the outcome of the claim; e.g., denied or paid. According to a claims official, this notification was designed to help assure that information concerning involvement in malpractice

claims is recorded in each provider's credentials file. The Air Force Surgeon General also receives copies of these notifications.

The Air Force system is more extensive than the Health Affairs or other service systems. But it lacks certain useful kinds of information, specifically the type or cause of the malpractice error and information from investigations of potential claims. Also, because data are collected and distributed only within the Air Force, the opportunity for interservice sharing is missed.

Neither the Army's Office of the Surgeon General nor the Navy's collects malpractice information. The Navy Surgeon General's Office of Quality Assurance reviews investigation reports on malpractice claims and potential claims and follows up to assure that any actions related to quality of care that are directed by the judge advocate general investigators are carried out. Information from the reports is not further aggregated or analyzed.

The Army Surgeon General's Office of Quality Assurance receives copies of the Pathology Institute reports on malpractice claims, but according to officials in that office, they do not analyze data from them. Also, at the time of our review, the Office of the Staff Judge Advocate at the Army's Health Services Command (responsible for medical facilities in the U.S.) was developing a system to collect information on actual and potential malpractice claims against Health Services Command facilities. Officials in that office told us they have encountered several obstacles in developing this system, including difficulties in obtaining the necessary computer hardware and lack of personnel. The purpose of the system is to allow analysis of the legal aspects of malpractice cases; information would be provided to medical quality assurance personnel if requested.

In September 1986 an official with the Army Surgeon General's Quality Assurance Task Force told us that plans were underway to set up a central information system concerning physicians. In addition to such information as licensure and board certification status, the system will include information on involvement in malpractice claims, which will be obtained from the Armed Forces Institute of Pathology and the Health Services Command's system. The official responsible for the system told us he did not know when it would be fully implemented.

Including Potential Claims Could Improve the Usefulness of Malpractice Data

Information concerning potential as well as actual claims can provide a more timely and complete picture of medical care problems than information that DOD is collecting based solely on actual malpractice claims. Civilian organizations include, or plan to include, both potential and actual claims in their centralized information systems.

Our analysis of 1984 closed claims showed that, on the average, claims were not filed until almost 25 months after the alleged malpractice incident.[2] Further, settlement of the claims took an average of 11, 13, and 19 additional months for the Air Force, Army, and Navy, respectively. Although information on actual claims provides a good data base to show possible systemic problems and patterns of substandard care, including potential claims shows a picture of problem areas on a more current basis.

Data based on investigations of potential claims may also be more complete than data based on investigations begun after a claim is actually filed, possibly several years after the incident occurred. Personnel involved are more likely to be available and to have a clearer recollection of the events than they would when the claim is actually filed. This may be especially true in the military, where personnel transfer or leave the service. Also, investigations may be improved because hospitals can better assure that medical records are complete and the circumstances surrounding the incident are fully documented. Our closed claim review showed that about 15 percent of the investigations were hindered by missing or incomplete records. (See app. X.)

The usefulness of sharing information on potential claims among facilities and services is demonstrated by the following examples.

- At one military hospital a patient suffered acute renal failure from injection of an intravenous material, which an investigator concluded should not have been used on this patient. The investigation indicated that a number of errors led to the mistake, including (1) the X-ray request did not indicate that the patient had chronic renal failure, (2) the patient was sent to the radiology department without his chart, and (3) the radiology staff relied on information provided by the patient, who was undergoing mental changes.

[2]Under the Federal Tort Claims Act, claims must be filed within 2 years of the incident or of the time at which the claimant should have known of the incident. Of the 1984 closed claims we reviewed, about 70 percent were filed within 2 years after the incident. The remaining 30 percent were filed from a few days over 2 years to over 28 years after the incident.

- Around the same time, a medical center in another military service disseminated information to its staff concerning the same topic. The bulletin reported that in the past 3 months, there had been two cases of significant acute renal failure associated with intravenous injection of the same material and added that clinical data regarding risk factors were not always available to the radiologist during the interview with the patient or the review of the chart.

The type of information addressed in the medical center's bulletin could have been useful to alert other health care providers and facilities in all three military services to this problem.

Officials of one of the civilian multihospital organizations we visited told us that over 50 percent of the data base they maintain on malpractice incidents consists of potential claims. They also told us information in the data base helps them to determine the causes of past losses and to fine-tune their risk management program to reduce or prevent future losses.

This organization also provided an example of how it disseminated information on incidents that could result in malpractice claims.

At one of the organization's hospitals, a patient undergoing open heart surgery was found to have carbon monoxide saturation of 29 (the normal value is 3). Repeat tests also showed elevated results. The patient was switched from the central oxygen and nitrous lines to cylinders, and patients in other operating rooms were checked. However, their values were all within normal limits. Although the patient's carbon monoxide level remained elevated for about 20 minutes, he was not adversely affected.

All equipment within the operating room was tested, and none was found to be defective. Attention was then turned to construction activities near the operating rooms. The organization retained a testing laboratory, which determined that the soldering process used to install medical gas lines had caused the carbon monoxide problem.

The organization sent its hospitals a "loss control bulletin" detailing this incident and providing guidelines on how to avoid the problem.

An additional example of a potential claim is described in appendix VI, case study 1.

Tracking Health Care Providers Could Help Improve Quality of Care and Reduce Risk

Neither DOD nor the services, except the Air Force, systematically collect information on provider involvement in malpractice incidents. Information from one multihospital organization we visited as well as cases found in our closed claim review indicate, however, that centralized data on providers' involvement in malpractice incidents can be a useful tool for quality assurance and risk management.

Data on Provider Involvement in Malpractice Are Not Maintained Centrally

For various reasons, malpractice investigation reports do not always identify the provider(s) responsible for malpractice, making it difficult for anyone above the hospital level to track provider involvement. Further, quality assurance and claims service officials told us that monitoring providers is not a centralized function, but is the responsibility of the hospitals through credentialing programs.

According to officials in the Army claims service, claims investigations have emphasized defending claims, rather than establishing individual responsibility. Under the Federal Tort Claims Act, the government is liable for the negligent acts of its employees acting in the course of their employment. Further, 10 U.S.C. 1089 makes the remedy against the government the exclusive remedy in military medical malpractice cases. It relieves individual military medical care providers of financial responsibility for malpractice. Consequently, investigators do not always specify who was responsible for the malpractice or substandard care they find. Air Force and Army claims officials said the facility's commanding officer, not the claims investigators, should determine whether a provider is responsible for an incident. On the other hand, Navy officials indicated that their investigation reports, which are reviewed by the hospital commander, should identify responsible providers. In about 39 percent of the Navy's 1984 closed claims, however, providers were not clearly identified.

Like claims services investigators, reviewers at the Armed Forces Institute of Pathology often do not identify specific providers involved in a case. They name providers only in cases of gross negligence, institute officials told us, because their reports are intended to be educational tools for the facilities that request them.

In our closed claims review, about 44 percent of the investigations that concluded malpractice had occurred did not identify the responsible provider. For example, one report acknowledged negligence on the part of a physician assistant and an internist who failed to diagnose and therefore properly treat a patient's condition, which later resulted in the

patient's death. The report does not provide sufficient information to identify either provider. In another case, more than one provider had seen the patient, and it was unclear which were responsible for the malpractice.

Regardless of whether providers are named in investigation reports, Health Affairs and some service quality assurance officials said centralized tracking of providers' involvement in malpractice is not necessary. DOD and service policies require hospitals to document in credentials files all incidents in which providers are responsible for malpractice or substandard care. Although military health care providers are periodically reassigned among hospitals, credentials files are required to accompany the providers to each assignment, thereby ensuring that commanders are aware of any problems.

However, major weaknesses in how hospitals were conducting credentialing activities were reported by the DOD inspector general and service audit agencies in 1984 and 1985. In February 1985 DOD issued a directive that established more specific criteria for information to be included in credentials files and considered during the credentialing process. Also, officials noted that they believe hospital-level tracking of providers will be made easier by a new automated quality assurance information system (Automated Quality of Care Evaluation Support System) recently installed in DOD hospitals.

These initiatives were not fully implemented at the time of our review.[3] The initiatives do not, however, attempt to track provider involvement above the hospital level. For example, the automated quality assurance system is designed for in-house use by hospitals and will not allow central access by Health Affairs or the services. Further, even though hospitals have primary responsibility for maintaining complete files on providers, as discussed below, central data on involvement in malpractice would allow headquarters to identify and follow up on provider-related problems.

[3]GAO is currently reviewing DOD and service credentialing programs, including implementation of the February 1985 DOD directive.

Centralized Provider Malpractice Information Could Identify Possible Problems

Information obtained from one of the civilian multihospital organizations we visited as well as from our closed claims review points to the potential usefulness of centralized provider-specific malpractice investigation data. The ability to identify physicians and other health care providers who may be providing substandard care is an important part of a centralized malpractice information system, according to an official at the civilian organization. In addition to tracking individual provider performance, the official said data collected allow the organization to associate possible problems with certain provider classes, such as board-certified and nonboard-certified providers, or with provider specialties. For example, he said that the organization had received a number of claims against orthopedists who treated emergency room crush injuries that later resulted in amputations. After reviewing the investigations, the organization concluded that all orthopedic physicians should consult a vascular surgeon (a specialist in surgical procedures of the cardiovascular system) before treating this type of injury.

We were unable to identify the responsible provider in over 40 percent of the claims we reviewed where malpractice had occurred, and we reviewed only a sample of 1 year's closed claims. Nevertheless, we found two cases that indicate the potential usefulness of tracking providers.

In the first case one physician was involved in three of the 1984 closed claims. The three incidents occurred over a period of about 10 months; in each the investigators concluded that this physician was responsible for malpractice. The three incidents resulted in outcomes ranging from minor injuries to death, and the government paid the claimants a total of $200,000. Documentation in the files indicated that two additional claims had been filed against the physician. Although this physician resigned from active duty 1 month after the second of the three claims was filed, he remained in the inactive standby reserve and was, under certain circumstances, subject to call to active duty in time of war or national emergency. Over 1 year after the third claim was filed and over 1-1/2 years after the physician resigned from active duty, a military review board was convened to consider his case, and the civilian licensing authority in the state in which he was then practicing was notified of the service's concerns about his medical competence.

In the second case, the file on a claim we reviewed noted that two other claims (not in our sample) had been filed against the physician involved. The investigation report did not conclude that malpractice had occurred in this case, but stated that, for the particular procedure involved, the

physician had a failure rate more than 20 times higher than the national average. Because the high failure rate would make the case hard to defend, the government settled the claim for $15,000. The file showed the two prior claims also were settled because of the physician's high failure rate.

These cases indicate the importance of (1) identifying in investigative reports the providers responsible for malpractice or substandard care and (2) tracking providers so that problems in health care delivery can be identified and promptly and appropriately addressed.

DOD and Service Officials Have Concerns About Implementing a Comprehensive Malpractice Information System

When we discussed with DOD and service officials the possibility of expanding the malpractice information currently collected and analyzed, they expressed several concerns. Their opinions about the usefulness of doing so varied, however, as did the extent and nature of their concerns. Two chief issues they raised were a lack of resources and potential misuse of the information by those outside the military health care system.

According to the Assistant Secretary of Defense for Health Affairs, a centralized malpractice information system would be a useful quality assurance/risk management tool for his office. He said, however, that Health Affairs lacks sufficient staff resources to implement such a system and that he does not expect to be able to obtain more staff. He explained that the Congress limited the size of the Office of the Secretary of Defense, and in recent years, Health Affairs had already received a substantial increase in staff within that overall limit.

Also, to implement a centralized malpractice data system, according to the Assistant Secretary, Health Affairs would have to take into account the three services' prerogatives and a current perception (on the part of the Offices of the Surgeons General as well as military physicians) that Health Affairs is encroaching on service and physician authority. He was also concerned that medical care providers, especially physicians, might resent having Health Affairs maintain central data on individual physicians, making physician recruiting and retention more difficult.

Other Health Affairs officials told us that they believed that most of the patterns that indicated possible problems would, upon further investigation, prove not to be care related. For example, if one hospital showed a dramatic increase in the number of incidents, the investigation might show that its patient load had increased correspondingly. The officials

were concerned that follow-up on all these patterns might not be the best use of Health Affairs' or the services' limited resources for quality assurance and risk management. To allow meaningful central interpretation of the malpractice information, they said valid data would have to be developed to enable them to weed out most of the "patterns" that do not accurately reflect care given. According to these officials, those data may not be easy to develop.

Another concern voiced by officials in Health Affairs, as well as the DOD Office of General Counsel, was that Health Affairs would be unable to protect the confidentiality of the information collected. They believed that data identifying specific hospitals or medical care providers could be misinterpreted by people outside the system. They said if media representatives or lawyers representing claimants against the government obtained the data, for example, through a Freedom of Information Act request, the information could be used incorrectly to draw conclusions about the quality of care based solely on the data, without the further investigation intended as part of the system.

Health Affairs officials agreed that data which included potential claims would be more useful—primarily because of timeliness—for quality assurance and risk management than data solely on closed claims. However, they were concerned that, if potential claims were included, comparisons among hospitals could be misleading because some hospitals might appear to have a higher rate of incidents solely because they did a better job of identifying and investigating potential claims.

The chairman of the Armed Forces Institute of Pathology's Department of Legal Medicine told us that he believed it would be worthwhile to maintain a central data base from which patterns of care, including names of specific providers, could be identified. He also believed useful case studies could be developed from potential, as well as closed, claims and that this would not cause legal difficulties in defending cases, as long as case studies were written so that specific cases would not be identified. He emphasized that any centralized data concerning specific providers should be based on a full investigation, such as is done on malpractice incidents, but that conclusions about performance should not be made without further consideration of the circumstances. He also noted that his department's current resources limited the extent of data collection and analysis that it could do.

Most service health and claims officials with whom we spoke agreed that a centralized data base could be useful, but their opinions differed

somewhat. Army Surgeon General and Army claims service officials indicated the data could be useful. Claims officials noted, for example, that a centralized malpractice data base would help them investigate complaints and decide on disposition of claims. Army Surgeon General officials were concerned, however, that if potential claims information was released outside their office, hospitals would be less likely to report potential claims.

Air Force officials reiterated that they already compile and disseminate some malpractice information and that they also had begun to keep track of physicians' involvement in malpractice claims. Surgeon General and claims officials said that centralized data could help in identifying possible problems and providing educational feedback. They also said that data on potential claims could be useful. A claims official said that he believed that keeping such data and feeding it back to the services and facilities would not cause significant legal problems concerning disclosure.

Navy officials, while acknowledging that such data could be useful, echoed the concerns of Health Affairs officials about the lack of resources necessary to implement a workable system and the fears that central data could be misused and misinterpreted if released. Keeping centralized data on specific providers was also a concern. They believe providers would be very threatened by that process and the peer review system at the hospitals—under which each provider's performance is reviewed—would be compromised because other providers (peers) would be less likely to report providers who had made mistakes. They emphasized that each provider's performance is tracked through the hospital-level credentialing process and that improvements in that process are still being implemented.

We did not assess the resources necessary to implement a centralized malpractice information system. However, the chairman of the Pathology Institute's Legal Medicine Department estimated that, if the institute was made responsible for systematically abstracting and analyzing malpractice data and preparing case studies, four additional staff would be needed. It would be very difficult to estimate the resources necessary to disseminate and follow up on malpractice data, because to some extent this depends on the number and types of possible problems identified. Certainly, we believe some judgment would have to be exercised in determining the possible seriousness of problems and the level of oversight needed. For example, Health Affairs could take action itself if problems appeared to be very serious; if they appeared less serious,

that office could either require the service to take action and report back or simply notify the service of a possible problem and allow the service to take whatever action it believed necessary.

We recognize the sensitivity of malpractice data and concerns about maintaining their confidentiality. Shortly after our discussion with the Assistant Secretary, however, legislation was passed (Public Law 99-661, dated Nov. 14, 1986) that protects DOD quality assurance records from disclosure to the public under the Freedom of Information Act and, with some exceptions, from disclosure in litigation. It specifically allows access by credentialing and licensing bodies, GAO, and others. The law also allows release of aggregate data. It was not clear whether aggregate data identifying specific hospitals, in addition to data identifying individuals such as patients and providers, would be considered confidential, according to officials in the Office of Health Affairs and the DOD General Counsel's Office.

Further, as discussed in chapter 2, other recently passed legislation (Public Law 99-660, dated Nov. 14, 1986) requires central reporting in the civilian sector of some of the types of malpractice data discussed in this report, specifically information concerning malpractice payments, including the name of the physician involved and the nature of the act or omission resulting in the payment. That law also requires that the Secretary of Health and Human Services seek to enter into memoranda of understanding with the Secretary of Defense and the Administrator of Veterans Affairs to include their agencies' medical facilities in this central reporting system.

Conclusions

A centralized, comprehensive malpractice information system would be a useful tool to help assure quality care and reduce the risk of financial loss resulting from malpractice in the military health care system. We believe claims service and medical service officials should cooperate to assure that useful medical data are obtained from claims files and centrally analyzed, followed up on, and fed back to the service and facility levels. This should be done under the leadership of Health Affairs to assure maximum consistency and interservice sharing of data.

Although Health Affairs and the services have recognized the usefulness of collecting malpractice information, they could make better use of such information for quality assurance and risk management. The usefulness of the data being collected by Health Affairs and the services at

the time of our review was limited by inconsistencies among the services' reports and by their narrow scope; for example, they did not identify specific facilities or providers and did not include potential claims. Only the Air Force had a systematic way of collecting statistical and educational malpractice data and feeding it back to its facilities. But these data were not shared with facilities in the other services and did not include potential claims. An official at the Armed Forces Institute of Pathology said the institute is supposed to analyze malpractice claims to identify care patterns and educate providers, but that limited resources have prevented this from being done in a formal way.

At the time of our review, Health Affairs was considering revising its malpractice reporting requirements and was collecting data on hospital mortalities and complications as well as data developed by civilian peer reviewers. These steps may provide additional data useful for centralized quality assurance/risk management efforts. However, we believe complete information about malpractice incidents is particularly useful because those incidents are not limited to specific diagnoses or complications and they are fully investigated. In many cases these incidents also have had demonstrated negative effect in terms of patient injury and payment.

We recognize that officials have concerns about expanding centralized malpractice information systems, especially lack of resources and possible misuse of the information. However, given that quality of care issues are involved, we believe the concerns do not outweigh the potential benefits of a centralized system.

Some additional resources would be necessary to effectively abstract, analyze, feed back, and follow up on malpractice data. The impact on resources could possibly be minimized, however, by judicious use of data and by allocating responsibility for the work among the various DOD health care organizations. For example, the Armed Forces Institute of Pathology could abstract data, develop statistical summaries, and prepare selected case studies, and Health Affairs could analyze and feed back information. Follow-up could be shared by Health Affairs, the service medical commands, and the hospitals themselves, and limited to those patterns of care that appear to indicate the most significant problems.

Although it is possible that the data could be misinterpreted if released outside the military health care system, we believe the usefulness of the data outweighs the risk. DOD is already collecting some centralized data,

such as mortality data, in spite of this risk. We recognize, however, the sensitivity of malpractice data as well as officials' concerns about confidentiality and the effect that keeping centralized data on individual providers might have on hospital-level peer review programs. We believe that protections contained in the recently passed Public Law 99-661 should help to alleviate these concerns.

Concerns about identifying specific providers in a malpractice data base go beyond that of possible disclosure and misuse of the information. For example, Health Affairs and Navy officials believe tracking providers is a hospital-level function—as part of the credentialing process—and inappropriate for higher levels. We believe that central tracking would provide a useful tool for focusing attention on corrective or preventive actions needed concerning specific providers frequently found to be responsible for malpractice or substandard care as well as for identifying more systemic problems with categories of providers. Further, the usefulness of central tracking of providers' involvement in malpractice in the civilian sector was recognized by Public Law 99-660, which requires information about malpractice payments, including the names of physicians, to be reported to the Secretary of Health and Human Services. That legislation also recognizes the usefulness of including DOD (as well as Veterans Administration) hospitals in such a system and requires the Secretary of Health and Human Services to seek to enter into memoranda of understanding with those agencies to accomplish this. We believe DOD should enter into such an agreement as soon as possible, but development of a DOD comprehensive malpractice information system should not be delayed pending implementation of the system required by Public Law 99-660.

We also found that, under current practices, investigation reports do not always identify the specific providers responsible for malpractice or substandard care. Unless providers are identified, a central information system could not effectively track providers.

Health Affairs and some service officials also raised concerns about using potential claims information, noting that it could be inconsistent and that hospitals may stop reporting them if they know they will be compared with other hospitals. We recognize these concerns. Chapter 4 discusses improvements needed to assure that potential claims are consistently reported and investigated.

Recommendations

We recommend that the Secretary of Defense direct the Assistant Secretary for Health Affairs, in conjunction with the service secretaries, to develop a DOD-wide system for collecting medical information from investigations of malpractice incidents, both potential and actual claims. The system should collect information that identifies the facilities and providers involved and that is sufficiently detailed to allow analysis and understanding of the problems identified and development of case studies. The system should provide for

- tracking and analysis of data on malpractice incidents to identify patterns of problems, including identifying providers responsible for malpractice or substandard care;
- further investigation to determine whether poor medical care is being given;
- follow-up, where appropriate, to assure corrective and preventive action is taken; and
- dissemination of statistical and educational information to the three service medical commands and medical facilities.

To better assure that complete information about provider responsibility is included in the system, we recommend that the Secretary direct the service secretaries to insure that investigations of malpractice incidents clearly identify providers found to be responsible for malpractice or substandard care.

In addition to developing a centralized malpractice information system for DOD's own use, we further recommend that the Secretary of Defense direct the Assistant Secretary for Health Affairs to participate fully in the provider tracking system required by Public Law 99-660.

DOD Comments and Our Evaluation

DOD generally concurred with all three recommendations but, except for the third, suggested a different approach than we recommended. We are concerned with the approach advocated by DOD. Our concern is based on a meeting we had with DOD officials on a draft of this report as well as our analysis of DOD's written comments.

DOD's basic approach is to expand existing quality assurance systems and to increase reporting of data to DOD headquarters. Its comments list the systems and activities that are either in place or planned and concentrate on taking most actions at the hospital level. (See pp. 108-111.)

There is no question that much is being done by DOD in quality assurance. Many of the efforts discussed in DOD's comments were underway during our review. However, while they are useful quality assurance activities, they do not allow the comprehensive, DOD-level analysis of known problems (claims and potential claims which investigations show to be cases of poor care) that implementation of our recommendations would allow.

The major system DOD proposes to accomplish central data analysis is one in which all adverse events, including claims, at each hospital would be entered into a hospital-level computerized data base. Some data would then be reported to DOD. DOD estimates that the program to increase central trends analysis and information sharing would be implemented in fiscal years 1988 and 1989. However, DOD stated that it will not define "adverse event" until fiscal year 1988, and we are not sure whether potential claims will be specifically identified. Further, DOD does not indicate whether the results of claims investigations would be entered into the system and centrally reported, or whether separate analysis of known problems identified from investigations of claims and potential claims would be done. Since the program for analysis and sharing is not yet developed, it is not clear how information will be centrally analyzed and shared among the services and hospitals. Nor is it clear how DOD will follow up to ensure that problems identified are corrected.

In making our recommendations, we envisioned a relatively simple system that we believe could be implemented fairly quickly. Claims and potential claims are already required to be investigated by claims services, and in many cases the results of those investigations are required to be sent to the services' claims service headquarters and/or the Armed Forces Institute of Pathology. Once the definition of potential claims and reporting requirements are clarified (see ch. 4), investigations already centrally located could be abstracted and analyzed by a relatively small staff.

DOD's system, in contrast, requires integration of several existing systems and relies on personnel at 168 hospitals to consistently abstract data on a much broader set of events than claims and potential claims. Further, several key components of DOD's quality assurance system are being changed. For example, DOD's malpractice reporting requirements (discussed on pp. 31-32) have been in effect since 1982; however, in October 1985, DOD changed the definitions in an attempt to provide more consistency in the data reported.

Occurrence screening (discussed on pp. 32-34) was first implemented in 1984. According to Health Affairs officials, DOD has found that program to be of limited usefulness as a central monitoring tool and has been planning major changes in the program. Some of those changes are discussed in DOD's comments on the draft of this report.

DOD began implementing the Automated Quality of Care Evaluation Support System in its hospitals in 1985. In 1986 significant problems were identified in the system, and changes were made. Additional changes, some of which are discussed in DOD's comments, are being considered to substantially expand the system's capabilities.

In view of the start-up difficulties of these DOD quality assurance initiatives and the need to integrate these changing systems, we believe that it will take a long time for DOD's proposed system to operate effectively. In contrast, we believe that the changes we recommended could be implemented more expeditiously and that DOD should focus near-term efforts on making those changes. Once DOD's expanded system is operational, these interim efforts could be phased out if the new system accomplishes the objectives of our recommendations.

We are also concerned about DOD's approach to implementing our second recommendation that claims investigations clearly identify providers responsible for malpractice or substandard care. Although DOD concurred, the comments are not clear on the action to be taken. Rather DOD stated that its general counsel will be requested to investigate a means of doing this.

Potential Malpractice Claims Should Be Investigated

As a result of current service policies and practices, all potential claims are not investigated at the local level. Consequently, hospital-level risk management programs are weakened. These programs have a primary goal of avoiding liability due to incidents that could lead to claims and a secondary goal of improving care through early identification and prevention of those incidents. A further consequence is that consistent and complete data on potential claims are not available for inclusion in a centralized DOD malpractice information system such as we recommend in chapter 3.

The Army and Air Force require that hospitals report potential claims to the base claims offices and that those offices investigate the claims. In the Army those potential claims investigations considered most significant are then required to be forwarded through the claims service chain of command to headquarters. Air Force regulations do not require potential claims to be forwarded above the base claims office level. In the Navy, hospitals investigate potential claims, and if the commander considers the potential claims significant, investigations are forwarded through the claims system to headquarters.

We found that potential claims were not always investigated at the local level, as required. Potential claims might not be consistently identified because definitions of a potential claim differ both among and within the services. Regulations requiring reporting and investigation of potential claims involving nonactive duty beneficiaries were not carried out in many cases. Potential claims, or for that matter actual claims, involving active duty service members were not always investigated, either because service policy was not to investigate these claims, or because unwritten policies requiring investigation were not followed.

Differences Exist in Service Definitions and Reporting Requirements for Potential Claims

Service regulations are not uniform in terms of (1) how they define a potential claim and (2) guidance concerning which potential claims should be forwarded to headquarters for review. Military hospitals we visited were using different definitions of potential claims. Two of the civilian multihospital organizations we visited had developed or planned to develop specific guidance concerning potential claims to help ensure they were investigated.

Service Regulations Concerning Potential Claims Differ

The three services' quality assurance/risk management regulations define potential claim differently. The Army regulation (AR 40-66) defines a potential claim as "where a breach of the standard of care has occurred with resulting injury." Likewise, the Navy instruction (NAVMEDCOM Instruction 6320.7) defines a potential claim as "an incident or occurrence that has caused harm and that has potential to expose the facility to professional or general liability to pay damages to the person(s) injured." The Air Force regulation (AFR 168-13) states that "there is no specific definition or formula available to predict what constitutes a potential claim." The regulation goes on to state that judgment is enhanced by experience and close legal liaison and that incidents should be reported where doubt exists.

Regulations also differ with regard to forwarding potential claims investigations above the local level. In the Army the base claims office decides whether to forward investigations to claims headquarters according to local judgments about the seriousness of the incidents. However, the Army has taken steps to clarify which potential claims should be forwarded. In January 1985, in response to the findings of the DOD-wide audit of medical quality assurance, the Army revised its quality assurance/risk management regulation to provide more specific guidance on which potential claims should be forwarded to the claims service headquarters. The revised regulation requires "at least" the following six categories of potential claims to be reported to Headquarters, U.S. Army Claims Service:

- Emergency service incidents.
- Operating room, anesthesia, or surgical incidents.
- Injury (adverse reaction) from drugs or biologics, including whole blood and blood fractions.
- Injury from medical devices.
- Adverse outcome from treatment (e.g., improper treatment, delayed treatment, or failure to treat).
- Adverse outcome from error in diagnosis, failure to diagnose, or delay in diagnosing.

The person responsible for drafting the provision said she determined through research of current literature that these six types of incidents are those that most frequently result in claims. The chief, General Claims Division, Army Claims Service, told us he believed that the change had resulted in more potential claims being reported, but he had no data to support this belief.

Air Force regulations require that regional medical law consultants be notified of potential claims and investigation results but do not require the investigations to be forwarded above the base claims office level. In the Navy, hospital commanders decide which incidents are sufficiently serious to require higher level review by the claims and medical systems' chains of command. The commander's decision may be based on an initial "command inquiry" investigation, which may include consultation with the hospital's legal officer.

DOD officials pointed out that no one definition could encompass all potential claims and judgment will always be needed in identifying which hospital incidents should be reported as such. We agree. However, we found hospitals were using significantly different definitions of potential claim.

Military Hospital Definitions of Potential Claims Also Vary

Two of the six hospitals we visited had developed more specific definitions of potential claims than provided in the service's regulations. The two definitions differed, and as discussed below, in one case the definition differed from that in the service's regulation. The other four hospitals had not developed specific definitions.

The two Army hospitals defined potential claim in their regulations. The Reynolds Army Community Hospital's definition went beyond that in the Army regulation by defining a potential claim as "any happening with or without injury [emphasis added], involving patient mishap or serious expression of dissatisfaction." Martin Army Community Hospital's regulation essentially repeated the Army regulation's definition of potential claim (a breach of standard with injury) and listed eight examples. The first six were those listed in the January 1985 Army quality assurance regulation, discussed above, as potential claims that must be reported to claims service headquarters. The other two examples were environmental accidents and patients leaving the hospital against medical advice.

Jacksonville naval hospital's local regulation repeated the definition of potential claim included in the Navy-wide instruction. The other three hospitals' regulations did not address potential claims specifically.

We did not assess the effectiveness and consistency with which these facilities actually identified potential claims because the DOD inspector general and service internal auditors already had identified problems in hospital programs for reporting unusual incidents to the hospital risk

manager. These incident reports are generally considered to be a major source from which the risk manager identifies potential claims.

In the June 1985 summary report on the DOD-wide audit of medical quality assurance, the inspector general stated that because incidents are not reported, management was not given data needed to reduce risk and improve care. One of the report's findings was that required incident reports were not prepared at six Army and six Navy hospitals. (Air Force auditors did not determine if incidents were reported to risk managers.) The inspector general also noted that Army auditors found a lack of reporting because "there was no clear understanding of what constitutes a potentially compensable event" (potential claim).

We also noted differences among the incident reporting programs at the six hospitals we visited. For example, one hospital defined a reportable incident as any happening related to patient care or affecting the capacity to deliver health care. The regulation provided 15 examples of incidents that should be reported. Another hospital simply listed 36 "reportable" incidents, some similar to the 15 examples at the first hospital.

Civilian Organizations Provide Guidance on Identifying Potential Claims

Two of the multihospital organizations we visited had given or planned to give their hospitals guidance on identifying potential claim incidents. One of the organizations had implemented its centralized system and had provided guidance on the types of incidents that have major claim potential to improve reporting of those incidents to corporate headquarters. Officials of the second organization, which was still planning its system, told us that, as a prerequisite to implementing the system, they plan to develop a standard definition of which incidents constitute potential medical malpractice claims.

Officials in the organization that had implemented its system told us that reported potential claims are reviewed by headquarters staff and, if considered significant, referred to professional claim investigation agencies. Organization officials told us that initially only about 10 percent of their malpractice claims were being identified as potential claims before claims were actually filed. They told us that, in part, this was because only medication errors and falls were being reported, not the incidents that most frequently resulted in claims. Therefore, incidents resulting in claims were not being fully documented and investigated. The organization then developed more specific guidance concerning the types of incidents that constitute potential claims and should be

reported as such; e.g., incidents related to equipment failure, maternal and infant care, and emergency services. According to officials, in the ensuing 18-month period, they found 70 percent of the claims against their facilities had been preidentified as potential claims.

Some Potential Claims Are Not Investigated

Information on potential claims, which could be used to help improve the quality of military medical care, cannot be collected on a systematic basis because (1) service regulations requiring the reporting and investigation of potential claims are not being fully implemented and (2) some incidents involving active duty service members are not investigated.

Regulations Concerning Reporting and Investigating Potential Claims Are Not Fully Implemented

To varying degrees, hospitals were not reporting to claims services the potential claims they had identified, and claims services were not always investigating those that had been reported. This finding is based on our review of the files at the six facilities we visited and on follow-up work at the six local or regional claims service offices. We reviewed all incidents identified as potential claims by the facilities between January 1, 1984, and June 30, 1985. A brief discussion by facility follows:

- Wilford Hall Medical Center identified 25 incidents as potential claims. The medical law consultant told us they make sure the medical records applicable to a potential claim are complete, but potential claims generally are not investigated. The base claims office knew of only 1 of the 25 potential claims Wilford Hall had identified, but had identified 2 additional potential claims.[1] These three potential claims had not been investigated. Base claims officials confirmed hospital officials' comments, stating that incidents are not investigated unless a claim is filed.
- Sheppard Air Force Regional Hospital had identified six potential claims. However, according to the base claims officer, the hospital had not reported the incidents to his office for investigation as potential claims.
- Reynolds Army Community Hospital had identified 22 potential claims. The base claims office had investigated 17 of these, but was unaware of the other 5. The depth of the investigations depended on the risk manager's and claims office's judgment as to the probability that the incident would result in a malpractice claim.

[1]Claims offices sometimes identify potential claims about which hospitals are unaware. For example, they receive letters of inquiry from potential claimants' attorneys and therefore know that a claim is possible.

- At Martin Army Community Hospital, we saw little evidence that potential claims were reported or investigated. The quality assurance/risk management coordinator identified 17 potential claims, but the claims office had no records on 13 of them. The claims office did have files on 12 other incidents identified as potential claims about which the coordinator was unaware. Neither the coordinator nor the claims office was aware of one file identified by the medical records department as a potential claim. The claims officer told us he investigates potential claims when he has time, but had not investigated many recently because of staffing shortages. Files for the 16 potential claims the claims office was aware of generally contained only copies of medical records. There was no evidence that the incidents had been investigated.
- Jacksonville naval hospital had identified 26 potential claims, and a hospital investigation had been completed on all of them. Under Navy policy, the completed investigations should have been forwarded through the claims service chain of command. However, officials in the Navy Legal Services Office told us they were unaware of and had not received information on 8 of the 25 investigations.
- Oakland naval hospital officials identified nine potential claims. Hospital investigations were still in process for two. Of the seven completed investigations, three were preliminary "command inquiries" for which investigators concluded the care was appropriate and which, therefore, were not more formally investigated. The remaining four, however, were formal investigations. Under Navy instructions, these should have been forwarded to the Navy Legal Services Office, but according to officials in that office, they had not been.

Some Incidents Involving Active Duty Service Members Are Not Investigated

Service policies and practices concerning investigation of malpractice incidents involving active duty service members differ among the services and from those that apply to nonactive duty members. As a result, there is no assurance that such incidents will be investigated or reviewed by the claims services.[2] Therefore, any centralized information system based on malpractice investigation data would not include all malpractice incidents. Not only would the data be incomplete, but they might not be representative of all hospital services because some hospital services are provided to proportionately more service members than civilian beneficiaries.

[2]All three military services require that hospitals review these incidents as part of hospital-level, ongoing quality assurance/risk management activities.

According to Army claims service officials, under Army policies, incidents involving active duty service members are not investigated. Officials explained that under a Supreme Court decision known as the Feres Doctrine, the United States is not liable under the Federal Tort Claims Act for injuries to service members where the injuries arise out of, or are in the course of activity incident to, service. Consequently, active duty service members are not compensated for military medical malpractice.

Army claims service officials told us their responsibility is to investigate claims for settlement purposes. Since under the Feres Doctrine active duty service members are not compensated for malpractice, their claims are denied immediately and neither claims nor potential claims are investigated. While Army claims officials agreed that an investigation of incidents by the claims system would be a useful risk management tool, they said they lack the resources to conduct investigations of incidents involving active duty service members. In spite of this policy, however, four of the six Army active duty claims in our 1984 closed claims review had been investigated by the claims service.

The Air Force and Navy claims services also deny claims as soon as active duty status is documented. However, officials in both services told us that under unwritten policies they investigate active duty claims—as well as incidents that, absent the Feres Doctrine, would be potential claims—using the same procedures as for civilian claimants.

Our review of 1984 closed malpractice claims showed this was not always the case. Although all 8 of the Air Force active duty claims had been investigated, the Navy had not investigated 4 of the 12 active duty claims it closed that year. For example, in one case, the claimant retired from the service with a physical disability that allegedly resulted when a military physician improperly set his fractured leg. The claim was not investigated and was denied on the basis that the claimant was on active duty at the time of the incident.

Because under the Feres Doctrine active duty service members are not compensated for military medical malpractice, they may be less likely to file claims than nonactive duty beneficiaries. Consequently, it is important that potential claims involving service members be investigated. Claims by active duty service members accounted for about 10 percent of the claims in our 1984 closed claims review.

Pathology Institute officials told us that they reviewed all active duty claims they received from the services because specialties that serve primarily active duty service members might not be regularly reviewed otherwise. They said a large percentage of all claims involve such specialties as obstetrics/gynecology and pediatrics, which generally involve dependents and are therefore potentially compensable. In contrast, specialties like orthopedics primarily treat active duty service members. Navy officials also noted that orthopedic services have fewer claims than specialties like obstetrics/gynecology because orthopedics serves more active duty service members who are not compensated for medical malpractice claims against the government.

Pathology Institute officials also observed that, from a quality assurance/risk management standpoint, reviewing active duty incidents could help prevent future similar incidents involving patients who could bring suit and might help improve the overall quality of medical care in the military.

Conclusions

Changes in policies and practices are needed to better assure that all potential malpractice claims are investigated. This would improve the effectiveness of hospital-level risk management programs and help assure complete and consistent data can be entered into a centralized malpractice information system. The services' definitions of potential claims are not specific, and definitions used by hospitals differ. Hospitals and local claims offices differ significantly in the extent to which they report and investigate potential claims. Some such claims are not investigated at all. Information on those potential claims that are investigated is not consistently forwarded to claims headquarters and thus is not readily available for developing a centralized data base. To effectively include information on potential claims in a centralized malpractice information system, DOD needs to better define potential claims, assure that they are investigated, and establish consistent requirements for forwarding potential claims to a central agency responsible for abstracting the necessary information.

Also, malpractice incidents involving active duty service members should be investigated through the claims system. Otherwise, some hospital services, such as orthopedics, might not be fully represented in a centralized malpractice data base, and some opportunity to improve care and prevent other claims (by learning from the active duty incidents) might be missed.

Recommendations

The Secretary of Defense should direct the Assistant Secretary for Health Affairs, in conjunction with the service secretaries, to establish a consistent definition of potential claims and consistent requirements for forwarding potential claims investigations to a central agency for inclusion in a centralized malpractice information system.

The Secretary should also direct the service secretaries to:

- Issue regulations requiring that malpractice incidents (actual and potential claims) involving active duty service members be investigated through the claims system in the same manner as incidents involving nonactive duty beneficiaries.
- Issue regulations adopting the revised definition of potential claims and requirements for forwarding them for inclusion in the centralized malpractice information system.
- Once the definition of potential claim is clarified, fully implement regulations requiring hospital reporting and claims service investigation of potential claims.

DOD Comments and Our Evaluation

DOD's comments state that it concurs with our recommendations, but similar to its comments on our recommendations in the previous chapter, it again suggests a different approach than the one we recommended. We believe that our recommendations should be fully implemented as soon as possible.

Although DOD indicated it would seek to define "adverse event," it did not indicate that "potential claim" would be defined. DOD said it will require the services to issue instructions that result in medical analysis of adverse events and thorough claims analysis of cases that have potential for litigation. However, the comments did not state that DOD will, as we recommended, provide the services with a better definition of which adverse events constitute potential claims (have potential for litigation) and should be sent to the claims service. Further, DOD did not address the need to provide consistent guidance on which potential claims should be forwarded to a central agency for inclusion in the malpractice data system.

As stated in chapter 3, we believe that DOD needs to focus near-term efforts on implementing the system we recommended. Failure to implement the recommendations in this chapter could result in that system having incomplete or inconsistent data.

Our analysis of DOD's comments showed that DOD did not concur with our recommendation to have the claims service investigate claims and potential claims involving active duty service members. DOD said claims investigations are needed only if litigation is possible and, because of the Feres Doctrine, incidents involving active duty patients do not need investigation by claims services. We believe that all malpractice incidents should be included in a centralized malpractice information system. As we point out in the report, failure to have claims investigation of active duty cases could lead to incomplete centralized malpractice information.

DOD Data Concerning Medical Malpractice Claims Filed and Paid (Fiscal Years 1982-85)[a]

Fiscal years	Claims filed		Claims settled with cash payment		Cash settlement			
	Number	Percent increase	Number	Percent increase	Amount (thousands)	Percent increase	Average value	Percent increase
1982	689	[b]	273	[b]	$28,958	[b]	$106,073	[b]
1983	833	20.9	279	2.2	33,916	17.1	121,564	14.6
1984	854	2.5	331	18.6	41,329	21.9	124,862	2.7
1985	930	8.9	370	11.8	62,490	51.2	168,891	35.3
	3,306	**35.0**	**1,253**	**35.5**	**$166,693**	**115.8**	[b]	**59.2**

[a]Information as reported by DOD/Health Affairs in January 1986. Counting of claims was not standardized among the services. A further discussion of these data appears on page 31. Percentage totals represent the increase from fiscal year 1982 to fiscal year 1985. Percents were calculated by GAO.

[b]Not applicable.

Methodology Used for Review of 1984 Closed Military Medical Malpractice Claims

This appendix describes (1) our universe of military medical malpractice claims closed in 1984, (2) how we identified claims in the universe, (3) how we selected and analyzed our sample of claims, and (4) the steps we used to assure accuracy in abstracting data from the claims files.

Universe of Closed Claims

The universe we selected for review consisted of claims closed by the three services in calendar year 1984 and for which claims service headquarters had investigation files. We limited our work to closed claims to minimize disruption of claims office activities. Of the claims closed in 1984, about 73 percent concerned incidents that occurred during 1979 through 1982; the other 27 percent, incidents that occurred as early as 1953 and as late as 1984. We chose claims closed in 1984 because at the time we began this part of our work, May 1985, it was the most recent full year for which data were available.

We considered a claim closed if it had been (1) decided through litigation (either by court verdict or out-of-court settlement), (2) administratively closed with payment, or (3) denied administratively and not reopened through litigation within 6 months of the denial date. (Claimants can file suit in federal court within 6 months after a claim is denied.) We also considered all claims arising from a single incident as one claim. For example, if a woman was injured through alleged malpractice, she, her husband, and her children might all file individual claims. Because the primary focus of our review was the medical incident, we counted that incident (and all related claims) only once. In determining the amount paid on such incidents, we included payments for all related claims.

Each service allows local or regional offices to settle claims up to a set dollar limit. In 1984, the local claims office limits for both the Army and Air Force were $5,000.[1] The limit for the regional naval legal service offices was $20,000. We did not attempt to obtain and review claims for which files were not available at headquarters. To do so would have required substantial resources because of the many installations involved. However, it did not appear that the claims excluded from our universe would significantly affect our analysis because:

- Air Force records showed 49 claims closed at the local level in 1984, only 7 of which were closed with payments. The payments totaled under $16,000.

[1] In 1985 the local limit was raised to $15,000 for the Army and $7,500 for the Air Force.

- Navy procedures require regional offices to forward files of all claims to headquarters. Officials said that although this is not always done, less than 1 percent of claims are closed at the local level. Our universe included the cases that had been forwarded.
- According to the chief, General Claims Division, Army Claims Service, although some claims are settled at local levels, almost all are forwarded to headquarters. He said at most only a few claims files would be unavailable at headquarters.

Identification of Claims in Universe

To identify the claims in our 1984 closed claims universe, we had to select from service information the claims that met the criteria described above. The Navy provided computerized lists of closed claims. However, the lists included claims that did not meet our criteria. The Navy does not consider claims that are administratively denied to be closed until 6 months after the denial to assure they are not litigated. For example, a Navy claim denied in September 1983 would be entered on the Navy's list as closed in March 1984, assuming no suit was brought, but by our criteria the claim was closed at the time of the denial, in 1983. We reviewed claims files for all claims included on the Navy's list as closed between January 1984 and August 1985 to identify those that met our criteria.[2]

The Air Force also provided computer lists of closed claims. Although the Air Force listed denied claims as being closed on the date of denial, the list included other claims not in our universe; for example, claims closed locally for which records were unavailable at headquarters. Based on coded information included on the Air Force lists, we removed from the universe claims that did not meet our criteria.

To help assure that the universe of claims for both services was complete, we reviewed information maintained by the Department of Justice concerning litigated cases. We wanted to be sure that claims shown by the services as in litigation had not been closed through the legal system and, for the Air Force, that claims shown as denied administratively had not been reopened through litigation during the 6-month period allowed for claimants to file suit. We adjusted the services' lists when necessary. After adjustments, there were 115 Navy claims and 201 Air Force claims closed in 1984 by our criteria.

[2]There were 21 claims on the list for which we could not determine the closure date because files were unavailable.

The Justice information was the only centralized source we could use to verify the service lists. However, a Justice official told us that U.S. attorneys do not always inform headquarters of the disposition of litigated cases. Therefore, there might be some cases closed or in litigation that we did not identify.

The Army lacked a centralized computer system for claims. We obtained data on closed claims from each of the three divisions in the Army Judge Advocate General's Office responsible for handling claims filed in the United States, filed overseas, and litigated. This information, some of which consisted of manually maintained logs, did not always clearly indicate whether the claim was closed, by our criteria, in calendar year 1984. Because of limited staff and time, we did not, as we did in the Navy, review all of the more than 400 files to determine which met our criteria. Instead, we took a random sample of claims to estimate the universe size.

We developed a list of the claims Army records showed as closed in calendar year 1984 and the first 7 months of 1985. An Army claims official told us that all 1984 closures should have been entered by mid-1985. As with the Air Force and Navy, we adjusted that list based on information from the Department of Justice. After adjustments, there were 401 claims that had the potential to be in our universe.

Using computer-generated numbers, we chose a random sample of 80 of the 401 cases. After reviewing those files, we determined that 36 met our criteria. From that we estimated that the Army's universe of claims closed in 1984 was 180 [(36/80) x 401]. This estimate has a 90-percent-confidence level with a maximum sampling error of plus or minus 20 percent. In other words, the chances are 9 out of 10 that the actual universe of Army claims is between 144 and 216.

Sample Selection and Analysis

We reviewed all of the Navy's 115 closed claims. Because of time and staffing constraints, however, we reviewed a random sample of the Army and Air Force claims. We used computer-generated random numbers to select the sampled claims. The samples are representative of each service and have a 90-percent-confidence level with a maximum sampling error of 12 percent. In other words, the chances are 9 out of 10 that estimates based on the samples will be within 12 percent of the true universe value. The data presented for the Navy have no sampling error because all claims were reviewed.

Data on the universe and our sample as well as case weights used in making estimates are summarized in table II.1. We calculated the case weight for each service by dividing the number of claims in the universe by the number of claims we reviewed. We then multiplied the case weight by the number of claims in our sample with the specific characteristics being analyzed (e.g., claims involving diagnostic error) to estimate universe values; that is, the number of claims that could be expected to have those characteristics if we had reviewed all claims. The data presented in the report and appendixes are based on these estimated universe values unless otherwise noted. For example, if 26 of the 72 Army sampled claims were settled without payment, we would estimate that 65 of the 180 claims in the Army universe were settled without payment; i.e., 26 times the case weight of 2.5 equals 65.

Table II.1: Universe and GAO Sample of Military Medical Malpractice Claims Closed in 1984

Service	Closed claims universe	Closed claims reviewed by GAO	Case weight	Percent of universe reviewed
Army	180[a]	72	2.50	40.0
Navy	115	115	1.00	100.0
Air Force	201	73	2.75	36.3
Totals	**496**	**260**		**52.4**

[a]Estimated.

Methods for Abstracting Data From Files

To assure that comparable, consistent data were abstracted from the files, we used a standard data collection instrument and instructions. In most cases, the investigative reports and supporting documents included in the claims file provided clear information, and we did not have to make judgments. However, some of the investigative reports did not provide clear conclusions about some aspects of the case. For example, it was not always clear which of the health care providers or hospital services that treated the patient was responsible for the malpractice that was found.

To help assure accuracy in our classification of the claims in cases where judgment was necessary, we followed written guidance and also had two people review each file and agree on the classification. GAO's Chief Medical Advisor reviewed all data collection instruments and supporting documentation to assure that the severity of injury was properly classified. (See app. IV concerning severity of injury.) Also, keypunching was verified before completion of the analysis.

One category in which we did not rely solely on the investigators' conclusions was in classifying claims as to whether malpractice had occurred. To assure that our analysis included all claims for which malpractice had occurred, we included 30 claims that had been paid even though military investigators concluded malpractice had not occurred. These 30 claims represented about 11 percent of the claims we reviewed. Four of the 30 claims were resolved through court verdicts, 3 through administrative settlement, and the other 23 by out-of-court settlements. The payments ranged from $300 to over $1.7 million. Only 10 of the files explained why payments were made. In the four cases closed through a court verdict, the court concluded malpractice had occurred and awarded payment. In four others, the files indicated that medical records were incomplete or the physician's record was poor and the case would have been difficult to defend. In two other cases, the file indicated that outside consultants said that malpractice had occurred or there was a good possibility that it had. For the remaining 20 claims, no reason was given as to why the payment was made. To assure that our data were as complete as possible, we included all paid claims in our analysis as if malpractice had occurred.

1984 Closed Military Medical Malpractice Claims: Range of Cash Payment Dollar Values

	Percent of claims (estimated)			
Amount paid	**Army**	**Navy**	**Air Force**	**DOD-wide**
$0 - $10,000	17.4	20.3	17.7	18.2
$10,001 - $50,000	41.3	34.8	37.7	38.4
$50,001 - $100,000	10.9	10.1	24.4	16.2
$100,001 - $250,000	6.5	15.9	4.4	7.8
$250,001 - $500,000	10.9	13.0	8.9	10.6
$500,001 - $1,000,000	10.9	1.5	4.4	6.2
Over $1,000,000	2.2	4.3	2.2	2.7
	100.0	**100.0**	**100.0**	**100.0**

Note: Estimates are based on our sample of 1984 closed claims as described on p. 65. Percentages are of the estimated 308 claims, out of the estimated total universe of 496 claims, for which payments were made. Calculations included adjustments to compensate for three claims that did not indicate the cost of the settlement to the government. Columns may not total 100 because of rounding.

1984 Closed Military Medical Malpractice Claims: Severity of Patient Injury

Injury	Percent of claims (estimated)			
	Army	Navy	Air Force	DOD-wide
No delay in recovery (no, or minor, physical damage, e.g., pain and emotional suffering, minor scar, minor rash)	10.6	11.7	21.6	15.5
Temporary disability (recovery delayed, e.g., infection, misset fracture, severe drug side effect)	27.7	22.1	15.7	21.5
Permanent partial disability (e.g., loss of fingers, loss or damage to minor organs, loss of limb, loss of eye)	8.5	10.4	23.6	15.2
Permanent total disability (e.g., paraplegia, loss of two limbs, blindness, life-long care, or fatal prognosis) or death	51.1	40.3	33.4	41.2
Could not determine	2.1	15.6	5.9	6.8
	100.0	**100.0**	**100.0**	**100.0**

Note: Estimates are based on our sample of 1984 closed claims as described on p. 65. Percentages are of the estimated 335 claims, out of the total estimated universe of 496 claims, for which malpractice had occurred. Columns may not total 100 because of rounding.

1984 Closed Military Medical Malpractice Claims: Disposition

Claim disposition	Percent of claims (estimated) Army	Navy	Air Force	DOD-wide
Administratively decided:				
Denied—statute of limitations had expired	2.8	4.4	2.7	3.1
Denied—Feres Doctrine precluded payment to active duty claimant	5.6	7.8	11.0	8.3
Denied—no negligence concluded	20.8	11.3	19.2	17.9
Payment made to the claimant	50.0	24.4	28.7	35.4
Claimant withdrew claim	0	1.7	0	.4
Total resolved administratively	**79.2**	**49.5**	**61.6**	**65.2**
Litigated:				
Payment made in out-of-court settlement	11.1	28.7	27.4	21.8
Litigated verdict for the plaintiff— payment made	4.2	8.7	5.5	5.8
Litigated verdict for the government—nonpayment	5.6	13.0	5.5	7.3
Total resolved in litigation	**20.8**	**50.4**	**38.3**	**34.8**

Note: Percentages are of the estimated universe of 496 claims closed in 1984 and are based on our sample as described on p. 65. Columns may not total 100 because of rounding.

Case Studies of Selected Military Medical Malpractice Incidents

Our analysis of claims closed by the services during 1984, as well as investigations of potential claims at the hospitals we visited, shows that information in the investigative files can provide valuable insights for quality assurance and risk management.

The case studies presented in this appendix were selected by GAO's Chief Medical Advisor as good examples of cases that are useful to facilities and health care providers for educational purposes as "lessons learned." These case studies do not include all the useful cases in our universe, but are examples of the various types of information available in the investigative files.

According to GAO's Chief Medical Advisor, the cases could be used, for example, as case presentations before groups of professionals, such as physicians, residents, or nurses. This is particularly true in cases that demonstrate diagnostic errors, especially when they produced serious consequences, and when actions can readily be taken to prevent the errors from recurring.

As an example, case 1 points to the importance of seeking early consultation by a neurologist or orthopedic specialist in all cases of protracted low back pain, particularly when this is accompanied by other untoward and unexplained symptoms. Likewise, case 3 emphasizes that it is essential not to ignore even minor symptoms if they persist. It offers a good teaching example of diagnostic failure and the serious consequences that may result from reluctance to seek expert advice in the presence of persistent symptoms. Case 11 demonstrates the serious consequences that may result from failure to closely monitor women in labor to detect early signs of fetal distress. This case could well be used in presentations before residents being trained in obstetrics and gynecology as an example of serious results of inadequate fetal monitoring.

Physicians in the Department of Legal Medicine, Armed Forces Institute of Pathology, agreed with our medical advisor's analysis of the cases presented in this appendix and, in some instances, pointed out additional perspectives.[1] The Institute reviewers considered these cases to be useful. However, to provide optimal information to health care providers, in their opinion, the cases would need more medical detail than is presented in these brief synopses.

[1]Case 15 was not reviewed by Institute physicians; GAO's Chief Medical Advisor selected this case after we met with the physicians.

The cases show a variety of problems. Some demonstrate more than one cause of the error, or errors, in medical care. Some of the most frequent causes of error demonstrated are

- lack of consultation with a specialist or lack of emergency consultation (cases 1, 2, 3, 6, and 10),
- inadequate supervision of nonphysician providers (e.g., nurse-midwife or physician assistant) or of residents (cases 2, 3, 4, 5, 6, and 11),
- poor communication between health care providers or with the patient (cases 7, 8, and 9),
- misreading X-rays (cases 4 and 5), and
- physician error (cases 14 and 15).

All but one of the case studies were taken from our sample of 1984 closed claims. That one, case 1, was taken from potential claims we reviewed at the hospitals we visited. Two of the cases, cases 1 and 15, involve active duty patients.

Unless otherwise stated, the information presented in the case synopsis, including conclusions and recommendations, was taken from the claims investigation reports. Only conclusions and recommendations dealing with quality of care are presented.

Case 1

Hospital service: Emergency room and urology.
Type of error: Diagnostic.
Disposition: Potential claim.
Major cause(s) of error: Lack of specialty consultation.

Synopsis: An active duty service member developed low back pain while on board ship. The medical officer planned to have an orthopedic consultation when the ship reached port; however, the patient improved and the consultation was never requested. Some 14 months later, the patient again developed low back pain, along with leg spasms and the inability to urinate or have a bowel movement. Over a period of several weeks, the patient was seen by both physicians and a physician assistant. The patient was eventually referred to the urology clinic, where his loss of bladder control was attributed to his back pain. He again visited the urology clinic 3 days later and was asked to return in 2 days. Later that day, however, he visited a branch clinic with complaints of increasing back pain. Without examining the patient, the physician prescribed bed rest and asked him to return in 2 days.

The next day, however, the patient visited a civilian urologist, who referred him back to the military hospital for a neurologic evaluation. The patient was evaluated in the hospital emergency room and referred to a civilian hospital for emergency surgery, where a spinal cord tumor was removed. The patient had residual numbness in the groin area and was still unable to void voluntarily.

Assessment/recommendations: Investigators concluded that the delay in diagnosis and therapy did not appreciably alter the outcome. However, the investigative report stated that the onset of persistent symptoms, such as this patient had, should have alerted the physicians to pursue a more aggressive diagnostic evaluation, including a thorough neurological consultation. The report recommended that the significance of the clinical signs of spinal cord compression be emphasized to all medical care providers involved in this case. The report further stated that the apparent general lack of awareness of the serious and urgent nature of this disorder demanded an educational program to review all aspects of this patient's care with the hospital's medical staff.

CASE 2

Hospital service: Obstetrics/gynecology.
Type of error: Improperly performed vaginal delivery.
Disposition: Administratively settled for $5,000.
Major cause(s) of error: Inadequate supervision and lack of emergency consultation.

Synopsis: A 20-year-old active duty dependent was admitted to a base hospital in labor at 3:00 p.m. on March 24, 1980. Although she was admitted by a physician, her care was provided by a nurse-midwife. Upon admission, the patient's condition was considered normal.

The medical records indicate that the patient was examined at least twice by the nurse-midwife between 5:30 p.m. and 1:30 a.m., when she was taken to the delivery room. The records also note that at about 11:00 p.m., the nurse-midwife ruptured the patient's membranes, and some slight meconium staining, a sign of fetal distress, was noted. At that time, an internal fetal heart monitor was applied. Records concerning fetal monitoring were incomplete, but the report concludes that fetal distress was almost certainly occurring and was undetected.

When born, the infant was severely asphyxiated. One investigator noted that resuscitation, as described in the records, was confusing; the nurse-midwife and the family practice resident, who was paged and arrived

shortly after the delivery, could not fully resuscitate the infant. It was not until after an anesthesiologist and a pediatrician arrived to treat the child that any stabilization occurred.

The child suffered severe brain damage. Following extensive therapy for almost 2 months, the decision was made to discontinue therapy other than routine supportive care. Shortly thereafter, the child died.

Assessment/recommendations: Investigators criticized the fact that the nurse-midwife did not consult a physician when she recognized that the delivery was sufficiently complicated to warrant internal fetal monitoring and did not notify pediatrics or anesthesiology of the possible delivery of an infant with fetal distress. One investigator noted that more information was needed about the delineation of the clinical privileges and supervision of the nurse-midwife. GAO's Chief Medical Advisor and Armed Forces Institute of Pathology reviewers also questioned the adequacy of supervision.

CASE 3

Hospital service: Primary care/family practice.
Type of error: Diagnostic.
Disposition: Litigated settlement for $250,000.
Major cause(s) of error: Lack of specialty consultation and inadequate supervision.

Synopsis: Between late 1980 and mid-1982, a 55-year-old retired service member was seen on numerous occasions at a medical center's family practice and primary care clinics, with a chief complaint of a sore throat. The records indicate that he was examined by physician assistants and a resident during these visits.

Records from a February 1981 visit noted that the patient should be referred to the ear, nose, and throat clinic if symptoms persisted. After that date, the patient visited the family practice and primary care clinics at least seven times with similar complaints and was treated for his sore throat. He was not referred to the ear, nose and throat clinic until May 1982. The investigation report is unclear about who made the referral or why. At that time, he was diagnosed as having throat cancer. Because of its advanced stage, the tumor was inoperable, and the patient died in December 1982.

Assessment/recommendations: Investigators concluded that the lack of recognition of the potential seriousness of the patient's symptoms and

the delay in seeking a timely ear, nose, and throat consultation seriously jeopardized the opportunity for early diagnosis and treatment, largely compromising the ultimate outcome of the patient's illness. Investigators recommended (1) a mandatory education program for residents and physician assistants to increase their awareness of the possibility of cancer, (2) closer supervision of physician assistants and resident staff by more experienced senior staff, and (3) increased utilization of highly trained specialists available at the facility.

CASE 4

Hospital Service: Radiology/medical clinic.
Type of error: Diagnostic.
Disposition: Administratively settled for about $282,000.
Major cause(s) of error: Inadequate supervision and misreading of X-ray.

Synopsis: On December 29, 1982, a 52-year-old retired service member with a history of several medical problems, including diabetes and obesity, visited a hospital screening clinic complaining of blood in the stool and fatigue. The examining physician ordered several diagnostic tests, one of which revealed an iron deficiency anemia. The physician also ordered a barium enema X-ray film and instructed the patient to return to the clinic after the X-ray was done. The barium enema X-ray was performed on January 28, 1983. It was interpreted as normal, although the radiologist indicated that the preenema preparation was less than optimal, and he could not rule out polyps.

On February 24, 1983, the patient returned to the medical clinic, where he was seen by a nurse practitioner for his diabetes. On the basis of the December laboratory data and the X-ray report, the nurse concluded that the patient's decreased blood count (anemia) was due to polyps. He prescribed iron and aspirin and instructed the patient to return to the clinic in April. An April laboratory report (blood count) indicated that the patient's hemoglobin had risen. (No records were found of the April visit except for the report on the blood count.)

On November 4, 1983, the patient returned to the clinic and was seen again by the nurse practitioner, who instructed the patient to return on November 7 for an examination by a physician. The physician ordered a series of diagnostic tests from November 7 through November 23, including a barium enema X-ray, which identified a partially obstructing mass in the colon. The radiologist found that, in retrospect, the mass, which was later found to be cancer, was visible in the January 1983

X-ray. The patient underwent surgery for removal of part of his colon on December 5, 1983, and was discharged on December 13. It was discovered on January 30, 1984, that he had cancer in the lung. Because the cancer was not discovered in its earlier stage, the patient lost up to a 50-percent chance of survival.

Assessment/recommendations: Investigators made no recommendations for improvements, but pointed out several inadequacies of the care, including (1) lack of prompt assessment of patient's complaints, (2) misinterpretation of the barium enema X-ray, and (3) lack of more aggressive investigation of the cause of the anemia by the nurse practitioner, whose conclusion that the anemia was caused by polyps was unfounded. GAO's Chief Medical Advisor and Armed Forces Institute of Pathology physicians also questioned the adequacy of supervision of the nurse practitioner.

CASE 5

Hospital service: Radiology/primary care.
Type of error: Diagnostic.
Disposition: Administratively settled for $75,000.
Major cause(s) of error: Misreading of X-ray and inadequate supervision.

Synopsis: On August 31, 1981, the dependent son of an active duty service member visited a primary care clinic complaining of a left hip injury that he had suffered 2 months previously. He was seen by a physician, who diagnosed his problem as bursitis and prescribed treatment, including a follow-up visit in 3 or 4 weeks. No X-rays were taken during this visit.

The patient returned on September 17 complaining of increased pain in the left hip and was seen by a physician assistant. An X-ray was taken to rule out a degenerative joint disease and was interpreted by the radiologist as normal. The patient was told to return in 1 week.

The patient did not return until October 28. He had fallen the night before and complained of a pulled muscle. He was seen this time by a nurse practitioner, who gave him crutches. The follow-up was to be by civilian physicians who were treating him at this time.

He was seen again in the primary care clinic on November 9 by another physician assistant. The patient, who had been given a cortisone shot two weeks earlier by a civilian physician, wanted to know if the clinic

would give him one. He was instructed to return to the civilian physician for treatment.

The patient returned to the primary care clinic on December 10, 1981, where he was seen by still another physician assistant. An X-ray ordered at that time showed a tumor in the left thighbone. A review of the September 17 X-ray indicated that it showed a defect that should have been reported. The patient underwent treatment at a military medical center. In March 1982, however, another tumor was found in the patient's lung. He declined further chemotherapy and died of cancer on April 22, 1982.

Assessment/recommendations: Investigators pointed out that, not only did the radiologist misinterpret the September 17 X-ray, but there were no notations in the chart that the physician assistant or his supervising physician saw the radiologist's report before the diagnosis was made. Also, the patient was examined the first time by a physician, but the second time, with worsening symptoms and medications not helping, was seen by a physician assistant without evidence of consultation with a physician.

The investigators recommended that the hospital undertake a quality assurance evaluation of reviews of X-rays requested by allied health care practitioners.

CASE 6

Hospital service: Primary care/internal medicine.
Type of error: Diagnostic.
Disposition: Denied on the basis of the Feres Doctrine.
Major cause(s) of error: Inadequate supervision and lack of an emergency consultation.

Case synopsis: A 41-year-old male active duty service member who had suffered from high blood pressure since 1975 was being monitored by a physician assistant. Between January and July 1981, the patient was seen numerous times in the primary care clinic by a physician assistant. On the first visit, the patient complained of being very weak. The physician assistant prescribed medication and asked the patient to be rechecked in a week. On later visits to the physician assistant, the patient continued to complain of weakness and fatigue. The physician assistant adjusted the medication and asked the patient to return for rechecks.

On July 1, the physician assistant noted in the records that the patient's blood pressure was very high. The patient complained of shooting pains in his left arm and said he felt terrible, as if he were going to faint. The physician assistant also stated the patient had other symptoms, such as chest pain, a clammy feeling, and numbness in the side. The physician assistant noted that the patient should see an internist, but no appointment was available during this visit.

On July 16, the patient was seen by an internist in the internal medicine clinic. The internist ordered tests, including an electrocardiogram, and asked the patient to return for additional evaluation. On August 16, after two visits to the emergency room complaining of pain, the patient was seen again by an internist. The physician noted the results of another test, but did not follow up on the absence of the electrocardiogram in the patient's record or order another one. The patient died of a heart attack later that day.

Assessment/recommendations: Investigators concluded that (1) an electrocardiogram should have been done as early as July 1 by the physician assistant and (2) although the internist ordered one on July 16, he did not follow up to see why it was not in the patient's file. One report noted that the patient was not diagnosed properly, and as a consequence, appropriate treatment may not have been given.

Additionally, although the patient's high blood pressure apparently was adequately managed, investigators were concerned about the apparent lack of supervision of the physician assistant. One report stated that the degree of physician involvement reflected in the medical record suggested that the supervision of the physician assistant was not consistent with policy and acceptable practice. There was no indication of physician review or agreement with the physician assistant's plan of care, such as by countersigning the notes or reviewing the record, or even noting concurrence. Although the physician assistant was acting for an internist, when he felt the patient needed to be seen by an internist, he had the patient return several days later and requested a consultation. This reflects a very distant relationship for a physician assistant and his direct supervisor.

The recommendations from the report were that the role of the physician assistant be investigated further and, if appropriate, the problem areas should be discussed at an appropriate risk management meeting.

CASE 7

Hospital service: Radiology.
Type of error: Diagnostic.
Disposition: Administratively settled for about $336,000.
Major cause(s) of error: Poor communication between medical departments and lack of communication with patient.

Case synopsis: In November 1978, a military hospital clinic referred a 25-year-old female for consultation to an ear, nose, and throat clinic because of her complaint of decreased hearing on the right side. For reasons unknown, the patient did not obtain the consultation until February 20, 1979, when she was examined in the ear, nose, and throat service by a family practice resident, who requested X-rays and referred her to another military hospital.

On February 28, 1979, a radiologist performed the X-ray study, and noted that the X-ray indicated the possibility of a tumor and that additional tests should be made. However, this information was not properly reported to the patient's treating physician, and the patient was not properly notified of the possibility that she had a tumor.

The patient was seen by a civilian physician in March for further testing, which did not indicate a tumor. No further visits were documented until December 1980, when the presence of a tumor was diagnosed at a civilian facility. The tumor, described in the operative report as being very large and resulting in substantial damage, was removed at a civilian facility in January 1981.

The patient suffered a total loss of hearing on the right side, partial facial paralysis of the right side, double vision, and moderate brain damage causing partial paralysis and loss of coordination. The nature of her medical problem requires that a tube, implanted to drain fluid from her brain to her stomach, be changed surgically about every 5 to 6 years for the rest of her life.

Assessment/recommendations: Investigators agreed that the patient should have been apprised of the results of the February X-ray. They also were critical of the breakdown in communication between the radiology and the ear, nose, and throat departments. Apparently, the radiologist did not inform the treating physician of the unusual findings, and the physician did not follow up on the requested X-ray.

One investigative report recommended that each department have written procedures to assure that the results of diagnostic studies are

never filed without review by a physician adequately trained to recognize abnormal results requiring follow-up. The same report recommended that attempts to contact patients concerning abnormal results should be documented and reasonably pursued.

Investigators also noted that the medical care at the civilian facility as well as the patient's failure to follow physician's directions to return for a follow-up visit could have contributed to the delay in diagnosis.

CASE 8

Hospital service: Pediatrics/laboratory.
Type of error: Diagnostic.
Disposition: Litigated settlement for about $363,000.
Major causes(s) of error: Inadequate communication among providers.

Synopsis: An infant male dependent of an active duty service member was born in a civilian hospital in May 1979. State law required that all newborn infants be screened for a genetic disorder that can be treated if discovered within 6 months of an infant's birth. The tests conducted by the state health department produced a borderline result which, according to established procedure, required a repeat test.

The health department forwarded to a military medical center a specially marked filter paper for a second specimen. The medical center failed to use the specially marked filter. Consequently, when the specimen was sent to the health department, it received no special attention. As a result, a false negative finding was obtained and no follow-up was indicated, although the first and second tests presented conflicting results.

The mother noted that at about 3 months of age, the infant was not responding to faces or sounds, an indication of developmental delay. At 4 and 6 months of age, the baby was taken for well-baby checkups at the medical center pediatrics clinic and judged normal. A developmental test was conducted in January, but was not completed or followed up on. On the baby's admission to the hospital for pneumonia in March 1980, developmental problems were discovered. The infant was admitted to another medical center in May 1980, at 1 year of age, to determine the cause of the problem, but was released before test results were completed. In November 1980, a sibling was born and, upon routine testing, found to have the genetic disease. Based on this finding, the first child was reevaluated and diagnosed as having the disease. By this time, he was permanently mentally retarded.

Assessment/recommendations: One investigator concluded that the military facilities did not diagnose the infant's illness. The retardation associated with it could have been alleviated if discovered in the first few months of life. Investigators also suggested the state health department and the civilian hospital where the child was born had partial responsibility.

One investigator noted that communication between the military medical center and the state health department concerning the importance of rerunning the test on the specially marked filter paper was not effective. Another investigator recommended that consideration be given to requiring a third newborn screening examination in case of conflicting results between the first two tests.

The lack of more aggressive investigation of the early developmental delay in face of the original borderline test result also was questioned by GAO's Chief Medical Advisor and Armed Forces Institute of Pathology physicians.

In addition, one investigator noted that, on the admission at 1 year of age, the patient was discharged with all laboratory results pending, any one of which would have disclosed the condition. However, by that time, permanent damage had already been done.

CASE 9

Hospital service: Obstetrics/gynecology.
Type of error: Lack of informed consent.
Disposition: Administratively settled for $9,000.
Major cause(s) of error: Lack of communication of full information to patient and of full written consent.

Synopsis: In October 1982, an active duty service member's spouse obtained a gynecology consultation. She had received treatment for abdominal pain in a military hospital family practice clinic since the birth of her baby in October 1981.

As a result of the consultation she was advised that she needed a total abdominal hysterectomy. After obtaining a second opinion, which agreed with the initial diagnosis, the patient signed an operation permit for a total abdominal hysterectomy.

On March 14, 1983, two physicians performed the surgery. During the operation, the physicians decided that one ovary did not have to be

removed, but the patient's appendix did. An appendectomy was performed.

After surgery, the patient hemorrhaged and a second surgery was required to repair an artery. The patient continued to have pain postoperatively and filed a claim in July 1983 claiming the initial surgery had been negligently performed and the appendix had been removed without consent.

Assessment/recommendations: Investigators concluded that the surgery itself, as documented, was performed properly, including the decision to remove the appendix, and the patient's continued pain was not attributable to the surgery. However, they also concluded that this claim might have been prevented by more open communication between patient and doctor. Investigators pointed out that there was no evidence that the possibility of an appendectomy was discussed with the patient.

Recommendations included in the investigative report addressed only legal issues, specific to the case, not quality of care issues.

CASE 10

Hospital service: Nursing, neurology, and radiology.
Type of error: Patient safety and diagnostic.
Disposition: Administratively settled for $25,000.
Major cause(s) of error: Inadequate patient supervision and lack of specialty consultation.

Synopsis: In May 1982, a female dependent of a retiree was admitted to the neurology service at a military hospital for testing and, subsequently, surgery, because of numbness and pain in her feet. In the early morning before the surgery, the patient was sedated. About 5 hours later, the patient was awakened to prepare her for surgery and was allowed to walk to the bathroom unattended. While in the bathroom, the patient fell. She was examined by a neurology resident, who ordered X-rays of the hips, ribs, and spine. The X-rays were reported as negative, and a soft-tissue injury was diagnosed. As part of her treatment, the patient was made to walk every day. Surgery was delayed for reasons unrelated to the patient's condition; then the patient refused to reschedule it.

Over the next several days after the fall, the patient repeatedly complained of lower back pain. Additional X-rays of the back revealed no problems. The patient continued to complain of back pain, and 10 days

after the initial fall, an orthopedics consultation was scheduled. However, the patient asked to be, and was, released from the hospital before the scheduled consultation.

Within about a week after discharge, the patient was seen at a civilian facility, where new X-rays revealed a fractured pelvis with marked displacement. The patient returned to the military hospital for treatment; no further complications resulted after treatment.

Assessment/recommendations: Investigators concluded that although the patient's injury was clearly misdiagnosed, the expected standard of care was not breached considering the nature of the injury, which cannot be detected by X-ray until displacement occurs, which may be a week or longer after the fracture occurred. However, they pointed to a lack of ambulatory supervision after she had been given a central nervous system depressant before scheduled surgery. Had the patient been properly supervised by the neurology staff, the injury most probably would not have occurred in the first place. Also, one investigator concluded that an orthopedic consultation should have been requested earlier in the patient's care when she refused to walk because of her pain.

The investigation report contained no recommendations.

CASE 11

Hospital service: Obstetrics/gynecology.
Type of error: Obstetrical treatment.
Disposition: Administratively settled for $45,000.
Major cause(s) of error: Inadequate supervision and poor patient monitoring.

Synopsis: A 23-year-old pregnant dependent spouse was admitted to a military hospital at 1:45 a.m. on August 4, 1983, in labor. The patient had received prenatal care from a family practice clinic in another military service's hospital. Upon arrival, the patient was examined by a first-year family practice resident. The fetal heart rate was not charted. The resident applied external fetal monitors and placed the patient in a labor room.

At 3:20 a.m., the resident performed another examination and found problems with the fetal heart rate. He notified a family practice physician from the service that had provided prenatal care and advised him of the problem. The physician told him that he would come to the hospital.

At about 4:10 a.m., the physician had not arrived, and an obstetrician who happened to be in the vicinity examined the patient and broke her membranes; meconium staining, an indication of fetal distress, was not apparent. The obstetrician attached an internal fetal heart monitor. At this time, the physicians became confused as to who was monitoring the patient. The resident assumed that the obstetrician was responsible and started treating other patients; the obstetrician, however, left the patient to deliver another baby. Therefore, between 4:30 and 5:00 a.m., there was essentially no one caring for the patient, and during this time, severe fetal distress developed.

At 5:00 a.m., the family practice physician who had been called 1 hour and 40 minutes earlier arrived. He took steps to improve the fetal heart rate, but was unsuccessful. The obstetrician returned and decided immediate delivery was necessary. At delivery, the baby had a dangerously low heart rate and severe respiratory problems.

Attempts by all three physicians (resident, family practitioner, and obstetrician) to intubate the child did not meet with much success. Various resuscitative methods, including injecting a drug into the heart, were applied without success. The baby died a short time after delivery.

Assessment/recommendations: Investigators raised questions about the adequacy of supervision of the first-year resident by the hospital staff and senior resident because (1) the inexperienced resident failed to recognize the signs of fetal distress (which one investigator noted were apparent from the beginning of monitoring) and (2) no one was monitoring the patient closely. They also stated that resuscitative efforts were inadequate—in that improper procedures and equipment were used—and not well organized. They also criticized the failure of the nursing staff to call for additional staff when they needed help as well as the failure of the physician to notify a pediatrician when fetal distress was discovered.

The investigators' recommendations for changes at the facility included (1) further training of residents to recognize subtle signs of fetal distress and actions to take when it occurs, (2) increased nursing staff on each shift in light of an increasing workload, and (3) a yearly refresher course on infant resuscitation for obstetrics/gynecology staff given by the pediatrics department. GAO's Chief Medical Advisor also pointed to the need to assure patients in labor are continually monitored.

CASE 12

Hospital service: Emergency room.
Type of error: Improper response to an emergency situation.
Disposition: Litigated settlement for $20,000.
Major cause(s) of error: Inadequate emergency room procedures.

Synopsis: On June 26, 1980, at about 6:00 p.m., a 3-year-old dependent child of an active duty service member swallowed a quantity of dibucaine anesthetic ointment in her home. When the mother became aware of this at about 6:15 p.m., she telephoned the emergency room of a military medical center and told the on-duty corpsman that her child had swallowed some dibucaine and asked what she should do. The corpsman relayed the information to the on-duty physician, who identified the substance as a hemorrhoid medication and inquired as to the child's age and the quantity swallowed. After receiving this information, the physician had the corpsman inform the mother not to give the child anything by mouth for four hours and that the child would be all right.

Approximately 30 minutes later, the mother again telephoned the emergency room and asked the on-duty nurse what else she could do for the child. The nurse told her that she could bring the child to the emergency room or call the poison control center for advice. The nurse furnished the center telephone number.

The mother called the poison control center at about 7:21 p.m. and was advised to take the child to the nearest hospital. At 7:27 p.m. she called the fire department, which got the child to the hospital about 7:50 p.m. Upon arrival at the hospital, the child was suffering from grand mal seizures. The child died 2 days later.

Assessment/recommendations: The investigators concluded that the on-duty physician provided negligent advice. Armed Forces Institute of Pathology reviewers concluded, however, that, given the amount of the ointment ingested and the timing of the first phone call, the outcome would have been essentially the same irrespective of the negligent advice provided by the medical personnel.

The investigators recommended that emergency room personnel refrain from offering medical advice regarding the potential or actual toxicity of substances over the telephone and instead advise patients to call the appropriate poison control center immediately and provide the telephone number. Additionally, they recommended the on-duty physician should be counseled and made aware of proper procedures for handling emergency phone calls.

CASE 13

Hospital service: Inpatient nursing.
Type of error: Patient safety.
Disposition: Administratively settled for $5,000.
Major cause(s) of error: Inadequate nursing procedures.

Synopsis: An infant, the dependent of an active duty service member, was born on August 3, 1982, at a military medical center. On August 4, the mother asked a medical technician if the infant's shirt sleeves could be fixed to prevent him from scratching his face. The medical technician inquired at the nursery if rubber bands or tape could be used. Allegedly, rubber bands were approved and were placed on the infant's sleeves.

On August 6, the mother observed that one of the infant's finger tips was black. The infant had managed to wiggle his fingers up through the rubber bands. The attending physician treated the finger immediately and had it observed for infection. The infant's finger was disfigured, although there was no loss of function.

Assessment/recommendations: Investigators agreed that the use of the rubber band breached the facility's duty to exercise a degree of skill and care in treating patients. This breach caused the infant's injury.

The use of rubber bands was inappropriate; taping the end of sleeves or stitching them closed would have been acceptable and avoided injury. The investigative report made no recommendations.

CASE 14

Hospital service: Emergency room.
Type of error: Diagnostic.
Disposition: Administratively settled for $15,000.
Major cause(s) of error: Physician error.

Synopsis: The 16-month-old daughter of an active duty service member was brought to a military hospital emergency room early on January 22, 1984. She had been running a fever for several days, and her breathing had become rapid. Upon arrival, the emergency room nurse's examination revealed that the child had a rash on her abdomen and chest and was exuding a very thick, yellow-green mucus. Because of the baby's extreme irritability, the nurse was unable to listen to the lungs. The baby's condition concerned the nurse, who had the emergency room physician on duty, a urologist (a civilian contract physician), see the child. The physician noted the temperature of 102 degrees and respiration rate of 34 per minute. He listened to the lungs, heard nothing

unusual, and diagnosed an upper respiratory viral infection. He prescribed Dimetapp and Tylenol, but no X-ray was taken.

The parents took the child home and gave her the prescribed medication. However, the child became progressively fussier, she lost interest in her surroundings, and her breathing became shallow and rapid. Again the parents took her to the emergency room, arriving around 5:00 a.m. on January 23. The on-duty physician, an internist, noted a shortness of breath, wheezes and crackles, and a respiration rate of 52. The internist called the on-call pediatrician and explained that he did not know how to treat a child with acute respiratory distress. The pediatrician indicated he would be in shortly.

At this point, the child turned blue from lack of oxygen, started gasping, and began excreting a thick mucus. At 6:30 a.m., the internist again called the on-call pediatrician, who again promised to come in soon. An hour later, the on-call physician still had not arrived, so the internist went to the pediatric clinic (which was then open) and asked the assistance of another pediatrician. This pediatrician immediately assumed care of the child, who was admitted to the intensive care ward. Later that same day, the child was transferred to a children's hospital about 90 miles away, where she was admitted in extremely critical condition. During the day the child's heart stopped several times. She died the day after she was taken to the children's hospital. An autopsy revealed that the cause of death was pneumonia and septic shock.

Assessment/recommendations: Investigators concluded that substandard care was given during the initial emergency room visit, at which time the examining physician (a urologist) failed to order an X-ray, which might have detected pneumonia. They also noted that care on the second visit was inadequate. The emergency room physician admitted he was unsure how to treat the child, yet the on-call pediatrician apparently refused to come to his aid. However, they noted that, by the time of the second visit, it probably was too late to save the baby's life.

The investigation report contained no recommendations. However, a memo in the file stated that the hospital's chief of internal medicine suggested that all civilian doctors undergo a personal interview and be briefed on hospital policies before being allowed to work in the emergency room.

CASE 15

Hospital service: Surgery.
Type of error: Surgical treatment.
Disposition: Denied on the basis of the Feres Doctrine.
Major cause(s) of error: Physician error.

Synopsis: On January 5, 1982, an active duty service member underwent surgery to repair a right recurrent inguinal hernia. The right femoral vein, which was caught in scar tissue from previous right inguinal hernia surgery, was severed during the January 5 surgery. The vein was repaired, and the operation completed without further complications. There was, however, blue discoloration of the right foot, and the foot was without pulse and cool to the touch. After the patient returned from the recovery room, no pulse was noted, and he experienced pain in the foot. The physician was notified. On January 6, the patient had extreme pain and cramping in his right leg and ankle. The foot was cold and white. After examining the patient, the physician transferred him to a Veterans Administration hospital, where surgery was performed to make further repairs to the femoral artery. The patient was equipped with a brace and discharged the next month. The patient suffered footdrop, most likely permanent, due to neural injury. He was later medically discharged from the service.

Assessment/recommendation: Investigators concluded that the surgeon did not obtain an adequate medical history and did not perform an adequate physical examination, which might have led him to be more cautious and thus avoid the complication entirely. They also concluded that he did not recognize the signs and symptoms of arterial injury and therefore did not act in time.

The investigative report contained no recommendations concerning quality of care.

Numbers of Operating Beds and Admissions for Hospitals Visited

Facility	Operating beds[a]	Inpatient admissions[b]
Reynolds Army Community Hospital Fort Sill, Oklahoma	169	10,536
Martin Army Community Hospital Fort Benning, Georgia	216	11,464
Oakland Naval Hospital Oakland, California	291	15,263
Jacksonville Naval Hospital Jacksonville, Florida	201	12,693
United States Air Force Regional Hospital Sheppard Air Force Base, Texas	155	4,635
Wilford Hall Medical Center Lackland Air Force Base, Texas	1,000	21,702

[a]Fiscal year 1984 statistics provided by DOD represent the latest information available at the time of our review.

[b]Fiscal year 1985 statistics as provided by the facilities visited.

1984 Closed Military Medical Malpractice Claims: Hospital Services in Which Malpractice Occurred

Hospital service	Percent of claims (estimated)			
	Army	Navy	Air Force	DOD-wide
Obstetrics/gynecology	31.9	30.0	25.5	28.8
Emergency medicine	12.8	15.6	19.6	16.3
Pediatrics	12.8	4.0	3.9	7.0
General surgery	8.5	5.2	3.9	5.8
Radiology	6.4	3.9	0.0	3.1
Orthopedic surgery	2.1	3.9	3.9	3.3
Cardiology	4.3	2.6	2.0	2.9
Family practice	0.0	3.9	3.9	2.5
Ear, nose, and throat	0.0	5.2	2.0	2.0
Other[a]	14.9	13.0	23.6	18.1
Unable to determine	6.4	13.0	11.8	10.2
Total[b]	100.0	100.0	100.0	100.0

[a]Includes anesthesiology, thoracic/cardiovascular surgery, orthopedics, psychiatry, plastic surgery, oncology, neurosurgery, neurology, urology, gastroenterology, colon and rectal surgery, internal medicine, other laboratory, pharmacy, surgical nursing, and inpatient nursing.

[b]Columns may not total 100 because of rounding.

Note: Estimates are calculated based on our sample of 1984 closed claims as described on p. 65. Percentages are of the estimated 335 claims, out of the total estimated universe of 496 claims, for which malpractice had occurred.

1984 Closed Military Medical Malpractice Claims: Types of Errors Resulting in Malpractice

Type of error	Percent of claims (estimated)			
	Army	Navy	Air Force	DOD-wide
Diagnosis-related	42.5	28.6	39.3	38.0
Obstetrical treatment	23.4	22.1	13.8	19.1
Surgical treatment	10.6	20.8	21.6	17.6
Monitoring problems	19.1	5.2	7.9	11.2
Other treatment—not surgical or obstetrical	4.3	16.9	11.8	10.3
Medication errors	4.3	3.9	7.9	5.7
Anesthesia error—inadequate patient assessment, method of administration, or other	8.5	5.2	2.0	5.0
Equipment-related—failure to inspect, improper operation, equipment malfunction, or other	6.4	3.9	3.9	4.8
Informed consent—failure to obtain patient's consent for treatment or other procedure	4.3	1.3	5.7	4.2
Patient safety—failure to ensure patient safety or protect patient from environmental hazards	2.1	5.2	2.0	2.8
Other—none of the above or unable to determine	2.1	18.2	2.0	5.8

Note: Estimates are calculated from our sample of 1984 closed claims as described on p. 65. Percentages are of the 335 claims, out of the total estimated universe of 496 claims, for which malpractice had occurred. Some claims involved more than one error.

1984 Closed Military Medical Malpractice Claims: Investigations Hindered by Missing or Inadequate Records

Claims with hindered investigations[a]	Percent of claims (estimated)			
	Army	Navy[b]	Air Force	DOD-wide
Percent of inpatient records	2.8	19.1	12.3	10.4
Percent of outpatient records	5.6	11.3	2.7	5.8
Number (estimate) of claims that identified one or more deficiencies[c]	15	30	28	73
Percent of claims that identified one or more deficiencies	8.3	26.1	13.9	14.7

[a]Claims in which the investigation report stated that missing or inadequate records hindered the government's investigation.

[b]The Navy's percentages may be higher than the other two services' because the Navy specifically requires that reports document any hindrance to the investigation.

[c]Some claims had deficiencies in both inpatient and outpatient medical records.

Note: Percentages are of the estimated universe of 496 claims closed in 1984, based on our sample as described on p. 65.

Comments From the Department of Defense

HEALTH AFFAIRS

ASSISTANT SECRETARY OF DEFENSE

WASHINGTON D C 20301

Mr. Frank C. Conahan
Assistant Comptroller General
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, D.C. 20548

MAR 20 1987

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report entitled, "DOD HEALTH CARE: Better Use of Malpractice Data Could Help Improve Quality of Care," dated January 29, 1987 (GAO Code 101304/OSD Case 7215).

The Department of Defense supports the concept of using risk management (RM) information to improve the quality of medical care and reduce the risk of malpractice losses. The DoD is developing an RM program that involves all levels of command in case identification, analysis, and trends analysis. Central agencies such as the Office of the Assistant Secretary of Defense (Health Affairs) (OASD(HA)) develop policy, review data reflecting trends throughout the system, provide for sharing of information between operational elements, and supervise the execution of policy by the operational elements. Individual case review is the responsibility of operational elements such as hospitals and major commands. These organizations are expected to investigate cases in detail, abstract data from cases for use in trends analysis, and refer cases of provider error to the appropriate Credentials Committee for investigation. Major aspects of the DoD RM program include the following:

1) All 168 DoD hospitals now have the Automated Quality of Care Evaluation Support System (AQCESS). Software improvements for this computer quality assurance (QA) system have been issued on a quarterly basis. The May 1987 software release includes major changes in risk management (RM) and occurrence screening which will result in increased reporting of adverse outcomes for trends analysis. The Composite Health Care System (CHCS) will be phased into military hospitals over the next decade and will maintain all of the functions of the AQCESS.

2) The Services have instituted aggressive programs to identify and report promptly major adverse events. These programs include close supervision of the medical treatment facility investigation of the cause of an adverse event. In those cases where there is a possibility of provider error, the case is referred to the Credentials Committee of the hospital for investigation and action. Requirements regarding the reporting of providers found to be negligent, incompetent, or unprofessional have been strengthened and clarified in Directives over the past three years.

3) The DoD has appointed a Joint-Service QA Committee composed of members of the OASD(HA) staff, the Service QA Directors, and other Service representatives. This Committee has met monthly since August 1986 and periodically in prior years. Several agenda items for this Committee have been RM related.

4) The DoD sponsored a Joint-Service QA workshop in May 1986 which will be repeated in May 1987. This workshop brings together QA professionals from the Services and OASD(HA) to review present QA policies, establish goals for the future, and advise the OASD(HA) on changes in the policies. In both years, one of the major committees at this workshop has addressed RM.

5) The DoD has also hosted an annual Commanders' Conference for the past two years. This conference was attended by the majority of military hospital commanders, leaders of the Services' medical departments, and OASD(HA). The conference has included major panels on the use of AQCESS and on aspects of the entire quality assurance program, including RM.

The DoD agrees that additional benefits can be obtained from improved central data trends analysis and information sharing and will work with the Services and the AFIP to develop a plan to identify methods of reporting and analyzing RM data from the hospitals. The DoD will continue to work on means of utilizing information obtained from these data in improving patient care. The DoD will use existing malpractice and RM data from the Services and the AFIP for analysis while the new programs are being developed.

It is important to understand that the DoD quality assurance program has three functional elements. These are credentials review, risk management, and utilization review. The three elements share information but, to assure thoroughness, their functions are kept separate. Providers found to have high rates of RM cases are referred to the Credentials Committee for evaluation.

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

Sincerely,

William Mayer, M.D.

Enclosure

GAO DRAFT REPORT - DATED JANUARY 29, 1987
(GAO CADE 101304) OSD CASE 7215

"DOD HEALTH CARE: BETTER USE OF MALPRACTICE DATA COULD HELP IMPROVE QUALITY OF CARE"

DEPARTMENT OF DEFENSE COMMENTS
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FINDINGS

* FINDING A: Military Health Care System's Medical Malpractice Experience. The GAO observed that health care for members of the U.S. Military Services provided by direct care medical facilities operated by the Army, Navy, and Air Force has been a matter of concern to the Congress and users of the system. One reason for this is the publicity given to individual cases of substandard medical care; another is the increase in the number of medical malpractice claims against the military health care system. The GAO observed that between FY 1982 and the end of FY 1986, the number of malpractice claims filed increased by approximately 35 percent, from 689 to 930. The GAO further observed that during the same period, total payments increased by about 116 percent, from approximately $29 million to $62.5 million. The GAO noted that the average value of each settled claim also increased about 59 percent, from $106,073 to $168,891. The GAO concluded that while the DoD experience with the increasing number of malpractice claims is consistent with what is occurring in the civilian health care sector, direct comparison between military and civilian rates is difficult because the two sectors differ in terms of patient populations and methods by which claims care settled. The GAO observed, for example, that under a 1950 Supreme Court ruling (known as the Feres Doctrine) the Government is not liable for injuries to active duty service members, when such injuries occur in the course of activity incident to service and this further complicates any comparison.(pp. 1-5/GAO Draft Report)

Now on pp. 10-12.

DOD COMMENT: Concur. In a system as large and diverse as the military health care system, untoward incidents occur. In FY 1986 there were over 970,000 hospital admissions and 51.6 million outpatient visits in the 729 military medical facilities. These facilities are staffed by approximately 47,000 health care professionals, including about 13,000 physicians.

A major concern of quality assurance is to reduce the frequency of adverse events. The DoD has followed malpractice data for several years. The GAO report shows an increase in

claims filed since 1982. Further analysis of these data, however, shows that the increase occurred in 1983. Since 1983, there has been no significant change in the number of claims filed annually. The number of claims by year filed was 833 in 1983, 854 in 1984, 930 in 1985, and 895 in 1986. This represents slightly more than one standard deviation from the average of these four years. Recent DoD data show that the total amount of malpractice payments decreased from $62.5 million in 1985 to $51.2 in 1986. The DoD also wants to emphasize that data of settled claims represent cases that occurred and were filed over a several year period. A proposed change in the FY 1988 malpractice reporting format will make it possible for the DoD to identify final payments by the year the event occurred. The DoD will be following these data closely.

* FINDING B: Hospital Programs Designed to Assure Quality of Care and Minimize Malpractice Losses. The GAO reported that a major response to the rising incidence of malpractice claims in both civilian and military hospitals has been the hospital's quality of care and minimize its financial loss resulting from poor quality care. The GAO also noted that in order to reduce further financial liability, civilian hospitals have begun to develop multi-hospital centralized quality assurance/risk management information systems to supplement their hospital-level programs. The GAO concluded that a major component of these civilian systems consists of data on malpractice incidents, which is used to help focus managerial attention on high risk areas and potential problems so appropriate corrective action can be taken. (pp. 5/GAO Draft Report)

Now on p. 12.

DOD COMMENT: Concur. The DoD agrees that one of the reasons for hospital QA programs is the hope of decreasing malpractice losses. The DoD is aware of programs being developed in civilian multi-hospital systems and has instituted policies to improve central control of RM programs. These policies stress the importance of local review and evaluation, while providing data that can be used for trends analysis to focus managerial attention on high risk areas and potential problems. Recent DoD initiatives include the following:

1) The Automated Quality of Care Evaluation Support System (AQCESS) equipment is now in all DoD hospitals and gathers data relating to QA and RM cases. Software releases planned for 1987 include specific RM programs that improve the reporting of relevant data to higher headquarters. The Composite Health Care System (CHCS), a major hospital automated information system, will be phased into DoD hospitals over the next decade and will include all the QA/RM functions of the AQCESS.

2) The DoD has contacted the Veterans Administration (VA) in order to exchange information pertaining to RM programs that the VA is using. The two systems have many similarities and may be able to assist each other in developing future RM programs.

The QA programs being developed by the Services, under the guidance of the Office of the Assistant Secretary of Defense (Health Affairs) (OASD(HA)), have a primary objective of improving medical care and decreasing the risk of iatrogenic injury or illness to our patients. It is commonly believed that such programs will also decrease the malpractice losses experienced; however, this impression has never been subjected to scientific scrutiny. The DoD will assess this assumption based on trends analysis. Whether or not the result of this analysis shows a positive impact on malpractice claims, it is the DoD position that QA activities are justified by the improvements in care rendered to patients.

* FINDING C: The Military Services Investigate Medical Malpractice Claims. The GAO observed that risk management programs form a link between a hospital's concern for quality of care and the legal implications and costs of malpractice incidents. The GAO reported that in order to establish liability for medical malpractice, the following three elements must exist: (1) a standard of medical care must have been breached, (2) an injury that resulted in actual damage must have occurred, and (3) the breach of standard must have been the cause (proximate cause) of the injury. In addition, the GAO reported that risk management programs (both military and civilian) deal with information not only from malpractice claims filed, but from potential claims. The GAO cited, for example, that Service regulations now require risk managers--i.e., those responsible for hospital risk management programs--to identify potential claims, to make sure they are properly investigated, if the standard of care has been breached, to take action to reduce liability, and to provide the best defense. The GAO found that all three Services require hospitals to identify potential claims incidents and investigate them. The GAO also found, however, that while the initial investigative procedures are the same for actual malpractice claims, the Services differ concerning further involvement or notification of higher level commands, depending on such factors as the seriousness of the incident and the likelihood of a claim being filed. (pp. 6-9 GAO Draft Report)

Now on pp. 13-15.

DOD COMMENT: Concur.

* FINDING D: Analysis Of DoD Claims File Data Allows Possible Problems To Be Identified. The GAO observed that useful information for medical quality assurance and risk management can be obtained from claims investigation files. The GAO explained that a statistical analysis of the data could point to possible medical care problems that need closer examination, such as:

facilities, patient age groups, or beneficiary groups that had proportionately more claims or malpractice findings; or

concentrations of claims or malpractice findings among hospital services, types of errors, or severity of injuries (or providers, if the information were available).

Based on its random analysis of files for medical malpractice claims closed by the Military Department in 1984, the GAO found that the available data clearly identified patterns of recurring medical care problems, such as specific hospitals involved in proportionately more claims. The GAO also found that, among the 1984 closed claims, the most frequent type of medical error resulting in malpractice was failure to accurately or promptly make a diagnosis. The GAO further found that the four major causes of diagnostic errors were (1) lack of consultation with specialists, (2) misreading x-rays, (3) inadequate communication between/among providers, and (4) inadequate supervision. The GAO found that case studies can be developed from such data to educate medical care providers on how to avoid similar errors--i.e, by focusing attention on patterns indicating possible medical care problems. The GAO further concluded, therefore, that analyses of more detailed information concerning malpractice incidents can provide insight into the causes of problems as well as provide valuable "lessons learned" educational tools. In addition, the GAO concluded that (1) feeding information back to facilities could help focus hospital-level quality assurance/risk management programs on areas where they vary from the system norm or average and (2) it could also allow the use of case studies to alert staffs to possible problems. (pp. 13-26, P. 30/GAO Draft Report)

Now on pp. 18-26, 29.

DOD COMMENT: Concur. The DoD agrees that claims file analysis can be useful in identifying problems for central and hospital QA programs. The DoD will work with the Services and the Armed Forces Institute of Pathology (AFIP), using existing claims file data for this purpose while the programs discussed in the following three paragraphs are being developed:

1) The DoD has developed a revision to the AQCESS software program that identifies each adverse outcome and each claim as an occurrence at the medical treatment facility (MTF).

The identification and tracking of these at the operational element level provides quality assurance information to the unit for use in improving patient care. It also provides data to higher headquarters for trends analysis and sharing between operational elements. When the CHCS is phased in, it will preserve this function.

2) The 1986 annual QA report to the OASD(HA) from the Services will be expanded to include RM material, including data relating to the number of claims, settlements, specialties affected, and "lessons learned." This report will provide for each of the Services to perform a thorough assessment of its RM program. The reports will also provide information pertaining to the overall function of RM for the DoD.

3) The DoD will work with the AFIP over the next six months to develop a program of central RM data reporting and analysis, including data from the AQCESS and the CHCS. This program should be operating in fiscal year 1988 and should provide periodic reports regarding trends in RM cases.

* FINDING E: Civilian Multihospital Organizations Are Developing Centralized Information Systems. The GAO observed that some civilian multihospital organizations consider a centralized information system to be a primary component of an effective risk management program. The GAO observed that a centralized program can complement hospital-level quality assurance/risk management programs by allowing the organization to collect data and identify potential problems within both the system and individual facilities, thus focusing managerial attention on the need for corrective or preventive actions. The GAO concluded that the civilian sector multihospital organizations have begun using central data bases that include malpractice information to supplement hospital-level quality assurance/risk management programs. The GAO further concluded that their goals in developing these systems are to improve care and reduce financial losses through malpractice suits. (pp. 26-28, p. 30/GAO Draft Report)

Now on pp. 26-27

DOD COMMENT: Concur. The DoD agrees that central agency programs are being developed by civilian agencies and that many of these programs may have potential for use in the military RM programs. It is the DoD position that central agency responsibilities include policy development and trends analysis of RM data. The DoD requires that peer groups engage in discussion of alternatives available that might reduce patient risk. The DoD hospital RM Committees will be required to abstract information from this analysis and report the abstracted information through the AQCESS system. The DoD will then analyze the data from these reports in order to fulfill the responsibility of trends analysis. A list of some DoD programs developed to achieve these goals follows:

1) Provider competency assessment is a function of the credentials program. Directives regarding this program have been published over the past several years. The Directives give specific guidance on review of performance and privilege assignment of DoD providers. These reviews occur at regularly scheduled intervals as well as following adverse outcomes. Provider specific trend analysis is carried out as part of this program. It is important to understand that RM cases comprise only one aspect of credentials review. It is equally important to understand that identification of incompetent providers is only one aspect of RM review.

2) A Directive regarding licensure was published in 1985. This Directive is being rewritten to give clear instructions on waiver and special case management of this program. The reissuance is scheduled for the summer of 1987.

3) The AQCESS was installed in all DoD hospitals by June 1985. This system offers increased automation to the QA and RM programs. Software releases for 1987 include programs regarding RM cases and occurrence screening that are expected to improve data collection and the analysis of those data. All AQCESS functions will be included in the CHCS, as that system is phased into DoD facilities.

4) Occurrence screening has undergone extensive changes since being introduced in 1984. The most recent change increases use of the AQCESS and will increase the ability of the program to trend the causes of occurrences. Past efforts have focused the attention of the staff on possible provider error and have not given attention to other causes of adverse outcome. This program gives valuable information relating to other causes of adverse outcomes and will lead to improvements in care.

5) An external civilian peer review program has been functioning for one year. This program is beginning to return information regarding patterns of care, and analysis of the patterns. A report of this experience will be issued during the first quarter of FY 1988.

6) The DoD hosted a Joint-Service QA Workshop in 1986 and will repeat the workshop in 1987. This workshop provides a valuable means of sharing programs and experience in all aspects of QA, including RM.

FINDING F: Recent Legislation Requires Central Reporting Of Malpractice Payments. The GAO observed that the Health Care Quality Improvement Act of 1986 (Title IV of Public Law 99-660, dated November 14, 1986), was enacted in response to

Now on pp. 28-29.

congressional concerns about the quality of medical care in the United States. As a result, of the legislation, the GAO reported the Secretary of Health and Human Services will establish a system that will help hospitals assess the competency of physicians and other health care providers by making available to the hospitals information about physicians' involvement in malpractice as well as certain adverse actions taken against them. The GAO also observed that provision was made to allow DoD facilities and providers to be included in this information system. (pp. 28-30/GAO Draft Report)

DOD COMMENT: Concur. The OASD(HA) has already appointed a representative to the committee formed by the Department of Health and Human Services (HHS) that will be implementing this legislation. The DoD intends to comply fully with this legislation.

* FINDING G: DoD And Services Could Make Better Use Of Malpractice Information. The GAO found that currently, the Office of the Assistant Secretary of Defense (Health Affairs) collects some centralized quality assurance/risk management data, including some malpractice claims data. In addition, the GAO found that the Armed Forces Institute of Pathology and the three Services' medical commands also receive some data on malpractice incidents. The GAO learned that Health Affairs is considering collecting additional malpractice information, which (if collected) could help focus attention on possible problems. The GAO observed, however, that the data currently being collected or even the data being considered for collection, are inconsistent and incomplete and, except in the Air Force, not systematically used for feedback or educational purposes. The GAO concluded that a centralized, comprehensive malpractice information system would be a useful tool to help assure quality care and reduce the risk of financial loss resulting from malpractice in the military health care system. In addition, the GAO concluded that claims service and medical service officials should cooperate to assure that useful medical data are obtained from claims files and centrally analyzed, followed-up, and fed back to the Service and facility levels. The GAO further concluded that this should be done under the leadership of Health Affairs to assure maximum consistency and interservice sharing of data. (pp. 33-42, p. 55/GAO Draft Report)

Now on pp. 31-36, 45-46.

DOD COMMENT: Concur. The DoD agrees that better use of malpractice information can result from central review and analysis of risk management data. Individual case review is an important aspect of hospital and major command risk management programs. Central agencies devote attention to policy development and trends analysis of data from the hospital review. The DoD has or will institute the following initiatives to implement these policies:

1) The DoD and the Services will increase the use of existing RM data to identify areas in which the QA program can improve medical care of patients.

2) An annual report from the Services to the OASD(HA) will be expanded to include risk management material and a summary of lessons learned. Risk management information is also discussed at monthly meetings between the Deputy Assistant Secretary of Defense (Professional Affairs and Quality Assurance) and his staff and the Services Quality Assurance Directors.

3) As described in the DoD Response to Finding E, the AQCESS is providing increased data for trends analysis. This improves consistency of case identification between the Services. This function will also be in the CHCS as that system is phased into DoD facilities.

4) The OASD(HA) will work with the AFIP to consider ways of increasing material reviewed by that organization and its value to the Services. In these discussions, the DoD will also explore what material the AFIP, within its current resources, might provide to the Joint-Service QA meetings.

5) In addition, in FY 1986, the DoD issued a memorandum to the Services establishing a standard format for documenting and reporting malpractice claims cases to the OASD(HA). This improves consistency of data from the Services for trends analysis.

* FINDING H: Including Potential Claims Could Improve The Usefulness Of Malpractice Data. The GAO reported that information concerning potential, as well as actual, claims can provide a more timely and complete picture of medical care problems than information the DoD is currently collecting based solely on actual malpractice claims. The GAO noted that civilian organizations include, or plan to include, both potential and actual claims in their centralized information systems. The GAO found that its analysis of 1984 closed claims showed that, on the average, claims were not filed until almost 25 months after the alleged malpractice incident. Further, the GAO found that settlement of the claims took an average of 11, 13 and 19 additional months for the Air Force, Army and Navy, respectively. The GAO concluded that, while information on actual claims provides a good data base to show possible systemic problems and patterns of substandard care, including information on potential claims would show a picture of problem areas on a more current basis. The GAO further concluded that although Health Affairs and the Services have recognized the usefulness of collecting malpractice information, they could make better use of such information

for quality assurance and risk management than they are now doing. The GAO also concluded that at the time of its onsite work, the usefulness of the data being collected by Health Affairs and the Services was limited by inconsistencies among the Services' reports and by their narrow scope (for example, they did not identify specific facilities or providers and did not include potential claims). (pp. 42-45, pp. 55-56/GAO Draft Report)

Now on pp. 37-38, 45-46.

DOD COMMENT: Concur. The DoD agrees that all adverse events should be included in trends analysis. The DoD also realizes that no program can hope to be 100 percent effective in identification of events that tend to have a subjective definition. In order to increase adverse outcome identification, however, the following initiatives have occurred:

1) The 1986 Joint-Services QA workshop panel on RM recommended changes in AQCESS software and in the definition of RM events. These recommendations were incorporated into 1986 and 1987 AQCESS software releases.

2) The 1987 Joint-Services QA workshop panel on RM will be tasked with further defining adverse outcomes and making recommendations for future AQCESS and CHCS software changes. These will be incorporated during FY 1988.

* FINDING I: Tracking Health Care Providers Could Help Improve Quality Of Care and Reduce Risk. The GAO found that neither the OSD nor the Services, except for the Air Force, systematically collect information on provider involvement in malpractice incidents. The GAO observed that centralized data on providers' involvement in malpractice incidents can be a useful tool for quality assurance and risk management. In addition, the GAO found that, under current practices, investigation reports do not always identify the specific provider responsible for the malpractice or substandard care. It is the GAO position that this information is necessary before a central information system could effectively track providers. The GAO concluded that a central tracking would provide a useful tool for focusing attention on corrective or preventive actions needed concerning specific providers found to be frequently responsible for malpractice or substandard care, as well as for identifying systemic-type problems with respect to categories of providers. The GAO pointed out that the usefulness of central tracking of providers' involvement in malpractice in the civilian sector was recognized by Public Law 99-660, which requires information about malpractice payments, including the names of physicians, to be reported to the Secretary of Health and Human Services. (p. 6, pp. 45-50/GAO Draft Report)

Now on pp. 3, 39-42.

DOD COMMENT: Concur. It is DoD policy that credential programs track events and circumstances surrounding providers identified as negligent, incompetent, or guilty of unprofessional behavior. The RM program can be used as one source of provider specific data to the credentials program. It is the policy of the DoD that providers experiencing a higher than average level of adverse events shall be referred to the Credentials Committee for evaluation. To improve the implementation of this policy, the data programs in the AQCESS and the CHCS will include provider identifiers. The DoD policy is that the credentials review and RM programs operate concurrently but independently. These two programs exchange information and recommendations but do not need to duplicate efforts.

The DoD has clarified programs for evaluation and reporting of providers found to perform negligently, incompetently, or unprofessionally. Two of these are as follows:

1) The Services have reported physician privilege restrictions and revocation actions to the Federation of State Medical Boards (FSMB) as called for in DoD Directives.

2) The DoD has issued several Directives regarding credentials review, provider performance investigation, and privileging actions. A Directive has been prepared that incorporates many of these actions into a single document and is scheduled to be issued in the summer of 1987. The credentials program provides for thorough review of a provider's education and training credentials as well as a continuing assessment of the provider's expertise and experience.

* FINDING J: OSD And Service Officials Have Concerns About Implementing A Comprehensive Malpractice Information System. The GAO reported that during discussions with OSD and Service officials on the possibility of expanding the malpractice information currently collected and analyzed, several concerns were expressed. The GAO reported, for example, that the Assistant Secretary (Health Affairs) agreed that a central system had merit, but cautioned that the prerogatives of the three Services would have to be considered before data could be maintained on a centralized basis. The GAO reported that other concerns included (1) the possible negative effect on physician recruiting and retention of keeping centralized data on individual physicians, and (2) whether all potential claims would be reported by hospitals if they knew comparisons with other hospitals were going to be made. The GAO concluded, however, that the potential benefits of a centralized system outweigh these concerns, and a centralized malpractice information system is needed to

Now on pp. 4, 42-45.

systematically collect and analyze known problems in medical care and focus attention on corrective and preventive actions, as appropriate. The GAO also concluded that such a system should be centralized so data can be analyzed across all three Services under the leadership of the Assistant Secretary of Defense for Health Affairs. (p. 5, p. 50-55, p.57' GAO Draft Report)

DOD COMMENT: Partially concur. It is the DoD position that the RM program should be developed with recognition of the concerns listed in the GAO report. These concerns are that the program not undermine Service responsibilities, that the program not create an atmosphere that leads to decreased compliance with reporting requirements, and that the program take measures to protect confidentiality of providers and patients. The DoD has developed the following initiatives with these concerns in mind.

1) As described in the DoD Response to Finding E (paragraph (4)), occurrence screening has been modified to permit identification of causes of adverse outcome. This program includes a number of possible causes in addition to provider deficiency. This will increase occurrence reporting and improve identification of the cause of occurrences.

2) Also as described in the DoD Response to Finding E (paragraph (3)), programs are being developed to increase the recognition of adverse outcomes and to trend the causes of these outcomes. These programs improve the definition of adverse outcome events and improve central data storage and trends analysis.

3) The DoD will work with the AFIP to develop a plan to identify methods of reporting, and analyzing RM data, including provider specific information from all three Services. The results of this program will lead to increased sharing of information relating to areas of concern and solutions to problems.

While the DoD agrees that more consistent central RM data trends analysis will encourage sharing of information between Services, the DoD does not agree that detailed central claims review of individual cases is necessary for this to occur. The DoD will work with the AFIP to develop additional central data analysis, focussing in on key determinants of RM cases and trends. Use of the central agency to perform detailed case review and analysis would be very resource intensive.

* FINDING K: Differences Exist In Services Definitions And Reporting Requests For Potential Claims. The GAO found that Service regulations are not uniform in terms of (1) how they define a potential claim and (2) guidance concerning which potential claims should be forwarded to headquarters for

review. The GAO also found that the military hospitals visited were using different definitions of potential claims. The GAO observed, however, that two of the civilian multihospital organizations it visited had developed, or planned to develop, specific guidance concerning potential claims to make sure they were investigated. The GAO concluded that the Services' definitions of potential claims are not specific and definitions used by hospitals differ. In addition, the GAO concluded that hospitals and local claims offices differ significantly in the extent to which they, respectively, report and investigate potential claims. (p. 7, p. 61-66/GAO Draft Report)

Now on pp. 5, 52-55.

DOD COMMENT: Concur. The DoD agrees that uniformity in the definition of adverse outcome can improve the quality of trends analysis. Programs to improve the uniformity of these definitions are included in the occurrence screening changes in the AQCESS, adverse outcome case trends analysis, and the Joint-Services workshops previously discussed. Other initiatives to improve RM definition uniformity will occur in FY 1988.

* FINDING L: Some Potential Claims Are Not Investigated. The GAO found that information on potential claims, which could be used to help improve the quality of military medical care, cannot be collected on a systematic basis because Service regulations requiring the reporting and investigation of potential claims are not being fully implemented, and (2) some incidents involving active duty service members are not investigated. The GAO concluded that changes are needed to better assure that all potential malpractice claims are investigated to improve the effectiveness of hospital-level risk management programs and help assure complete and consistent data can be entered into a centralized malpractice information system. The GAO also concluded that to include effectively information on potential claims in a centralized malpractice information system, the DoD needs to better define potential claims, make sure that they are all investigated, and establish consistent requirements for forwarding potential claims to a central agency responsible for abstracting the necessary information. Finally, the GAO concluded that malpractice incidents involving active duty service members should also be investigated through the claims system. The GAO observed that, otherwise, some hospital services, such as orthopedics, might not be fully represented in a centralized malpractice data base, and an opportunity to improve care and prevent other claims (by learning from the active duty incidents) might be missed. (p. 7, pp. 66-71/GAO Draft Report)

Now on pp. 5, 56-59.

DOD COMMENT: Concur. The DoD agrees that all adverse outcome cases should be investigated and the cause of the adverse outcome identified. Material from this review process should be sent to higher headquarters to permit trends analysis. The DoD has instituted programs to accomplish these goals. The programs have been previously discussed in the DoD responses to Findings E and J.

RECOMMENDATIONS

* RECOMMENDATION 1: The GAO recommended that the Secretary of Defense direct the Assistant Secretary for Health Affairs, in conjunction with the Service Secretaries, to develop a DoD-wide system for collecting medical information from investigations of malpractice incidents, both potential and actual claims. According to the GAO, such a system should collect information that identifies the facilities and providers involved and is sufficiently detailed to allow analysis and understanding of the problems identified and development of case studies. Specifically, the GAO suggested that the system should provide for the following:

    a. tracking and analysis of data on malpractice incidents to identify patterns of problems, including identifying providers responsible for malpractice or substandard care;

    b. further investigation to determine whether poor medical care is being given;

    c. follow-up, where appropriate, to assure corrective and preventive action is taken; and

    d. dissemination of statistical and educational information to the three Service medical commands and medical facilities. (pp. 58-59/GAO Draft Report)

Now on p. 48

DOD COMMENT: Concur. The DoD agrees that the OASD(HA), in conjunction with the Service Secretaries, should develop a DoD-wide system for collecting medical information from RM cases. In the DoD RM program, the functions of central agencies, such as OASD(HA), are to develop policy, centrally analyze data for trends, provide for information sharing between Services, and perform oversight. Individual case analysis is a responsibility of operational elements such as the hospitals. Supervision of case analysis is performed by the major command organizations. Central reporting of data abstracted from cases by the hospital makes possible trends analysis, information sharing and oversight.

The DoD requires that each Service provide the OASD(HA) data on malpractice to include lessons learned. These data will be evaluated to determine whether system-wide trends exist and where information sharing is of benefit.

The DoD already has several programs that address the four concerns that the GAO listed in Recommendation 1. The major programs are:

1) The AQCESS/CHCS programs involving occurrence screening and adverse event cases will result in increased recognition of these cases and in improved analysis of the cause of the events. Increased central reporting requirements will result in a better data base at DoD for identifying trends and systemic problems. This makes possible the performance of trends analysis comparing Services, hospitals, providers, and types of events as previously recommended (see Recommendation 1, paragraph a). Providers will be identified in central reporting of this system using computer codes.

2) Provider specific privilege modifying actions are reported to the OASD(HA) as they occur. The reports are also filed with the Federation of State Medical Boards (FSMB). The soon to be reissued DoD Directive 6025.1, Credentials of DoD Health Care Providers, calls for reports also to be sent to the State in which the provider is licensed and to other clearinghouses, as designated by the Surgeon General of the Service. The HHS clearinghouse will be included in this reporting when it is available. It is the DoD position, however, that provider specific analysis of adverse outcome data is a responsibility of the credentials program. The RM program is responsible for performing trends analysis of areas of risk and recommending methods of decreasing risk. When the RM program personnel see evidence of provider incompetence, they refer the provider to the Credential Committee for evaluation.

3) While waiting for AQCESS data to be available, DoD will use existing data from the Services and the AFIP to determine whether there is evidence of poor medical care. Where such evidence is encountered, the Services will perform a thorough evaluation of the cases.

4) Follow-up of corrective actions is a central part of the DoD quality assurance program. This is a standard of the Joint Commission on Accreditation of Hospitals.

5) Increased sharing of information between the Services has occurred at the monthly Joint-Service QA meeting and at the Joint-Service QA workshop held in May 1986, and planned for May 1987.

6) Statistical and educational information from RM review is being provided in a number of ways, including case presentations in the monthly journal, Military Medicine, lectures by DoD representatives, and in DoD-sponsored conferences, such as the annual Commanders' Conference and the Joint-Service QA Workshop.

In addition, the OASD(HA) will work with the AFIP over the next six months to develop a program to increase central trends analysis and information sharing. This program will be implemented in fiscal years 1988 and 1989.

Other avenues for information dissemination are being explored. These include increased use of the AFIP, increased sharing of knowledge with other government and civilian health care institutions, and other means of disseminating information.

Now on p. 48.

* RECOMMENDATION 2: The GAO recommended that the Secretary of Defense direct the Service Secretaries to insure that investigations of malpractice incidents clearly identify providers found to be responsible for malpractice or substandard care. (p. 59/GAO Draft Report)

DOD COMMENT: Concur. The DoD assumes that this recommendation refers to the inclusion of the responsible providers' names in the Judge Advocate General claim files for such cases. The DoD will request General Counsel to investigate means of achieving this goal.

It is the position of the DoD that review of provider performance should occur as soon as possible after identification of the adverse event. Malpractice cases are filed up to 2 years following the episode of care and are settled months to years after the claim is filed. The DoD is working with the Services to develop a means of assuring that provider performance evaluation occurs in every case that is filed. It is the position of the DoD that this will be an essential aspect of the reporting requirement for DoD participation with the clearing house being established by HHS. When providers are identified as having been negligent, incompetent, or unprofessional, this fact will be documented clearly in provider specific files as well as malpractice files. Such providers are already reported to the Office of the Surgeon General, the OASD(HA), and, when privileges are limited in any manner, to appropriate civilian agencies.

The RM cases from occurrence screening and adverse event identification are studied at the health care facilities to determine the cause of the event. These programs increase efforts to identify the causes of adverse outcomes and institute programs to decrease the likelihood of recurrences. The AQCESS/CHCS software programs are being modified in May 1987 to further improve reporting of RM data for higher headquarters to perform trends analysis. The program will include provider specific computer codes.

Hospitals are required to perform provider performance assessments on a regular basis. In addition, interim performance assessments occur whenever a major adverse event or a series of minor adverse events is identified. These investigations are performed under the supervision of a higher headquarters and the Office of the Surgeon General. Privilege changes are reported to the FSMB, State licensure boards, and the DoD. Minor deficiencies and cases where the provider is not found to have been deficient are documented in a provider-specific file kept at each health care facility. This file is used in the regularly scheduled performance assessment. Performance assessments and assigned privileges are permanent documents in the provider credential file that accompanies a provider throughout the DoD service.

Now on p. 48.

RECOMMENDATION 3: The GAO recommended that the Secretary of Defense direct the Assistant Secretary for Health Affairs to participate fully in the provider tracking system required by Public Law 99-660. (p. 59/GAO Draft Report)

DOD COMMENT: Concur. The DoD contacted the officials of HHS soon after PL 99-660 was passed. A DoD representative has been appointed to the HHS committee which is implementing this law. DoD intends to participate fully in this initiative.

Now on p. 60.

RECOMMENDATION 4: The GAO recommended that the Secretary of Defense should direct the Assistant Secretary for Health Affairs, in conjunction with the Service Secretaries, to establish a consistent definition of potential claims and consistent requirements for forwarding potential claims investigations to a central agency for inclusion in a centralized malpractice information system. (p. 72/GAO Draft Report)

DOD COMMENT: Concur. The DoD agrees that there is a need for a more consistent definition of events which should be evaluated under the RM program. A consistent definition will provide more reliable data in trends analysis and will provide for consistent evaluation of all cases of patients at risk. It is the position of the DoD that all such cases should be studied and, therefore, the term "adverse event" is used in this response to avoid the confusion caused by the term "potential compensable event." Adverse events are studied regardless of the status of the patient. Potential compensable events might be construed as not involving servicemembers. The programs developed to increase identification of such cases include the following:

1) The QA Workshop in 1986 included a panel on RM that discussed aspects of RM case definition. The 1987 panel will be specifically tasked with recommending policy regarding and standard definitions of adverse events. These recommendations will be implemented in FY 1988.

2) Major changes in definitions of occurrence screening and in the evaluation process of positive occurrences have been incorporated into recent AQCESS/CHCS software updates.
3) The Services and the DoD have become much more aggressive in identifying, reporting, and investigating adverse outcomes. Recent AQCESS software releases will improve this program.

4) The external civilian peer review program serves as a further means of identifying adverse outcome cases for review.

5) The DoD has required the Services to centrally report on a quarterly basis, malpractice data. The DoD is considering further refinements in these data to increase the usefulness of the material. The DoD is also exploring the possible use of the AFIP to analyze adverse outcome data to provide trends analysis of this information.

The DoD recognizes that no program will be 100 percent effective in identifying adverse outcomes. An RM program should, however, make reasonable efforts to identify all such cases and to carry out responsible review in order to identify and correct the causes of adverse events.

Now on p. 60.

* RECOMMENDATION 5: The GAO recommended that the Secretary of Defense should direct the Service Secretaries to:

a. issue regulations requiring that malpractice incidents (actual and potential claims) involving active duty service members be investigated through the claims system in the same manner as incidents involving non-active duty beneficiaries;

b.issue regulations adopting the revised definition of potential claims and requirements for forwarding them for inclusion in the centralized malpractice information system; and

c. once the definition of potential claim is clarified, fully implement regulations requiring hospital reporting and claims service investigation of potential claims. (p. 72/GAO Draft Report)

DOD COMMENT: Concur. It is the policy of the DoD that adverse events be investigated by the hospital RM Committee regardless of the status of the patient. The regulations quoted below implement this policy. Claims analysis provides information in event of litigation; this parallels the medical evaluation of cases. Claims from active duty service members are prevented due to the Feres doctrine, making defensive claims analysis unnecessary.

In preparing this response, the Service QA/RM regulations were reviewed. Quotations from the Service regulations follow:

Navy, NAVMEDCOMINST 6320.7 dated 6 September 1984: "The Incident: An individual episode of harm or potential harm or a serious expression of dissatisfaction by patients, visitors, and staff."

Air Force, AFR 168-13 dated 31 May 1984: This regulation calls for the RM committee to review all incident slips, complaints, congressional complaints, and occurrence screening events without mention of the status of the patient.

Army, AR 40-66 dated 31 January 1985: "All serious incidents, whether or not they are compensable, will be promptly investigated by priority." "An incident is any unintended or unexpected result that arises from human error or mechanical malfunction during patient care."

The DoD and the Services have taken action to increase recognition of, and central reporting of, adverse events. The DoD will require the Services to implement use of the refined definition of adverse events that will be developed following the Joint-Service QA workshop in May 1987. The DoD will also require the Services to implement instructions to RM committees that result in medical analysis of adverse events and thorough claims analysis of cases identified as having potential for litigation.

U.S. G.P.O. 1987-181-235:60025

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