Further reevaluation of workload and space is needed before a decision is made to fund the 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, a new 2-story addition comprised of 12,500 net square feet and costing $3.7 million will be built adjacent to the existing ambulatory care building to provide additional space for ambulatory care functions.

3. Our audit found that the existing ambulatory care area was crowded, and improvement was needed. However, medical center management did not adequately assess the impact that three other construction projects, which will more than double the existing ambulatory care space, will have on space needs. Also, they did not adequately determine the effect that Community Based Outpatient Clinics (CBOCs) will have on reducing medical center workload and space needs. As a result, we concluded that the $3.7 million project to increase ambulatory care space was not adequately justified. We recommended that approval and funding for this project be delayed until the need for the project is reevaluated and our concerns about space needs are addressed. You concurred with the recommendations and began an acceptable implementation plan by conducting a reevaluation of space needs. While we consider the recommendations resolved, we reviewed the interim reevaluation results that were provided and concluded that the need
for the project has not yet been demonstrated. We still had concerns, discussed in the OIG Comments on page 8, that should be addressed before a decision is made to fund the project. We will follow up on these issues until implementation is completed.

For the Assistant Inspector General for Auditing

(Original signed by)

WILLIAM D. MILLER
Director, Kansas City Audit Operations Division
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RESULTS AND RECOMMENDATION

Additional Space Needs Should Be Assured Before the Project Is Resubmitted for Approval and Funding

A Minor Construction project was planned to provide additional ambulatory care space that would expand the number of outpatient clinic exam rooms and relieve overcrowded conditions. However, medical center management did not adequately determine how much additional space, if any, was needed. This occurred because the amount of existing space had not been evaluated, space needs were not adequately identified, the effect of other recent projects on ambulatory care space had not been considered, and the effect that Community Based Outpatient Clinics (CBOCs) would have on medical center workload was not analyzed. As a result, management has not adequately justified the need for the project. If it is determined that the additional space is not needed, or that a lesser amount of space is needed, up to $3.7 million in Minor Construction funds can be redistributed for better use.

Plans for the Project Were Unsettled and Changed Even During Our Audit

When we began our audit in March 1998, the 1998 project application (VA Form 10-1193) was titled, “Renovate Ambulatory Care (Phase II).” The project was to result in a new 14,000 gross square feet (12,000 net square feet), 2-story addition adjacent to the ambulatory care building to expand Primary Care space. Also, the project, estimated to cost $4 million, was to renovate 20,000 gross square feet of space, including the Mental Health space adjacent to the new addition on the first floor, for additional Primary Care space. At that time, plans called for relocating the Mental Health clinics to one of the inpatient wards that was available and would be renovated. However, while our survey work was in process, Facility Management Service staff told us that moving Mental Health would not be possible. Instead, the new addition would still be built for Primary Care; but Mental Health would remain where it was, and its space would be renovated as part of the project. During our survey phase, we had concerns about the need to renovate the Mental Health space.

In August 1998, the 1999 project application was completed, and the scope of the project had changed considerably. The VA Form 10-1193 was still titled, “Renovate Ambulatory Care (Phase II),” but now the project was to result in a new 20,000 gross square feet (12,500 net square feet), 2-story addition costing approximately $3.7 million. Also, while the General Data section of the application indicated that no space was to be renovated, the Detailed Project Description section indicated that existing clinic areas would be renovated. We determined in discussions with Facility Management Service staff that the Detailed Project Description was not accurate—the project would not renovate any existing space.
Also, the facility had a Master Strategic Space Proposal, which was a planning tool used to efficiently arrange existing and new offices and services. However, it was not current and did not account for all space that would be available. For example, it showed that the Compensation and Pension (C&P) exam rooms would relocate from the 11th floor of the main tower to one of the Primary Care clinics. However, Medical Service was planning to contract out the C&P exams, so the new space would not be needed. Also, while the Master Strategic Space Proposal showed two Primary Care teams expanding into the old emergency room space, one of these teams would actually be relocated to a new addition currently under construction.

VAMC officials responded to our concerns, stating that the planning process is inadequate and too time consuming to be effective. They told us that it takes several years to get projects approved, and making and updating calculations each year is not efficient. Each year a lot of time is spent on planning, and much of it is useless. VISN staff added that the project applications to the VISN are not typically very detailed or specific. This is because the medical centers cannot afford to spend considerable amounts of time on preparing the submissions for projects that may not be approved and/or funded. The requirements for Minor Construction and Nonrecurring Maintenance (NRM) funding are much more limited than for Major Construction funding. Once projects are selected for funding, a more detailed analysis of actual needs would be completed, and the VISN would then review the final project scope and justification for appropriateness.

While we acknowledge that a lot of detail concerning the project may not initially be necessary, we do believe that sufficient information should be included to enable reviewers to determine what is to be accomplished by the project and what its priority should be in relation to competing projects. For example, it should be clear whether or not space is being renovated and what services/functions are being provided new or renovated space.

We also agree that plans can and should be changed when necessary. However, throughout our audit, there were conflicting views among the affected staff as to what was to be accomplished and what needed to be accomplished by this project.

The Amount of Existing Space Had Not Been Determined

The project application did not include the amount of existing space in the ambulatory care area. In our view, the amount of existing space is needed in order to adequately assess whether additional space is necessary. Since this information was not available, Facilities Management Service staff provided us with a facility Space List from which they believed we could calculate existing space. Although we found this Space List contained inaccuracies (for example, seven exam rooms identified on the Space List were not exam rooms), we were able to use it to assist us in determining existing space. We determined that ambulatory care currently has approximately 24,276 net square feet of
space. This includes Primary Care, specialty clinics, and all common waiting/reception areas.

**Space Needs Were Not Adequately Identified**

The 1999 project application indicated a need for 12,500 new net square feet of ambulatory care space, but it did not provide any analysis to show how this figure was determined. The only space needs assessment available was one prepared by an Architect/Engineer (A/E) approximately 3 years ago. This assessment, for the most part, was based on VA’s space planning criteria contained in VA Handbook 7610 (7610) and Fiscal Year (FY) 1995 actual workload. It included space calculations for, among other functions, the medical and surgical specialty clinics, primary care clinics, emergency room, and patient education.

The A/E calculated space needs totaling 50,970 net square feet for ambulatory care. We reviewed the space calculations for the four major sections of the Exam/Treatment portion and the entire Primary Care portion of the ambulatory care space. This amounted to 28,390 net square feet, or 56 percent of the total. We found several discrepancies in these calculations as noted below.

**Number of Modules** - The square footage needs for many functions are based on the number of modules. Since Primary Care was a new program at the time and workload was low, VAMC staff requested that four primary care modules be provided. Therefore, the A/E prepared space needs calculations based on four modules.

However, applying FY 1998 Primary Care workload to 7610 indicates a need for only two modules as shown below.

| 52,479 | Primary Care clinic stops |
| 1,730  | Factor from 7610          |
| 30     | Exam rooms based on workload (52,479 ÷ 1,730) |
| 2      | Modules needed (7610 states that 2 modules are required when the number of exam rooms totals 20 to 35) |

Thus, the space needs of all areas that are based on the number of modules were overstated. For example, 7610 states that each module should have a reception area. So, based on 7610 calculations above, two reception areas are needed. However, the A/E calculated space for four reception areas. The space for several other functions (toilets, consult/pharmacy, nurse stations, clean supplies, clean utility room, soiled utility room, procedure room, and vital signs) that are based on the number of modules would also be similarly overstated.
Nurse’s Interview Room - According to 7610, an interview room is needed for nurses to take the patient’s vital signs and history before the exam and provide final instructions/information before the patient leaves the clinic. The A/E included this in his calculations. However, one purpose of providing two exam rooms per provider (which we agree is reasonable, as discussed below) is to allow these activities to occur in the exam room. Thus, the A/E is providing space for this function twice.

Shared Space – According to 7610, each module needs a communication center totaling 150 net square feet, which is what the A/E allowed. However, 7610 also states that two modules could share one communication center totaling 200 net square feet, resulting in a 33 percent saving in space needs for every two modules. Medication rooms and staff toilets are other functions that, according to 7610, can share space.

Waiting Space - The A/E used a method different from 7610 criteria to calculate waiting space needs. The A/E’s methodology resulted in waiting space approximately three percent less than that provided by 7610.

These discrepancies, in total, caused the A/E to overstate Exam/Treatment and Primary Care needs by approximately 22 percent (28,390 net square feet per the A/E versus 23,217 per the IG). If this error rate also occurred in the other functions, overall ambulatory care space needs would total 39,613 net square feet, rather than the 50,970 calculated by the A/E.

Facility management expressed concerns with the usefulness of the 7610 criteria. They believe it is outdated and does not reflect current medical practice. The 7610 that we used was published in 1995. However, we acknowledge that changes in the medical profession continue, and we made adjustments when appropriate. For example, 7610 does not provide two rooms for each provider; however, we made adjustments to allow for this since it appeared to be a reasonable approach. In our view, to justify the spending of $3.7 million on new space, further analysis of space needs should be made. At this point, 7610 is the only criteria that VA has. Using it and making appropriate adjustments to fit current practices is the methodology used by the A/E and facility staff. Therefore, that is what we audited.

Also, facility management indicated that there have been dramatic increases in the outpatient workload in recent years that justify the additional space. Facility reports show that outpatient workload has increased as follows.

<table>
<thead>
<tr>
<th>FY</th>
<th>Visits</th>
<th>Clinic Stops</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>232,961</td>
<td>426,633</td>
</tr>
<tr>
<td>1996</td>
<td>257,892</td>
<td>424,121</td>
</tr>
<tr>
<td>1997</td>
<td>289,501</td>
<td>436,061</td>
</tr>
<tr>
<td>1998</td>
<td>336,491</td>
<td>542,160</td>
</tr>
</tbody>
</table>
However, these increases had little relation to the ambulatory care functions addressed by the proposed Minor Construction project. Space needs calculations in 7610 are based on the number of clinic stops. As the table above illustrates, clinic stops increased significantly from FY 1997 to FY 1998. We analyzed this increase to determine reasons for the increase and found that 86 percent of the increase was related to functions not addressed by this project. These functions include laboratory, numerous mental health clinics, clinical pharmacy, prosthetics, telephone calls, x-ray, the emergency unit, orthotics, radiation therapy, community visits, telephone triage, ultrasound, audiology, and magnetic resonance imaging.

In addition, facility management expressed concern that functional deficiencies exist. They mentioned that many exam rooms open up to public areas, causing a patient privacy concern. Also, they told us that support staff, such as dieticians, social workers, and pharmacists need to be located in the clinic areas that are more convenient to the patients. However, since this project will not renovate any existing space, the patient privacy concerns would not be addressed. Also, facility management has already used station level funds to construct glass privacy walls in strategic locations around the waiting areas. This project would address management’s desire to have more support staff in the clinic areas by expanding ambulatory care space. However, this will also be accomplished by three other projects, currently in process, which will provide additional ambulatory care space.

The Effect of Other Projects on Ambulatory Care Space Had Not Been Considered

We identified three other projects, currently in process, which will provide additional ambulatory care space. Although these projects will significantly increase the amount of space available for ambulatory care, they were not mentioned in the facility’s assessments of space needs.

The first project was to renovate additional space for ambulatory care that had been “shelled in” as part of a previous Major Construction project that was not completed because of a lack of funds. At the time of our review, plans had been initiated to renovate this space for outpatient surgery clinics and patient education. We determined that the renovation would add approximately 24,316 net square feet of ambulatory care space.

The second project was initially planned as an interim and temporary solution (modular trailers) to correct ambulatory care space deficiencies. However, it later became a permanent structure to provide additional ambulatory care space. Facility management believed that a permanent structure would create a more professional and aesthetic environment. This project was awarded using two identical contracts, one for each floor of a 2-story addition. The two contracts totaled $1,074,390 and were funded through the NRM program. According to Facilities Management Service staff, each contract represented “one building.” Construction had begun on this project at the time of our
review. When completed, this project will provide 17 new exam rooms with space totaling approximately 4,484 net square feet.

The third project was to provide a new emergency room and was under construction at the time of our review. According to Facilities Management Service staff, this new emergency room space will total approximately 4,745 net square feet.

**The Effect of CBOCs on VAMC Workload Had Not Been Analyzed**

The project application did not include an analysis to determine the impact that current and planned CBOCs would have on the future workload at the medical center. One CBOC is currently in operation in Atlanta, and one for northeast Georgia is being planned. These CBOCs could impact workload at the medical center because VAMC Atlanta is the parent facility for both. The Director, VAMC Atlanta, was the Primary Care Coordinator for VISN 7 and had direct knowledge of CBOC plans within the VISN. He noted that there were several CBOCs within the VISN currently in operation, and others were being planned. However, he added that he didn’t believe the CBOCs were having the impact of reducing medical center workload to the extent that VA was expecting.

We determined that the intent of establishing CBOCs was primarily to accommodate users of the VA health care system who find it difficult, due to geographic location or medical condition, to travel to a VAMC. One of the goals for establishing the CBOCs was to redirect patients currently served at VAMC clinics in order to reduce waiting times, shorten waiting periods for follow-up care, and reduce the operating cost of providing care. One requirement for proposing the CBOCs was to prepare a projected workload analysis that describes and distinguishes those patients that will be redirected from the existing service population and those that are new. In addition, Veterans Health Administration Directive 97-036, Policy for Planning and Activating CBOCs, states:

> While new users of the VA will almost certainly occur as a consequence of establishing a CBOC in an underserved area, these clinics shall not be established solely or primarily for the purpose of attracting new VA patients.

Therefore, we believe that VAMC workload will be impacted, and this should be reflected in the calculations used to determine space needs. In our view, since current and new workload estimates are used to justify establishing a CBOC, it is reasonable to expect that the CBOC will reduce VAMC workload to some extent, and this should be considered for project planning purposes.
Conclusion

VAMC management has not adequately demonstrated the need for more ambulatory care space. We agree that the existing ambulatory care area is crowded and improvement is needed. However, since the A/E prepared his space needs assessment approximately 3 years ago, several other projects are currently in process that will more than double the ambulatory care space from 24,276 net square feet to 57,821 as shown below.

<table>
<thead>
<tr>
<th>Description</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing ambulatory care space</td>
<td>24,276</td>
</tr>
<tr>
<td>New space in “shelled in” area</td>
<td>24,316</td>
</tr>
<tr>
<td>New space in addition that was initially planned as modular</td>
<td>4,484</td>
</tr>
<tr>
<td>New emergency room space</td>
<td>4,745</td>
</tr>
<tr>
<td><strong>Total available net square feet</strong></td>
<td><strong>57,821</strong></td>
</tr>
</tbody>
</table>

This available space totals 13 percent more than the A/E’s calculated space needs of 50,970 and 46 percent more than our adjusted space needs calculations of 39,613 net square feet.

Additionally, the current movement in VA is to make services more accessible to the veterans by establishing CBOCs. As a result, many veterans would not generally come to the medical center for treatment. To date, VA has established over 200 CBOCs nationwide, and more are planned. However, the effect that CBOCs will have on reducing medical center workload has not been adequately analyzed by VAMC staff.

In summary, with all of these construction changes in process or planned, it is not apparent that an additional 12,500 net square feet of new space is needed. In our view, a reevaluation of ambulatory care space needs is prudent before this Minor Construction project is approved and funded.

Recommendation

We recommend that the VAMC Director:

a. Reevaluate the need for the Renovate Ambulatory Care (Phase II) Project (Project No. 508-305). This reevaluation should include:

   - A determination of existing space, space currently being constructed, and space that will be added in other planned projects,
   - An assessment of space needs,
   - An analysis of the effect of CBOCs on the medical center workload, and
• A comparison of available space with space needs to determine how much, if any, additional Ambulatory Care space may be needed.

We recommend that the Director, VISN 7:

b. Delay funding of the Renovate Ambulatory Care (Phase II) Project (Project No. 508-305) until VAMC officials have determined how much additional space, if any, is needed.

*The associated monetary benefits for the Recommendation are shown in Appendix III on page 11.*

**Director, VISN 7 Comments**

*Appendix IV on page 15 contains the full text of the VISN Director’s comments.*

**Recommendation a.**

The medical center concurred with the recommendation that a reevaluation of the project should occur and should address the components that were listed in the recommendation. Prior to sending comments to the draft report, a medical center team conducted an interim reevaluation of the project. In this reevaluation process, the medical center team concluded that 12,538 net square feet of ambulatory care space was still needed, and, thus, the project was justified. The team also stated that the OIG report contained discrepancies and that the OIG auditors erred in some areas, and may have inadvertently included, in its existing space calculations, space that was not usable. The team also stated that it was unable to determine the impact that the CBOCs will have on reducing the medical center workload, although it acknowledged that there might initially be some reduction.

**Recommendation b.**

The VISN Director concurred with the recommendation and issued a memo to the Atlanta VAMC requesting that they not proceed with an award of the project until a space plan is developed and the justification is sufficient.

**Office of Inspector General Comments**

**Recommendation a.**

The discrepancies between our report and the medical center team’s reevaluation occurred in two areas—existing space calculations and space needs (criteria) calculations—and are discussed as follows.
Existing space calculations

The OIG estimated that 57,821 net square feet was available, while the medical center team calculated 33,728, a difference of 24,093 net square feet. In trying to reconcile the difference, we found that we should not have included the Eye Clinic (4,655 net square feet) space in our calculations. However, the remaining difference of 19,438 net square feet occurred because of changes in the square footage provided the audit team by medical center staff. Examples are as follows:

- When we began the audit in March, we were told the new modular building would provide 6,000 net square feet of space, so we based our calculations on that. In October, we were told that the new modular building would only provide 4,484 net square feet, so we adjusted our calculations for that. Now, in the medical center team’s response to our report, they state that the new modular building will provide only 3,174 net square feet. This is only slightly more than half of what was originally stated and a 29 percent reduction from the number provided us in October.

- Similarly, in October we were told that the new emergency room would provide 4,745 net square feet. Now, in the medical center team’s response to our report, they state that the new emergency room will provide only 3,350 net square feet, a difference of 1,395. This is also a 29 percent reduction from the number provided us in October.

- In order to calculate the space that was to be available in the new “shelled-in” area, medical center staff provided us with plans prepared by a contractor in June 1998 showing square feet by area or function. For each area, there was one line titled, “NSF” and another line titled, “Useable square feet.” Medical center staff said that the “Useable square feet” line should be used. While we could not verify the figures used in the medical center team’s response to our report, it is possible that they used the “NSF” figures. This would have reduced the available net square feet by an additional 5,626. This no longer matters, however, because during a telephone call to the VAMC to discuss this difference, medical center staff told us that the square footage figures provided by the contractor were not accurate. At that time, they were in the process of re-measuring the areas, with assistance from VA Central Office staff.

- The medical center team modified the functions included in their existing ambulatory care space by adding second floor office space to their total. We did not include this area in our calculations because renovations were not planned for the second floor, and space needs calculations provided to us by medical center staff during our audit did not include it. We could not reach anyone on the medical center team who could provide us with the amount included.
Initially, as stated in our report, the medical center (A/E) had calculated a need for 50,970 net square feet for ambulatory care. In the medical center team’s response to our report, this figure was adjusted to 47,566 net square feet. In our audit, we estimated a need for 39,613 net square feet, a difference of 7,953 net square feet. Most of this difference was an overstatement of needs by the medical center team in the following two areas.

- The number of exam rooms being planned is 60, which is in line with the number of exam rooms needed based on 7610 criteria. However, 7610 states that 60 exam rooms support the need for only four modules, not six used by the medical center team. Reducing the number of modules from six to four reduces the net square feet by 4,890.

- Each of the four modules included functions that could be shared. According to 7610, two adjacent modules can share functions such as the multipurpose conference room and the nurse’s station communication center. Taking advantage of the sharing options would reduce space needs by 550 net square feet.

We subtracted these amounts from the medical center team’s adjusted figure to arrive at a revised total of 42,126 (47,566 – 4,890 – 550). In trying to reconcile the remaining difference of 2,513 (42,126 – 39,613), we found that the medical center team modified the functions that were included in the analysis. For example, in their ambulatory care space needs calculations, they added the staff office function and deleted the patient education center function. This “fine tuning” of the space needs should have little impact on the end result, as long as the functions included in space needs are consistent with the functions included in existing space.

In addition to these existing space and space needs differences, we still contend that the existing and planned CBOCs will reduce the medical center’s ambulatory care workload. As stated in the report, that was one of the purposes of establishing CBOCs. Thus, we believe further research should be undertaken to quantify the impact before spending $3.7 million on this project.

In conclusion, as stated in our report, medical center staff had not adequately determined existing ambulatory care space and ambulatory care space needs (criteria). In our view, these still have not been adequately determined because questions remain about measurements. We believe the reevaluation should be continued as part of the implementation plan for our recommendation.

**Recommendation b.**

The Director, VISN 7, concurred with the recommendations and began an acceptable implementation plan by conducting a reevaluation of space needs. While we consider the
recommendations resolved, we reviewed the interim reevaluation results that were provided and concluded that the need for the project has not yet been demonstrated. We still had concerns that should be addressed before a decision is made to fund the project. Also, in view of all the changes made to the numbers used to justify the project, staff from the VISN should review the reevaluation and verify the calculations to ensure the project is justified before it is approved for funding. We will follow up on these issues until implementation is completed.
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 VAMC level, interviewed VAMC staff and management, and assessed current procedures for project approval.

To accomplish our objectives, we relied on computer-processed clinic stop data contained in the Veterans Health Information Systems and Technology Architecture, formerly the Decentralized Hospital Computer Program. We verified the accuracy of this data and did not find any significant errors. Therefore, we concluded that the data were sufficiently reliable to be used in meeting the assignment’s objectives.

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 Atlanta, Georgia

The medical center services veterans from northern Georgia. During FY 1997, VAMC Atlanta had 268 operating beds, 5,879 admissions, 289,318 outpatient visits, and an average daily census of 181. The 120-bed Nursing Home Care Unit had 169 admissions, 158 discharges, and an average daily census of 101. The medical center is affiliated with the Emory University School of Medicine.

During FY 1997, VAMC Atlanta spent approximately $2.7 million on construction projects. This total included approximately $2.1 million for NRM projects and approximately $600,000 for station-level projects.
MONETARY BENEFITS
IN ACCORDANCE WITH IG ACT AMENDMENTS

<table>
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<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, depending on how much, if any, additional ambulatory care space is needed.</td>
<td>Undetermined at this time</td>
<td>$ -0-</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>$ -0-</td>
<td></td>
</tr>
</tbody>
</table>
Memorandum

Department of Veterans Affairs

Date:   December 10, 1998

From:   Director, Atlanta Network (10N7)

Subj:   Draft Audit Report, Audit of Ambulatory Care Renovation Project at Department of Veterans Affairs Medical Center, Atlanta, Georgia (Project No. 8R5-041)

To:     Assistant Inspector General for Auditing (52)

1. Per your memorandum dated November 12, 1998, subject as above, the following is submitted:

- **VAMC Atlanta’s response to recommendation (a).** While the medical center concurs with the recommendation that the re-evaluation of the project should occur and should address the components that were listed (a space analysis, space needs, and affect of CBOCs and comparison of available space), they did find a number of discrepancies in the report itself. Documentation supporting their response, which outlines these discrepancies, is attached.

- **VISN #7 response to recommendation (b).** VISN 7’s response is as follows: Concur. On November 3, 1998, prior to receipt of your draft report, VISN 7 issued a memo to the Atlanta VAMC requesting that they not proceed with an award of the project until a space plan is developed and the justification is sufficient. A copy of this memorandum is attached.

2. Questions regarding the attached may be addressed to Paul Bockelman or Alex Watson at (404) 728-4100 in the Atlanta Network office.

(Original signed by:)
Larry R. Deal

Attachments
MEMORANDUM FROM THE DIRECTOR, VISN 7

Date: Dec 4 1998
From: Medical Center Director, VAMC Atlanta (508/00)
Subj: Response to IG Audit on Minor Project No. 508-305, Amb Care Phase II
To: Network Director, VISN 7 (10N7)

1. This report is the Atlanta VAMC’s response to the justification audit of project 508-305, Ambulatory Care Phase II.

2. The medical center assembled a team of healthcare professionals to do a detailed space and workload analysis to determine the current and future space needs of the facility and to show sufficient justification for project 508-305.

3. The eight-member team consisted of an architect, three engineers, a medical service administrative assistant, a facility planner, a VISN facility planner and a program analyst. The group employed a six-step methodology to perform the analysis.

4. The six steps correlate to the attachments and are briefly explained as follows:

   Step 1 – PLANNING PROJECTION

   Attachment A: The spreadsheet projects workload up to FY 2010. Actual workload was used for FY 98. The workload for fiscal years 1999 through 2010 were calculated using a market share methodology that project 1% per year growth in uniqueness. This growth targets the medical center for a 15% market share by the year 2010. This seems like a very conservative estimated growth rate considering the VISN as a whole currently has a 12% market penetration, and that VAMC Atlanta serves approximately 30.26% of the VISN’s Primary Care population.

   Attachment B: This spreadsheet projects workloads by clinic type. The workloads are projected to FY 2010 by using the conservative growth rate to a 15% market share. General purpose clinics and the Women’s Health Clinic were held to a 1% growth rate under the assumption that Primary Care would address the majority of new enrollees’ healthcare needs. Employee Health was flat-lined to no growth due to expected budgetary restraints related to hiring additional FTEE. The goal is to improve efficiency through better clinic alignment.
APPENDIX IV

MEMORANDUM FROM THE DIRECTOR, VISN 7

Step 2 – EXISTING SPACE VERIFICATION IN NET SQUARE FEET (NSF)

Attachment C: This space analysis showed a large discrepancy between the IG audit team calculations and the field verification audit conducted by the VACO Registered Architect. The spreadsheet provides possible insight into where the IG may have erred. The IG calculations and the field verification differ by 40%. The architect explained that he used typical methods for calculating NSF. This typical method is what the VA unilaterally uses to develop its space criteria.

Step 3 – DEVELOPMENT OF SPACE MODELS USING 7610 CRITERIA

Attachment D: Using 7610 criteria and FY 98 workload statistics, a space plan was developed for two primary care modules for our FY 98 needs. A model that required three primary care modules for our estimated FY 2010 conservative growth rate was also developed.

Step 4 – DEVELOPMENT OF BEST PRACTICE METHOD

Attachment F: A Best Practice model was developed by the team using eight providers per module plus support staff. This model provides space for two Dietitians, and one Social Worker, Business Manager and Case Manager per team.

Step 5 – TREATMENT MODULE CALCULATIONS

Attachment G: This spreadsheet depicts the current status of the medical center space versus what will be needed for the FY 2010 workload projections. Increases in sub specialty clinic space should be noted. This is due in part to the increase in projected uniques associated with CBOC enrollment.

Step 6 – PROPOSED STRATEGIC SPACE PLAN

Attachment H: This attachment describes the proposed space utilization plan for the entire medical center. This plan was conceived taking into effect the activation of the Primary Care Modular Buildings and the Shelled Space.

5. The following numbered findings are the response to the Inspector General’s findings in their audit report:

Finding 1: PLANS FOR THE PROJECT WERE UNSETTLED AND CHANGED EVEN DURING OUR AUDIT

Project No. 508-305, Ambulatory Care, Phase II was originally submitted in FY 97 for FY 98 design funding and FY 99 construction funding. The original scope included new construction and renovation of the ground floor of the Ambulatory Care building (currently occupied by Mental Health) for the expanding clinics. Mental Health was to
be relocated to the first floor in the “shelled-in” space. The project was not approved for FY 98 funding by the Network. The project was resubmitted this year for FY 99 Minor funding consideration with a modified scope that excluded the renovation of the ground floor. It was determined that Mental Health would remain in its current location in the basement of the Ambulatory Care building. The Strategic Space Planning Committee (SSPC) made this determination as a result of their analysis. This group determined that the growth of Primary Care was the driving force and the need for additional space exceeded what was to be made available if Mental Health vacated under the original plan. Medical Media (also on the ground floor, adjacent to Mental Health) is being relocated to the sixth floor of the tower to allow Mental Health to expand. This should adequately accommodate Mental Health’s space needs. The SSPC also recommended that the shelled in space be converted to specialty outpatient clinics. This new plan would allow for all medical, primary care, and specialty clinics (including surgical) to be located on the same floor, to allow like clinics to be grouped in close proximity with adjacent ancillary services. The desired outcome would be improved customer access, improved customer service and more efficient use of staff and resources.

Under the revised scope of Minor Project 508-305, the proposed renovation of any existing space was minimal and consisted of renovation areas associated with connecting the new building to the existing Ambulatory Care structure. Facility Management Staff specifically acknowledged to the audit team that there was an error in the project description section of the FY 99 submission and that the scope of the project was basically new construction.

The medical center’s strategic space plan reviewed by the audit team was prepared using FY 95 workload data and served as the basis for the original project application submission in 1997. Continued increases in actual and projected workload, related to primary care, served as the basis for the change in the scope of work to reflect a need for more primary care space. The new space was justifiable based on the original master space planning proposal and new workload projections, without a need to update the original space plan. We agree that an updated space model should be developed to link the primary care construction plans to the strategic goals of the facility. In fact, the medical center has hired a facility planner to work with service line managers to determine optimal long-term space utilization.

Regarding the planning process in general, it was not our intent to suggest that some level of planning is not needed that would enable reviewers to understand and support proposed capital investments such as construction. Instead, a difference was noted in planning improvements targeted at correcting current deficiencies, which is often the primary objective of the Minor and Non-Recurring Maintenance (NRM) construction programs versus long range planning needs of the facility. It can be concluded that in the case of the Ambulatory Care Phase II project, both short term and long term objectives are being addressed by the determination to build new space. We also agree that plans can have differing views and due to many variables can change and should be updated when necessary.
Finding 2: THE AMOUNT OF EXISTING SPACE HAD NOT BEEN DETERMINED

The medical center organized an in-house consulting team that included planners, engineers and architects, who validated the existing Ambulatory Care space. The IG’s findings indicate that Ambulatory Care currently has approximately 57,821 net square feet. Our findings suggest that Ambulatory Care currently has approximately 33,728 net square feet. The conclusion of the team indicates that the IG calculations may have inadvertently included circulation, mechanical and/or electrical space.

Finding 3: SPACE NEEDS WERE NOT ADEQUATELY IDENTIFIED

The original master space plan submitted by the A/E firm, Leo Daly, Inc., combined with factors such as existing congestion in patient waiting areas and corridors, acknowledged the fact that we needed additional space. The 12,500 net square feet was an estimate for the project application submission. Exact space criteria was expected to be applied as part of the subsequent Design Development documents taking into consideration variables such as the structural requirements and cost to locate a building in the proposed site adjacent to the existing Ambulatory Care building.

The A/E’s calculated space needs is currently being updated. Preliminary calculations continue to support the need for three primary care modules. To effectively manage each module as a separate clinic, shared support space is not desirable. The IG report suggests two modules based with thirty exam rooms each while the VA analysis team concluded that three modules with twenty-seven exam rooms would meet the best practice standard of two rooms per provider.

Finding 4: THE EFFECT OF OTHER PROJECTS ON AMBULATORY CARE SPACE HAD NOT BEEN CONSIDERED

Again, while the original master space plan did not reflect the shelled in space renovation, emergency care addition and new primary care modular building, the effect of these projects was considered when resubmitting the project application for the Ambulatory Care Phase II project for FY 99 funding consideration.

The space calculations included in the IG’s finding for the shelled in space, emergency care addition and the new primary care modular building could not be validated and appears to be overstated by approximately 40%. Our independent review found that the shelled in space added 6,790 net square feet of Ambulatory Care space compared to 24,216 calculated by the IG. We also found that emergency care was 3,350 net square feet compared to 4,745 and that the primary care module was 3,174 net square feet compared to 4,484 calculated by the IG. This is a combined discrepancy of 22,835 net square feet. Possible explanations for the discrepancy is outlined in the attachment, with the calculations performed by the Registered Architect.
Finding 5: THE EFFECT OF CBOC’S ON VAMC WORKLOAD HAD NOT BEEN ANALYZED

Due to the relative newness of the CBOC’s, the team was not able to obtain any data that could be used to analyze the impact of CBOC’s on the Primary Care teams. However, the team assertion is that Primary Care workload could initially be reduced, but a long-term increase in uniques and Ambulatory Care sub specialty work is highly probable.

ANALYSIS SUMMARY:

CBOC’s may initially reduce primary care workload, but will increase sub specialty workloads especially concerning new uniques.

- Architect analysis of Ambulatory Care space clearly shows Atlanta’s space deficit. Using FY 98 workload statistics for allowable space and subtracting 1300 NSF for the Infectious Disease Clinic (1/99 activation), the following results are obtained:

<table>
<thead>
<tr>
<th>FY 98</th>
<th>Architect’s audit</th>
<th>Inf Dis Clinic</th>
<th>Amb Care Space Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>47,566 NSF</td>
<td>-</td>
<td>33,728 NSF</td>
<td>-</td>
</tr>
</tbody>
</table>

  - Field verification of dimensions by VACO architect showed an error of approximately 10% in reported square footage on CAD drawings provided to the IG audit team.
  - Additional space provided by project 508-305 will satisfy immediate needs and provide time to fully assess the impact of CBOC’s.
  - The IG assertion that the ongoing projects more than double the existing Ambulatory Care space is inaccurate.
  - FY 2010 space analysis take CBOC’s into account.

Conclusion: This analysis clearly shows a need for additional Ambulatory Care space, and this response should satisfy the Inspector General’s concerns regarding their March/August 1998 audit of project 508-305, Ambulatory Care Phase II.
MEMORANDUM FROM THE DIRECTOR, VISN 7

RECOMMENDATIONS:

Three recommendations are presented from the team analysis.

1. Minor construction projects submissions should include an updated strategic space plan for the applicable medical center to be used for reference in project review by the VISN approval board.

2. VAMC Atlanta should enlist a VACO architect to develop a finalized strategic space plan. The plan should be regularly updated as renovations occur and mission needs change.

3. After the strategic plan is finalized, reviews and validated by medical center staff, the plan should be forwarded to the VISN for review and concurrence. The target date for completion of this plan is late January 1999. After VISN review and concurrence, Design Development should proceed.

(Original signed by:)

R. A. Perreault
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