United States General Accounting Office

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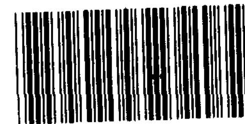
Report to the Chairman, Committee on Veterans' Affairs, U.S. Senate

November 1990

# VA HEALTH CARE

# Actions in Response to VA's 1989 Mortality Study

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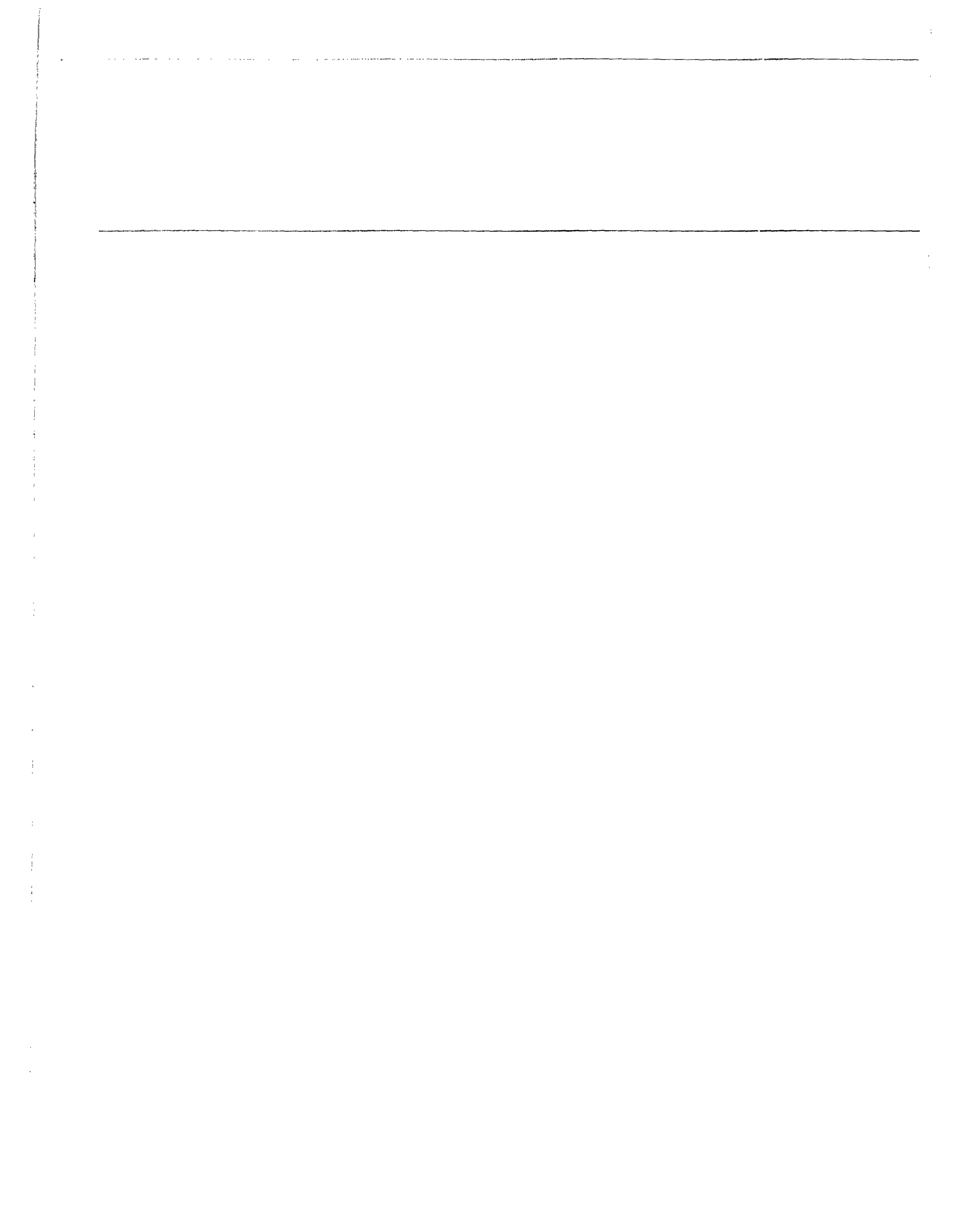


**United States**
**General Accounting Office**
**Washington, D.C. 20548**

**Human Resources Division**

B-241910

November 27, 1990

The Honorable Alan Cranston
Chairman, Committee on Veterans' Affairs
United States Senate

Dear Mr. Chairman:

As requested in your June 16, 1989, letter, we have reviewed the actions that the Department of Veterans Affairs (VA) has taken to address quality-of-care problems associated with deaths in several VA medical centers during fiscal year 1986. Specifically, in a June 1989 report, VA stated that 44 of its 172 medical centers had higher-than-expected mortality rates in one or more diagnostic categories (for example, cancer or severe heart disease) in that period. Further, "likely" quality-of-care problems were found in 90 cases in which deaths occurred. VA said it would conduct follow-up activities to determine to what extent such problems exist in its medical centers and what actions will be taken to correct them.

You requested that we monitor and review VA's follow-up actions, specifically determining whether

- the validation methodology for the follow-up is appropriate,
- the follow-up is completed as described in the mortality study,
- the actions taken as a result of the follow-up are proper, and
- other actions may be needed to ensure that the probable causes of death resulting from quality-of-care problems are identified and corrective actions taken.

We briefed your staff on the results of our work on July 9, 1990. This report summarizes that information and provides an update of certain VA activities through October 31, 1990. Our work's scope and methodology are discussed in appendix I.

## Background

In June 1989, at the direction of the Chief Medical Director, VA's Office of Quality Assurance published a report concerning deaths in VA medical centers during fiscal year 1986. The report showed that 44 of VA's 172 medical centers had higher-than-expected mortality rates in one or more

diagnostic categories.[1] In the aggregate, 3,050 deaths occurred in these medical centers[2] in those diagnostic categories, whereas only 2,098 deaths would have been anticipated. Staff from VA's Medical District Initiated Peer Review Organizations (MEDIPROS) reviewed 1,771[3] of these cases according to preestablished criteria and referred 473 cases from 43 hospitals to MEDIPRO physicians for review. These physicians determined that 90 cases had "likely" quality-of-care problems. Almost half of these cases (38 of 90) occurred in six primarily psychiatric hospitals. The remaining were identified as having occurred in 16 medical centers providing primarily medical and surgical acute care.

In its report, VA stated that, among other things, the following actions would be taken to assess the significance of the aforementioned data:

- Require each medical center to comment on MEDIPRO decisions and provide both the central office and MEDIPRO a summary of corrective actions to be taken to address issues raised.
- Require MEDIPRO and central office personnel to review and approve the medical centers' responses and corrective action plans.
- Analyze mortality cases not available at the time the original study was published and report in a supplement the findings and corrective actions taken.
- Validate the original study methodology.
- Monitor the care in the medical and surgical wards of primarily psychiatric facilities to determine if there are any significant differences between this care and that provided at other VA medical facilities.

A complete statement of the actions VA planned to take to address the study findings is contained in appendix II.

## Results in Brief

VA has used an appropriate methodology to identify and follow up on deaths associated with quality-of-care problems. Further, most of the actions it planned to take to assess the significance of the mortality

[1]These diagnostic categories were severe heart disease; metabolic, electrolyte disorder; cancer; orthopedic conditions; cerebrovascular disease; gastrointestinal disease; low-risk heart disease; pulmonary disease; renal and urologic disease; and follow-up and after-care.

[2]Although the June 1989 mortality report identified 44 hospitals with higher than expected mortality rates, the report included data from only 43. Data from the 44th hospital were analyzed as part of the follow-up actions.

[3]VA selected 2,417 of the 3,050 mortality cases for MEDIPRO review. Of the cases selected, 273 were found to involve deaths after discharge or erroneous coding and were eliminated from the study, and 373 pertinent records were unavailable; thus, 1,771 cases were ultimately reviewed.

study findings have been completed. But VA is still analyzing deaths that occurred in psychiatric centers in fiscal year 1989, to determine if there are any significant differences between the quality of care provided in psychiatric facilities and that provided at other VA medical centers.

VA's completed actions are as follows:

- Each medical center has commented on the MEDIPRO decisions and has provided a summary of any corrective actions taken to resolve the issues raised.
- MEDIPRO and central office personnel have reviewed and commented on each medical center's corrective action plan.
- MEDIPRO personnel have reviewed mortality cases not available for review when the original study was conducted.

Actions yet to be completed are:

- The original study methodology is being examined, and a final report is expected to be issued in March 1991.
- MEDIPRO staff are reviewing deaths that occurred in fiscal year 1989 in seven[4] psychiatric hospitals that had high mortality rates in 1986 to determine the extent to which quality-of-care problems are occurring. Preliminary data indicate that at least four of the seven psychiatric hospitals continue to have deaths with possible quality-of-care problems at rates higher than the comparable mortality rate in medical and surgical acute care hospitals. Assessments of the quality of care provided in the psychiatric facilities involved are in process.

Although VA has taken specific actions to follow up on its mortality study, it has not used the information it obtained from individual medical centers to improve systemwide operations. For example, at least five medical centers were known to have problems implementing their "Do Not Resuscitate" procedures,[5] and each developed its own revisions to correct the situations encountered. This issue may have systemwide applicability. But the central office did not disseminate the data to all of its medical centers. The result may be duplication of effort and a lost

[4]The review of previously unavailable cases identified another three "likely" problem cases in a seventh psychiatric hospital.

[5]Procedures written to clarify matters such as the extent to which emergency measures will be instituted if a patient's condition warrants, who has the authority to make such decisions, and what factors must enter into those decisions.

opportunity to share data that could prevent similar problems from occurring at other medical centers.

The Committee should consider discussing with VA the results of actions that are still underway and the need to disseminate information that has systemwide applicability.

## VA Used a Generally Accepted Methodology to Identify Quality-of-Care Problems

VA used physician peers (MEDIPRO) from outside the involved medical centers to examine each mortality case selected for review, determine potential quality-of-care problems, and evaluate the appropriateness of corrective actions taken. This peer review technique is consistent with methods used in the private sector to evaluate medical care. It is based on a fundamental medical community premise that physicians are best qualified to review and judge the clinical activities of other physicians.

VA initiated MEDIPRO in 1985 on a limited basis and, by 1986, had expanded it to include all districts in the system. Its purpose was to provide a mechanism for physician peers to evaluate the quality of care and utilization of resources in VA medical centers. Clinically active VA physicians from hospitals within each of VA's 27 districts were selected to serve on district boards, which analyzed data to identify potential quality-of-care problems in VA medical centers.[6] VA used MEDIPRO for the mortality study and its follow-up because it had experience in conducting multi-facility medical record reviews and was external to the facilities being reviewed.

MEDIPROs served a function similar to that played by Peer Review Organizations (PROs) in the private sector. PROs are congressionally mandated private organizations established to ensure that services furnished through Medicare are necessary, appropriate, and of high quality.

## VA Actions Are Being Conducted as Planned

VA medical centers have completed all of the follow-up efforts they were required to take as a result of the June 1989 study. VA's central office and MEDIPROs are in the process of conducting their intended follow-up efforts. MEDIPROs completed their reviews of cases that were not available when the original study was performed; every VA medical center that had deaths attributed to quality-of-care problems commented on MEDIPRO decisions and provided a summary of any proposed corrective

[6] As of April 1, 1990, VA abolished its district offices and, as of October 1990, had not determined what peer review structure will be employed.

actions to the cognizant MEDIPRO and to the central office; and the medical centers' corrective action plans were reviewed and evaluated by cognizant MEDIPROS. Disagreements between medical centers and MEDIPROS about the quality of care provided in individual cases were referred to panels appointed by central office officials.

VA's central office, however, has not completed its planned study to determine whether there are differences between the quality of care furnished in medical and surgical wards of primarily psychiatric facilities and that provided to medical and surgical patients in other VA medical centers. MEDIPROS are reviewing deaths that occurred in fiscal year 1989 in psychiatric hospitals previously found to have quality-of-care problems to determine if such problems continue to occur at rates higher than that experienced in acute care VA facilities in 1986 (3.7 percent). These MEDIPROS will also report their conclusions about the quality of care provided at locations in which deaths occurred that had related quality-of-care problems. VA hopes to complete this process by December 15, 1990.

The following sections discuss what VA is doing in each area in which follow-up action was planned.

## Patient Records Unavailable During Original Survey Were Reviewed

From January to November 1989, MEDIPRO staff reviewed patient records in 627 mortality cases that had been identified in the original statistical study as occurring at higher-than-expected rates, but, for various reasons, were not in the final report.[7] Of these cases, 104 did not meet the staff's screening criteria and were referred to MEDIPRO physicians for further review. These physicians concluded that 21 cases had "likely" quality-of-care problems, thus increasing the total number of problem cases to 111. VA intends to publish a supplement to the mortality study to describe these additional findings and the results of its review of deaths that occurred in the seven psychiatric hospitals in fiscal year 1989. This supplement is expected to be published by March 1991.

[7] These follow-up steps were begun at the time the published study report was being finalized. Of the patient records not reviewed in time for the report's publication, 267 were located in one hospital that was delayed in starting its review; 94 were from two hospitals that expanded the scope of their review; and the other 266 were from various hospitals that did not have the patient records available immediately.

## Medical Centers Commented on MEDIPRO Findings, but Not All Took Corrective Actions

Every medical center in which MEDIPRO alleged that a quality-of-care problem existed commented on the MEDIPRO findings. Not all agreed with the MEDIPRO's findings; therefore, some took no corrective action. Of the 111 cases involving "likely" quality-of-care problems, the medical centers agreed with MEDIPRO findings in 78 cases and disagreed in 33. The latter were sent for review to VA's central office, which upheld the MEDIPRO's decisions in 22 cases.

Medical centers submitted corrective action plans, which, in most cases, the cognizant MEDIPRO approved, to address problems identified in 81 of the 111 cases. In the remaining 30 cases, medical centers took no corrective actions: in 15 cases, officials disagreed with the MEDIPRO's findings; in 11 cases, all of the involved physicians had left the medical center and center officials believed no further action was necessary; and in 4 cases, the hospital had no evidence that the recommended actions had been taken. In cases where there was disagreement, VA central office officials told us that no corrective action by the medical center will be required. Specifically, they stated that staff in each of the affected facilities have already reviewed the case data several times to determine if any corrective action was necessary. In the opinion of these officials, any requirement to review the cases again would be superfluous.

In many instances, medical centers took more than one action to correct a problem: 53 actions involved medical center policy and procedure changes, 34 related to increased use of occurrence screening,[8] 48 involved additional training or education, 13 involved individual counseling with the provider, and 12 involved physician reassignment. In 9 of the 81 cases, hospital officials believe that the corrective action taken was not effective, and further problem-solving activity is in progress. In 10 cases, the medical centers took various corrective actions even though the involved physicians had left the medical centers. Appendix IV summarizes the corrective actions taken at each medical center.

[8]One of several elements in a VA medical center's quality assurance program. It involves a review of patient records by trained personnel, who use designated criteria to identify occurrences that represent deviations from normal procedures or expected outcomes. Once identified during the review of a medical record, the occurrence is evaluated through a peer review of physicians, who determine whether the care given was appropriate and met acceptable medical standards.

## VA Is Validating the Methodology Used in the Original Mortality Study

The chief of staff at VA's Hines Medical Center is examining the original study methodology through a VA central office-funded research project. He has submitted several status reports to the central office covering the period July 1989 to August 1990 and expects to issue a final report to the central office in March 1991.

## Psychiatric Case Monitoring Is in Progress

In its June 1989 report, VA stated that it would monitor the care provided in medical and surgical wards in primarily psychiatric facilities to determine whether it differs significantly from that provided at other VA medical facilities. As of October 1990, this action had not been completed, but VA officials hope to complete the analysis by December 15, 1990.

To meet its follow-up commitment, VA is examining all deaths that occurred in fiscal year 1989 at the seven psychiatric facilities that were determined to have quality-of-care problems in 1986. Cases with such problems are being identified using a process similar to that employed by MEDIPRO to review deaths that occurred in fiscal year 1986, and a rate of cases with quality-of-care problems is being computed. As the case analysis is completed, the 1989 data are being compared to aggregate data developed by VA for all VA acute care hospitals (3.7 percent). Preliminary data from six of the seven psychiatric facilities examined show that at one center, 14 percent of the mortalities have related quality-of-care problems. Three centers have quality-of-care problems ranging from 5.7 to 6.9 percent of the death cases reviewed;[9] one psychiatric center has a rate comparable to acute medical and surgical facilities, 3.9 percent; and one center has a rate lower than such facilities, 2.9 percent.

VA regional offices are analyzing data describing the corrective actions taken by the medical centers to resolve any problems identified. Further, each MEDIPRO board that analyzed mortality cases has been tasked with drawing conclusions about the quality of care provided at the facilities and making recommendations regarding the need for further monitoring and other activities.

This approach is consistent with a recommendation made in December 1989 by a committee of central office and medical center personnel appointed by the former Associate Deputy Chief Medical Director to

[9]Death cases at two medical centers have been reviewed by one physician. VA central office officials have directed the cognizant region to assign a second physician to review the problem cases. When the second review is complete, the problem rates may be lower than the preliminary data indicate (6.9 and 6.3 percent).

review mortality cases in psychiatric hospitals that had "likely" quality-of-care problems. The committee reviewed 36 cases MEDIPRO identified as having such problems in six psychiatric medical centers[10] and determined that death was preventable in 12 cases. It also concluded that 30 cases had one or more quality-of-care problems: 25 cases had delays in diagnosis; 15, drug usage problems; and 8, a delay in or omission of referral or consultation. The committee recommended that VA conduct future studies to compare the quality of care in psychiatric facilities with that in other VA facilities.

## VA Needs to Better Disseminate Information to Medical Centers

VA medical centers have identified quality-of-care problems and initiated corrective actions that could have had systemwide applicability. But VA's central office did not use the experience gained in these centers as a means of improving care throughout the system. According to central office officials, medical centers provided information about the problems and proposed corrective actions. However, data were not sufficiently detailed to allow a determination to be made as to whether the problems may exist systemwide and whether the actions taken to address them could have universal applicability. Central office personnel also stated that no effort was made to obtain additional information from the medical centers because, at the time, no consideration was being given to the potential systemwide applicability of the data.

For example, a medical center pharmacist team developed a drug usage evaluation plan for several therapeutic drugs that, among other things, specified procedures for when and how to use theophylline[11] for therapeutic use in the emergency room. This and other drug usage protocols were presented at a national pharmacists' meeting, and many attendees requested copies. However, these guidelines were not communicated to other VA medical centers.

VA traditionally has delegated operational decision-making to its medical center directors. As a result, central office personnel are generally reluctant to act in ways that might suggest they are attempting to direct the medical centers' activities. Thus, in discussing the potential systemwide applicability of some of the changes made at individual medical centers, central office quality assurance officials stated that they had not considered the possibility of wider applicability of these changes. The officials

[10]The special review had already begun before the follow-up identified a seventh psychiatric hospital with problem cases.

[11]A drug used for treating certain bronchial conditions.

stated, however, that in the future they will consider disseminating data with potential systemwide applicability.

## Conclusions

Patients in VA psychiatric facilities should benefit if VA (1) completes, as planned, its comparison of the differences between care provided on medical and surgical units in primarily psychiatric hospitals with that furnished in medical and surgical acute care centers and (2) takes appropriate action to resolve any problems identified. Statistical data derived from the original study indicated that, in 1986, mortality rates and quality-of-care problems were higher in psychiatric facilities than in other acute care hospitals. Preliminary data on 1989 deaths in psychiatric facilities indicate that these problems still exist. Until the MEDIPROs complete their analysis, serious questions about the quality of care provided on medical and surgical units of psychiatric facilities will remain.

VA's central office could have made more extensive use of the information that MEDIPROs and medical centers developed as part of the mortality study and its follow-up. MEDIPROs' review of mortality cases identified some quality-of-care problems with possible systemwide applicability. If these problems and their corresponding corrective actions had been communicated throughout the VA medical system, individual medical centers might have identified similar problems and used effective corrective responses developed elsewhere. More importantly, initiating these corrective actions systemwide could have helped assure more uniform care for all VA patients.

## Matters for Consideration by the Committee

As part of its continuing oversight of VA health care issues, the Committee may wish to discuss with the Secretary

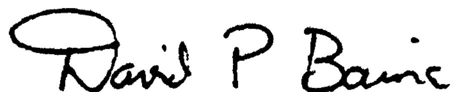
- the results of VA's efforts to compare the quality of care provided in medical and surgical units in primarily psychiatric hospitals with that provided in medical and surgical acute care hospitals and
- the need for central office staff to review the results of future quality assurance studies for possible systemwide applications and disseminate appropriate information to all medical centers.

As agreed with your office, we did not obtain written comments on this report from VA, but did discuss its contents with Office of Quality Assurance officials. Their comments have been incorporated, where appropriate.

We are distributing this report to VA and to interested congressional committees and members. We will also make copies available to others upon request.

If we can provide any further assistance, please call me at (202) 275-6207. Other major contributors to this report are listed in appendix V.

Sincerely yours,



David P. Baine
Director, Federal Health
Care Delivery Issues

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**Abbreviations**

| | |
|---|---|
| MEDIPRO | Medical District Initiated Peer Review Organization |
| PRO | Peer Review Organization |
| VA | Department of Veterans Affairs |
| VHS&RA | Veterans Health Services and Research Administration |

# Scope and Methodology

In this monitoring effort, we relied on the work of district MEDIPROs and did not evaluate their decisions or conclusions. Our objective was to determine whether problems were addressed, corrective actions were taken, and any lessons were learned that could be applied to medical centers systemwide.

We periodically met with quality assurance staff in VA's central office to obtain an update on their follow-up activities. We also reviewed VA medical center correspondence that discussed follow-up actions, examined data aggregated by central office quality assurance staff about corrective actions taken in each medical center, and analyzed questionnaires completed by medical center officials describing corrective actions taken and submitted to MEDIPRO and central office staff. To determine the adequacy of hospitals' corrective actions, we talked with medical center directors, quality assurance coordinators, chiefs of staff, or other appropriate VA personnel and obtained documents that included the policy revisions made and described education or training provided. Our work was performed between August 1989 and October 1990 at VA headquarters in Washington, D.C., in accordance with generally accepted government auditing standards.

# Review of Mortality in VA Medical Centers—Planned Actions

1. Medical centers will report the following information for each case that was assessed by two peer reviewers as having a likely quality-of-care problem:

- Whether the case was previously reviewed by the facility's quality assurance program and, if so, the outcome of that review.
- Whether the medical center agrees with the findings of the review and, if not, the reasons for its disagreement.
- The proposed corrective actions to address the issues raised by the case.

2. The medical centers' responses will be reviewed by the MEDIPRO boards and VA's central office.

3. Medical record reviews of a number of cases that were targeted by the mortality rate analysis were not completed in time to be included in the report. A supplement will present the results of these medical record reviews and a description of all corrective actions resulting from them.

4. Monitoring of the care provided in the medical and surgical wards of primarily psychiatric facilities will be conducted through a number of Veterans Health Services and Research Administration (VHS&RA) quality assurance mechanisms, such as MEDIPRO and, where appropriate, site visits by central office clinical and administrative officials. This monitoring will determine:

- Whether there are significant differences between the quality of medical and surgical care provided at primarily psychiatric medical facilities and that provided at other VA medical facilities.
- If so, what actions should be taken to improve the care at primarily psychiatric facilities.

5. A VHS&RA study will be conducted to determine the validity of the statistical methodology described in part I of VA's mortality study as a mechanism for identifying possible quality-of-care problems. Upon completion of this study, VHS&RA will decide whether regularly scheduled mortality rate analyses would be a useful addition to existing quality assurance activities.

# Results of Death Cases Examined by MEDIPROs and Central Office Reviewers

| | Number of cases | | | |
|---|---|---|---|---|
| | Original study | Follow-up efforts | Total | Number of hospitals |
| Cases reviewed by MEDIPRO staff | 1,771 | 627 | **2,398** | 44 |
| Cases referred to MEDIPRO physicians for in-depth review | 473 | 104 | **577** | 44 |
| Cases that MEDIPRO believes have "likely" quality-of-care problems | 90 | 21 | **111** | 27 |
| Cases that medical centers agreed have quality-of-care problems | | | **78** | 23 |
| Cases referred to central office because medical centers disputed MEDIPRO findings | | | **33** | 16 |
| Cases for which central office reviewers concurred with MEDIPRO findings that quality-of-care problems existed | | | **22** | 14 |
| Remainder[a] | | | **11** | 6 |

[a]In eight cases, the panels agreed with medical centers that no quality-of-care problem had occurred; in two cases, records were unavailable; and in one case, the panel could not determine from the records if a problem had occurred.

# Medical Center Corrective Actions

| Facility | Number of cases | Corrective action taken: Occurrence screening | Individual counseling | Additional training | Policy change | Other[a] |
|---|---|---|---|---|---|---|
| Albany, NY | 1 | | | | 1 | 1 |
| Asheville, NC | 2 | | | 2 | | |
| Atlanta, GA | 3 | 2 | 1 | | | |
| Battle Creek, MI | 12 | 12 | | 12 | 12 | 12 |
| Chillicothe, OH | 2 | | | 2 | 2 | 2 |
| Columbia, SC | 1 | | | | | 1 |
| Dayton, OH | 6 | 5 | 2 | 1 | 5 | 6 |
| Denver, CO | 8 | | 3 | | 3 | 2 |
| Durham, NC | 2 | | | | | |
| Fayetteville, NC | 1 | 1 | 1 | | | |
| Houston, TX | 10 | | | 9 | 9 | |
| Iowa City, IA | 1 | | | | 1 | |
| Leavenworth, KS | 3 | | 3 | 3 | 2 | |
| Lebanon, PA | 3 | 3 | | 3 | | |
| Loma Linda, CA | 10 | 2 | | | 10 | |
| Marion, IN | 5 | | | 5 | | 5 |
| Mountain Home, TN | 1 | | | | | |
| New Orleans, LA | 3 | | | 3 | | 2 |
| Oklahoma City, OK | 1 | 1 | 1 | | 1 | |
| Phoenix, AZ | 1 | | | | 1 | |
| Salisbury, NC | 11 | | | | | |
| San Juan, PR | 5 | | 1 | | | 1 |
| St. Louis, MO | 3 | 2 | | 1 | | 2 |
| Tuskegee, AL | 6 | 6 | | 6 | 6 | |
| Waco, TX | 5 | | | | | |
| Walla Walla, WA | 1 | | 1 | 1 | | 1 |
| Washington, DC | 4 | | | | | |
| **Totals** | **111** | **34** | **13** | **48** | **53** | **35** |

| Examples of corrective actions and other comments |
|---|
| Policy changed to require all cardiac arrests and deaths to be reviewed. A respirator was placed in the emergency room. |
| Staff trained to better document mortality case review. |
| The medical center disagreed with MEDIPRO's decision in one case. |
| The medical center and MEDIPRO now review all deaths concurrently. Laboratory and radiology are staffed 24 hours. |
| Nurses were instructed to prepare better documentation. The "Do Not Resuscitate" policy was revised. |
| Physicians presented case to the mortality and morbidity committee and conducted a literature review on infections. |
| Medical center implemented new "Do Not Resuscitate" policy. Quality assurance staff now reviews all autopsy reports. In one case, the chief of surgery discussed the need for adequate documentation with surgeons. |
| One case is now the subject of a lawsuit. Policy involved: following up on use of anticoagulation drugs, monitoring of blood pressure drops during surgery, and monitoring of oxygen tank gauges. |
| No actions taken in response to these cases because the medical center disagreed with MEDIPRO's conclusions. Further, VA review substantiated the medical center's position that no problem had occurred. |
| The need for adequate documentation was discussed. |
| Medical center noted that by the time of the follow-up review, all the involved residents had left. However, the medical center admissions policy was changed to require an attending physician to see all new admissions within 24 hours of admission, seven days a week. Also, high dosages of theophylline are now monitored; a strong drug usage education program was started; and surgery patients now have cardiac workup. |
| X-ray results are now reported more promptly. |
| Use of four antibiotics is now monitored and discussed in staff training. |
| Medical staff received refresher training in medical center's "Do Not Resuscitate" policy. |
| Medical center rewrote its "Do Not Resuscitate" policy. |
| Medical staff received instruction in treating severe cardiac cases. |
| No corrective actions were taken because medical center did not agree that a quality-of-care problem had occurred. |
| Continuing education now given for nurses' documentation of emergency situations and physicians' documentation of progress notes before surgery. Also, glucometers were placed in wards. |
| Medical center now reviews all autopsy reports. |
| Continuing education was furnished on how to recognize acute medical problems in debilitated elderly patients, particularly at time of transfer from other facilities. |
| No action taken because the medical staff involved, including the chief of staff, had left the medical center. |
| Staff education on case workup, management, treatment, and need for better documentation enforced. |
| Medical staff were instructed in improved diagnosis and treatment of ulcer surgery and were directed to improve their consultation with surgical staff. Results of test reports are now filed more promptly. |
| The medical center developed new "Do Not Resuscitate" policy and improved its reporting of lab and X-ray test results to physicians. Also, weekly mortality and morbidity reviews have been improved. |
| Medical center documentation of mortality review was improved. No other actions were taken because medical center disagreed with MEDIPRO in all five cases |
| Critical lab results are now reported by telephone. A consulting specialist provided staff with continuing education in diagnosis and treatment of stroke patients. |
| Medical center could not locate documentation indicating if actions were taken for one case. No action was taken in remaining three cases because medical center disagreed with MEDIPRO findings. |

[a]Other corrective actions taken include increased use of resources, such as patient monitoring equipment; improved or faster procedures, such as reporting lab results; and modified quality assurance procedures, such as more thorough reviews of all mortality cases. Some of these examples are described in the last column of this table.

# Major Contributors to This Report

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