The surgical suite does need modernization, but not equipping one of the four operating rooms until needed will result in better use of funds.
Memorandum to:

Director, Veterans Integrated Service Network (VISN) 21 (10N21)
Director, Department of Veterans Affairs Medical Center, Fresno, CA (570/00)

Audit of Surgical Suite Renovation Project

1. The purpose of the audit was to determine if the construction project was necessary or whether there were alternatives that would satisfy the needs of the medical center in a more cost-effective manner. We performed the audit as part of a national audit of Minor Construction and Nonrecurring Maintenance (NRM) projects. This Minor Construction project was included in 68 projects we statistically selected for review from a national universe of 1,106 Minor Construction and NRM projects.

2. According to the project plans, the existing surgical suite containing four operating rooms would be remodeled to provide state-of-the-art equipment and utilities and adequate space for efficient traffic flow.

3. Our audit found that the existing surgical suite was in need of modernization. Also, the existing layout did not provide appropriate patient flow from the surgery preparation area to the recovery area. However, we determined that the current surgical workload did not support the need for four operating rooms. Medical center management believed that the surgical workload will increase in the future, and they estimated that the cost to remodel four operating rooms instead of three would not be significant. We accepted that reasoning, but we concluded that the fourth operating room should not be equipped unless future workload justified it. This would enable $126,000 in equipment funds to be redistributed for better use. As a result, we recommended that the scope of the project be reduced by eliminating the equipment and that future project needs be thoroughly assessed when projects are submitted for approval.
4. The VISN Director concurred with the recommendation and provided acceptable implementation plans. We consider all audit issues resolved and will follow up on the implementation plans until they are completed.

For the Assistant Inspector General for Auditing

WILLIAM D. MILLER
Director, Kansas City Audit Operations Division
**TABLE OF CONTENTS**

Memorandum to the Director, Veterans Integrated Service Network (VISN) 21 and Director, VA Medical Center (VAMC) Fresno, CA ................................. i

**RESULTS AND RECOMMENDATION**

Reducing the Scope of the Surgical Suite Renovation Project Will Enable Better Use of Funds........................................................................................................ 1

Recommendation .................................................................................................. 3

**APPENDIXES**

I  OBJECTIVES, SCOPE AND METHODOLOGY................................................. 4

II  BACKGROUND ............................................................................................... 5

III  MONETARY BENEFITS IN ACCORDANCE WITH IG ACT AMENDMENTS.................................................. 6

IV  MEMORANDUM FROM DIRECTOR, VISN 21 ............................................. 7

V  FINAL REPORT DISTRIBUTION ..................................................................... 8
RESULTS AND RECOMMENDATION

Reducing the Scope of the Surgical Suite Renovation Project Will Enable Better Use of Funds

A Minor Construction project was proposed to remodel the existing surgical suite, which contains four operating rooms (ORs). The project would provide state-of-the-art equipment and utilities and adequate space for efficient traffic flow. We found that the surgical suite needed to be upgraded; however, the current surgical workload plus increases in workload expected by VAMC staff only support the need for 2.3 ORs. This occurred because VAMC and VISN management did not assess space needs based on workload. Since there were four ORs in existence, they planned to remodel all four. According to the Acting Chief, Facilities Management, the cost to remodel four ORs instead of three would not be significant, since the entire surgical suite is being remodeled. However, we determined that eliminating the equipment for the fourth OR would enable $126,000 in equipment funds to be redistributed for better use.

The Project was Based on the Need to Upgrade the Surgical Suite

The existing surgical suite was in need of modernization. The design for the current surgical suite dated back to 1946. The interior finishes on the walls, floors, and ceilings had deteriorated beyond acceptable limits for infection control purposes. The surgical ORs had only one isolated power unit, and current construction standards require two units. All of the ORs depended on a single primary feed from the main electrical transformer vault, providing no redundancy of electrical service to the entire suite. The ORs had no ceiling columns for power or medical gas. The receptacles were located at either end of the room, and computer terminals and waste containers compromised access to them. The surgical lights, radiology units, and surgical tables were over 20 years old, and the ceiling mounted radiology units were no longer functioning. Also, the existing layout did not provide appropriate patient flow from the surgery preparation area to the recovery area. Patients leaving the ORs for the recovery area were held initially in the same space as patients preparing to enter surgery.

Surgical Workload Does Not Support Four ORs

Based on the monthly Operating Room Utilization Reports for Fiscal Year (FY) 1997 and FY 1998 through January 27, 1998 (a 16-month period), VAMC staff performed an average of 6.3 operations per day. Also, based on the Utilization Reports and allowing time for preparing and cleaning the ORs for each procedure, 1.9 ORs were needed to accomplish the 6.3 operations each day.

Facility staff stated that they believed the annual surgical workload would increase by at least 376 operations for the following reasons:
• Performing additional orthopedic procedures which are currently being transferred to other facilities (20 cases per year)
• Granting surgical privileges to the current podiatrist (156 cases per year)
• Resuming Ear, Nose, and Throat (ENT) Surgical Services by the addition of an operating ENT Surgeon (150 cases per year)
• Establishing a satellite clinic in Merced County (50 cases per year)

Using the historical average of 2.1 hours per operation, an additional 790 hours of OR time would be required for this additional workload. Each OR is available for 1,757 hours per year (based on a 7-hour workday and 251 working days per year). Thus, this additional workload would require .4 of an OR (790 / 1,757).

If the additional surgical workload does materialize, the number of ORs needed would still be only 2.3 as shown below.

1.9 Average number of ORs used currently  
.4 Average number of ORs needed for projected workload increases  
2.3 Total ORs needed

**Nursing Service Can Only Staff Three ORs**

According to the Clinical Manager for Surgery Service, they only have enough nursing staff for three operating rooms on an 8-hour shift, and they do not expect to hire more staff in the future.

**Not Equipping the Fourth OR Would Save $126,000**

The Acting Chief, Facilities Management stated that they are still in the process of selecting an Architect/Engineering (A/E) firm, and they do not have any A/E design plans or cost estimates at this time. Therefore, he could not accurately determine the difference in construction costs for three ORs versus four ORs. However, he felt that the difference would be minimal, as many costs, such as demolition, utilities, and support equipment, would not change.

The Acting Chief, Facilities Management also said that the cost to equip the fourth OR might be more significant. According to the Activation Equipment List, equipment costs for one OR totals $126,000.

In our view, a less costly alternative to remodeling the surgical suite to provide four functioning ORs is available. We believe the area should be remodeled to provide three
functioning ORs and another “roughed-in” OR. Then, if surgical workload does increase in the future, creating a need for a fourth OR, it can be finished and equipped at that time.

**Recommendation**

We recommend that the VAMC Director:

a. Reduce the scope of the project by eliminating the equipment for the fourth operating room.

We recommend that the Director, VISN 21:

b. Ensure that needs are thoroughly assessed when projects are submitted for approval.

*The associated monetary benefits for the Recommendation are shown in Appendix III on page 6.*

**Director, VISN 21 Comments**

1. The Inspector General report specific to the remodeling project of the surgical suite at VA Central California Health Care System (formerly known as VAMC Fresno) has been thoroughly reviewed.

2. The facility is in concurrence with the essential components of the report:
   a. Current and immediate projected workload requires three operating rooms.
   b. Remodel the area for three functioning operating rooms and the fourth as a “roughed-in” operating room.
   c. Additional $126,000 will be saved on equipment.

3. The long term planning and projections did indicate the necessity for the four operating rooms; however, the short and immediate needs will be sufficient with three operating rooms as noted in the report.

**Office of Inspector General Comments**

The Director, VISN 21 concurred with the recommendation and provided acceptable implementation plans. We consider all audit issues resolved and will follow up on the implementation plans.
OBJECTIVES, SCOPE AND METHODOLOGY

Objectives

The objective of this audit was to evaluate the effectiveness of controls at the VISN and VAMC levels to ensure that projects are justified and that construction funds are used to meet agency goals. Specifically, we conducted this on-site review to determine if the project was justified and if alternatives had been considered that would provide the required services more cost-effectively.

Scope and Methodology

This audit was performed as part of a national audit of Minor Construction and NRM projects. This Minor Construction project was included in 68 projects statistically selected for review from a national universe of 1,106 Minor Construction and NRM projects. To meet the audit objective, we reviewed supporting documentation and analyses at the VISN and VAMC levels, interviewed VAMC staff and management, and assessed current procedures for project approval.

To accomplish our objectives, we relied on computer-processed surgery data contained in the Surgical Service OR Utilization Reports. For a sample of the surgeries, we compared the computer-processed data to source documents such as individual Operating Reports. We concluded that the data was accurate for our purpose.

The audit was made in accordance with generally accepted government auditing standards and included such tests of the procedures and records as were deemed appropriate under the circumstances. Internal controls pertaining to the areas reviewed were analyzed and evaluated. The audit included program results, economy and efficiency, and financial and compliance elements.
BACKGROUND

VAMC Fresno, California

The medical center services veterans from Fresno, Madera, Merced, Kings, and Tulare counties. During FY 1997, VAMC Fresno had 100 operating beds, 3,376 admissions, 148,207 outpatient visits, and an average daily census of 79. The 50-bed Nursing Home Care Unit had 52 admissions, 46 discharges, and an average daily census of 47. The medical center is affiliated with the University of California, San Francisco.

During FY 1997, VAMC Fresno spent approximately $1.2 million on two minor construction projects and approximately $1.3 million on NRM projects.
### MONETARY BENEFITS
### IN ACCORDANCE WITH IG ACT AMENDMENTS

**Report Title:** Audit of Surgical Suite Renovation Project at VAMC, Fresno, California

**Project Number:** 8R5-041

<table>
<thead>
<tr>
<th>Recommendation Number</th>
<th>Category/Explanation of Dollar Impact</th>
<th>Better Use of Funds</th>
<th>Questioned Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Better Use of Funds. Amount VA can use elsewhere by reducing the scope of the surgical suite renovation project.</td>
<td>$126,000</td>
<td>$ 0-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$126,000</td>
<td>$ 0-</td>
</tr>
</tbody>
</table>
MEMORANDUM FROM THE DIRECTOR, VISN 21

Department of Veterans Affairs

Memorandum

Date: OCT 13 1998
From: Director, VA Sierra Pacific Network (10N21)
Subj: Draft Audit Report; Surgical Suite Renovation (Project No. 8R5-041)
To: Assistant Inspector General for Auditing (52)

1. The Inspector General report specific to the remodeling project of the surgical suite at VA Central California Health Care System (formerly known as VAMC Fresno) has been thoroughly reviewed.

2. The facility is in concurrence with the essential components of the report:
   a. Current and immediate projected workload requires three operating rooms.
   b. Remodel the area for three functioning operating rooms and the fourth as a “roughed-in” operating room.
   c. Additional $126,000 will be saved on equipment.

3. The long term planning and projections did indicate the necessity for the four operating rooms; however, the short and immediate needs will be sufficient with three operating rooms as noted in the report.

4. Your assistance in this important matter is appreciated.

(Original signed)
Robert L. Wiebe, M.D.
APPENDIX V

FINAL REPORT DISTRIBUTION

VA DISTRIBUTION

The Secretary of Veterans Affairs (00)
Assistant Secretary for Management (004)
Office of Management and Financial Reports Service (047GB2)
Under Secretary for Health (105E)
Chief Network Officer (10N)
Chief Financial Officer (17)
Directors, VISNs 1-22
Assistant Secretary for Congressional Affairs (009)
Assistant Secretary for Policy and Planning (008)
Deputy Assistant Secretary for Public Affairs (80)
Chief Facilities Management Officer (18)
General Counsel (02)

NON-VA DISTRIBUTION

Office of Management and Budget
U.S. General Accounting Office
Congressional Committees:
  Chairman, Senate Committee on Governmental Affairs
  Ranking Member, Senate Committee on Governmental Affairs
  Chairman, Senate Committee on Veterans’ Affairs
  Ranking Member, Senate Committee on Veterans’ Affairs
  Chairman, Subcommittee on VA, HUD, and Independent Agencies, Senate
    Committee on Appropriations
  Ranking Member, Subcommittee on VA, HUD, and Independent Agencies, Senate
    Committee on Appropriations
  Chairman, Subcommittee on VA, HUD, and Independent Agencies, House
    Committee on Appropriations
  Ranking Member, Subcommittee on VA, HUD, and Independent Agencies, House
    Committee on Appropriations
  Chairman, House Committee on Veterans’ Affairs
  Ranking Member, House Committee on Veterans’ Affairs
  Chairman, House Committee on Veterans’ Affairs, Subcommittee on Hospitals and
    Health Care
  Ranking Member, House Committee on Veterans’ Affairs, Subcommittee on
    Hospitals and Health Care

This report will be available in the near future on the VA office of Audit web site at
http://www.va.gov/oig/52/reports/mainlist.htm, List of Available Reports.

This report will remain on the OIG web site for two fiscal years after it is issued.