Combined Assessment Program
Review of the
VA Boston Healthcare System
Boston, Massachusetts
Office of Inspector General
Combined Assessment Program Reviews

Combined Assessment Program (CAP) reviews are part of the Office of Inspector General's (OIG's) efforts to ensure that high quality health care and benefits services are provided to our Nation's veterans. CAP reviews combine the knowledge and skills of the OIG's Offices of Healthcare Inspections, Audit, and Investigations to provide collaborative assessments of VA medical facilities and regional offices on a cyclical basis. The purposes of CAP reviews are to:

Evaluate how well VA facilities are accomplishing their missions of providing veterans convenient access to high quality medical and benefits services.

Determine if management controls ensure compliance with regulations and VA policies, assist management in achieving program goals, and minimize vulnerability to fraud, waste, and abuse.

Provide fraud and integrity awareness training to increase employee understanding of the potential for program fraud and the requirement to refer suspected criminal activity to the OIG.

In addition to this typical coverage, CAP reviews may examine issues or allegations referred by VA employees, patients, Members of Congress, or others.

To Report Suspected Wrongdoing in VA Programs and Operations
Call the OIG Hotline – (800) 488-8244
Contents

Executive Summary ......................................................................................................................i

Introduction ......................................................................................................................................1

Healthcare System Profile ..............................................................................................................1

Objectives and Scope of the CAP Review ......................................................................................1

Results of Review ..........................................................................................................................4

Organizational Strength .................................................................................................................4

Opportunities for Improvement ......................................................................................................5

Service Contracts ...........................................................................................................................5

Radiology Services ..........................................................................................................................8

Medical Care Collections Fund ....................................................................................................15

Equipment Accountability ..............................................................................................................22

Procurement of Prosthetic Supplies ..............................................................................................26

Controlled Substances Accountability ...........................................................................................27

Information Technology Security ....................................................................................................29

Pressure Ulcer Prevention and Management ..............................................................................30

Emergency Preparedness .............................................................................................................32

Appendixes

A. VISN 1 Director Comments ....................................................................................................33

B. Healthcare System Director Comments ..................................................................................34

C. Service Contract Administration Deficiencies .........................................................................48

D. Monetary Benefits in Accordance with IG Act Amendments ..................................................49

E. OIG Contact and Staff Acknowledgments ..............................................................................50

F. Report Distribution ....................................................................................................................51
Executive Summary

Introduction

During the week of February 6–10, 2005, the Office of Inspector General (OIG) conducted a Combined Assessment Program (CAP) review of the VA Boston Healthcare System. The purpose of the review was to evaluate selected operations, focusing on patient care administration, quality management (QM), and financial and administrative controls. During the review, we also provided fraud and integrity awareness training to 161 employees. The healthcare system is under the jurisdiction of Veterans Integrated Service Network (VISN) 1.

Results of Review

This CAP review covered 12 operational activities. The healthcare system complied with selected standards in the following three areas:

- Environment of Care
- Government Purchase Card Program
- Quality Management

We identified the following organizational strength:

- Implementing perioperative interventions reduced post-operative infections and other adverse events associated with surgery.

We made recommendations in 9 of the 12 activities reviewed. For these nine activities, the healthcare system needed to:

- Strengthen controls to avoid potential conflicts of interest and improve contract monitoring and administration.
- Improve VA radiologist productivity and reduce the cost of outsourced radiology services.
- Increase Medical Care Collections Fund (MCCF) collections by validating suspended lists and the “Reasons Not Billable Report” (“RNB Report”), preventing cancellation of valid third-party outpatient bills, and identifying and billing all outpatient and inpatient services.
- Improve inventory procedures and controls over nonexpendable equipment.
- Improve compliance with the supply purchasing hierarchy.
• Correct deficiencies in controlled substances inspections and strengthen other controls.
• Strengthen controls over information technology (IT) security.
• Develop a skin care policy and establish documentation requirements for patients at risk for developing pressure ulcers and ensure that hospital-acquired pressure ulcer data is accurate.
• Correct emergency preparedness deficiencies.

This report was prepared under the direction of Mr. Thomas L. Cargill, Jr., Director, and Mr. Philip D. McDonald, CAP Review Coordinator, Bedford Audit Operations Division.

**VISN 1 and Healthcare System Director Comments**

The VISN and Healthcare System Directors agreed with the CAP review findings and recommendations and provided acceptable improvement plans. (See Appendixes A and B, pages 33-47, for the full text of the Directors’ comments). We will follow up on the planned actions until they are completed.

*(original signed by:)*

JON A. WOODITCH  
Deputy Inspector General
Introduction

Healthcare System Profile

Organization. The VA Boston Healthcare System provides inpatient and outpatient healthcare services at three divisions in West Roxbury, Jamaica Plain, and Brockton, MA, and outpatient care at six community-based outpatient clinics (CBOCs) in Boston, Dorchester, Worcester, Framingham, Lowell, and Quincy, MA. The healthcare system is part of VISN 1 and treats about 60,000 unique patients in Massachusetts, New Hampshire, Maine, Vermont, Connecticut, and Rhode Island.

Programs. The West Roxbury campus serves as the regional referral center for inpatient surgery and provides high-risk surgeries such as vascular, orthopedic, and plastic surgery. The Jamaica Plain campus offers state-of-the-art ambulatory and primary care services. The Brockton campus offers a wide range of healthcare services including long-term care, a chronic Spinal Cord Injury unit, mental health services, and comprehensive primary care. The healthcare system has a total of 643 hospital beds at the 3 divisions.

Affiliations and Research. The healthcare system is affiliated with the Boston University School of Medicine and Harvard Medical School and supports 256 medical resident positions in 30 training programs. In fiscal year (FY) 2004, the healthcare system research program had 443 active research studies and a budget of approximately $18 million. Important areas of research include endocrinology, cardiology and cardiovascular diseases, neurophysiology of mental illnesses, hematology, spinal cord injury, pulmonary medicine, post-traumatic stress disorder, and infectious diseases.

Resources. The healthcare system’s FY 2004 medical care budget totaled $429.1 million, a 9.9 percent increase from the FY 2003 budget of $390.4 million. FY 2004 staffing was 2,943 full-time equivalent employees (FTE), including 178 physician FTE and 598 nursing FTE.

Workload. In FY 2004, the healthcare system treated 59,420 unique patients, a 4 percent increase from FY 2003. The FY 2004 inpatient care workload totaled 11,279 discharges, and the average daily census was 525. The outpatient care workload was 536,148 patient visits.

Objectives and Scope of the CAP Review

Objectives. CAP reviews are one element of the OIG’s efforts to ensure that our Nation’s veterans receive high quality VA health care and benefits services. The objectives of the CAP review are to:
• Conduct recurring evaluations of selected health care facility and regional office operations focusing on patient care, QM, benefits, and financial and administrative controls.

• Provide fraud and integrity awareness training to increase employee understanding of the potential for program fraud and the requirement to refer suspected criminal activity to the OIG.

Scope. We reviewed selected clinical, financial, and administrative activities to evaluate the effectiveness of patient care administration, QM, and management controls. Patient care administration is the process of planning and delivering patient care. QM is the process of monitoring the quality of patient care to identify and correct harmful practices or conditions. Management controls are the policies, procedures, and information systems used to safeguard assets, prevent errors and fraud, and ensure that organizational goals are met.

In performing the review, we inspected work areas; interviewed managers, employees, and patients; and reviewed clinical, financial, and administrative records. The review covered the following 12 activities:

- Controlled Substances Accountability
- Emergency Preparedness
- Environment of Care
- Equipment Accountability
- Government Purchase Card Program
- Information Technology Security
- Medical Care Collections Fund
- Pressure Ulcer Prevention and Management
- Procurement of Prosthetic Supplies
- Quality Management
- Radiology Services
- Service Contracts

The review covered healthcare system operations for FY 2004 and FY 2005 through January 31, 2005, and was done in accordance with OIG standard operating procedures for CAP reviews. It should be noted that in the our review of service contracts (see page 5), the periods of time covered by the contracts ranged from May 1, 2001, through September 30, 2007. We also followed up on selected recommendations of our prior CAP review of the healthcare system (Combined Assessment Program Review of the VA Boston Healthcare System, Report No. 2001-01253-14, October 31, 2001).

As part of the review, we used questionnaires and interviews to survey patient and employee satisfaction with the timeliness of service and the quality of care. Questionnaires were sent to all employees, and 178 employees responded. We also interviewed 40 patients during the review. We discussed the survey and interview results with healthcare system managers.

Activities needing improvement are discussed in the Opportunities for Improvement section (see pages 5–32). In this report we make recommendations for improvement.
Recommendations pertain to issues that are significant enough to be monitored by the OIG until corrective actions are implemented.

During the review, we presented 3 fraud and integrity awareness briefings for 161 employees. These briefings covered procedures for reporting suspected criminal activity to the OIG and included case-specific examples illustrating procurement fraud, false claims, conflicts of interest, and bribery.
Results of Review

Organizational Strength

Outcome Initiatives Were Effective. By implementing perioperative interventions in collaboration with the Institute for Healthcare Improvement (IHI),\(^1\) the healthcare system reduced post-operative infections and other adverse events associated with surgery by 50 percent in 2004. These positive outcomes were accomplished by administering medications to patients before their surgeries to prevent infections, cardiac events, and deep vein blood clots. The healthcare system was also successful in reducing unplanned post-operative readmissions and unplanned returns to the operating room. These efforts were highlighted in IHI’s 2005 Progress Report, *Ideas in Action*.

Also in 2004 and in conjunction with IHI, the healthcare system implemented initiatives that reduced by 80 percent emergency room (ER) diversions (sending patients who present in the ER to other facilities when appropriate beds are not available). As a result, the healthcare system was able to increase acute admissions. Additionally, the healthcare system decreased the average time required to transfer patients from acute care at West Roxbury to long-term care at Brockton.

\(^1\) IHI is a not-for-profit organization whose mission is the improvement of health by advancing quality and value of health care.
Opportunities for Improvement

Service Contracts – Controls Needed Strengthening to Avoid Potential Conflicts of Interest and Improve Contract Administration

Conditions Needing Improvement. VISN and healthcare system management needed to ensure that Contracting Officer’s Technical Representatives (COTRs) closely monitor contracts and that contracting officers perform their responsibilities in accordance with the Federal Acquisition Regulation (FAR) and VA policy. To evaluate the effectiveness of the contracting activity, we reviewed 12 contracts valued at $36.8 million from a universe of 69 service contracts valued at $68.9 million. We identified the following issues that required management attention.

Potential Conflicts of Interest. Controls need to be strengthened to ensure that officials administering contracts comply with conflict of interest statutes. We also identified a potential conflict of interest in one scarce medical service contract (value = $2.1 million). Federal law prohibits Federal employees from participating personally and substantially in a Federal matter in which the employee has a financial interest. A contracting officer appointed a physician as COTR for a 13-month period from June 2002–July 2003 for a perfusion services contract. The physician had a potential conflict of interest because he had mutual financial interests with the contractor’s chief perfusionist. Effective July 13, 2003, the physician was removed as COTR and the physician’s administrative assistant was appointed to replace him.

We also followed up on our recommendation from our 2001 CAP review to ensure controls were implemented to eliminate potential conflicts of interest during contract negotiations. The Healthcare System Director agreed with the prior CAP review findings and recommendations and reported that necessary steps had been taken to appoint appropriate individuals as COTRs for scarce medical service contracts. However, based on our review, corrective actions were not fully implemented. Therefore, we must again recommend that controls be strengthened. The physician mentioned above was also cited in our prior CAP review as having a potential conflict of interest in two VA contracts over which he had been appointed as COTR.

Perfusion Services Contract Employees Not Board Certified. A $2.2 million perfusion services contract for the period June 2002–September 2006 required that perfusionists providing contract services maintain board certification and eligibility. The contracting officer did not ensure that personnel providing services under the contract met these requirements. Further, the contractor provided personnel who did not meet the contract requirements.
Perfusionists are part of a surgical team for operations such as open-heart surgery. Perfusionists operate special equipment that temporarily takes over a patient’s respiratory and/or circulatory functions. This equipment ensures that oxygen reaches the patient’s body through the blood even when the patient’s lungs and heart are temporarily not functioning. Autotransfusion is a method by which blood that is lost during and sometimes after surgery can be collected, filtered, concentrated, washed, and returned to the patient. We determined the following five perfusion services contract employees were not board certified as required:

- For the period June 2002–November 2002, two perfusionists were board eligible but did not have board certifications. Contract specifications required the perfusionists to perform cardiopulmonary bypass procedures as directed by VA cardiac surgeons and to provide circulatory support for emergency room patients. The autotransfusion services included emergency on-call coverage for emergency open-heart autotransfusions. The value of perfusion services performed by non-board certified contract employees totaled $129,293. The new contract going out for bid in October 2005 will require the contract employees to be board eligible.

- We also determined that a contract employee was not board certified or board eligible. This employee did not have any related formal education to perform perfusion and autotransfusion procedures. From June 2002 through February 2005, the individual was recorded as performing 16 perfusion and 86 autotransfusion procedures at the healthcare system. The value of perfusion services performed by this untrained contract employee totaled $54,740.

- Two additional contract employees, who were university co-op students, lacked both board certification and eligibility, but were recorded as performing 104 perfusion procedures between December 2002 and September 2003. The value of perfusion services performed by non-board certified or eligible contract employees totaled $140,097.

In summary, we determined that the healthcare system paid the contractor $194,837 for perfusionist services performed by three individuals whose qualifications did not meet the requirements of the contract.

Medical Physicist Contract Employee Not Board Certified. A $1.5 million medical physicist services contract from May 2001–September 2005 required that medical physicists providing contract services be board certified. The contracting officer did not ensure that personnel providing services under the contract met this requirement. For the period May 2001–January 2005, the healthcare system paid $642,141 for a non-board certified medical physicist in therapeutic radiologic physics.
The contract specifications included calculating radiation dose distribution, monitoring and measuring dosage delivered to patients, and providing physicians with physics consultations. A review of daily work reports for the period November 1, 2004–November 5, 2004, showed that the medical physicist performed numerous basic and special dosimetry calculations and other related services. As a result, the contractor billed the healthcare system $642,141 for medical physicist services performed by a non-board certified medical physicist.

Infectious Waste Removal Services Contract Payments Not Monitored. The healthcare system had a $819,040 contract for the removal of infectious waste from February 1, 2004–September 30, 2007. Payments were made to the contractor based on the number of pounds of waste removed from the healthcare system at a rate of $0.27 per pound. The COTR certified payments without knowledge of how much waste was removed by the contractor. As a result, the healthcare system had no assurance that $52,292 paid for the removal of waste was appropriate for the 8-month period ending September 2004.

Management acknowledged that infectious waste removed from the healthcare system was not weighed, but that charges were consistent with previous years. The Environmental Management Service will track the number of boxes by weight to ensure accurate billing.

Contracting Officers Not in Compliance with Contract Administration Requirements. Contracting officers are responsible for completing all necessary contracting actions, ensuring compliance with the terms and conditions of the contract, and maintaining files containing records of preaward and postaward contractual actions. Our review of the 12 contracts found the following contract administration deficiencies:

- Preaward Contractual Actions. For the 12 contracts, contracting officers did not request required preaward contractual actions including forwarding 1 contract valued at $3.1 million to the VA Office of Acquisition and Materiel Management (OA&MM) for legal and technical review and conducting price analyses for 1 contract valued at over $300,000. In addition, for these 12 contracts contracting officers did not search the Excluded Parties Listing System (EPLS) database to determine whether the prospective contractors were excluded from participating in Federal contracts.

- Postaward Contractual Actions. Contracting officers did not conduct postaward contractual actions, including ensuring that contract personnel were board certified for contracts, initiating background investigations for contract personnel for seven contracts, preparing price negotiation memorandums to document the negotiation process for two contracts, and preparing written justifications to extend contract terms for four contracts. In addition, for five contracts contracting officers did not ensure
that COTRs were trained. VA employees, other than COTRs, inappropriately validated services and certified payments for three contracts.

See Appendix C, page 48, for a table summarizing the types of contract services acquired, the estimated value of each contract, and the contract administration deficiencies noted.

**Recommendation 1.** We recommended that the VISN Director ensure that the Healthcare System Director requires: (a) contracting officers to strengthen controls to prevent potential conflicts of interest, (b) contracting officers to make sure contract employees are qualified in accordance with contract requirements, (c) COTRs receive proper training, (d) COTRs properly monitor contracts and payments are made in accordance with contract terms, and (e) contracting officers correct contract administration and documentation deficiencies.

The VISN and Healthcare System Directors agreed with the findings and recommendations and reported that a new system has been implemented in which the lead contracting officer will review existing enhanced sharing agreements and scarce medical service contracts. The review will ensure VA employees who participate in the acquisition process and contract administration are free of potential conflicts of interest. Contracting officers have received annual mandatory conflict of interest training. Also, a review is being initiated to validate written qualifications in scarce medical contracts. A one-time review will be conducted to ensure contract staff meet accepted qualifications. COTRs have been trained on the Veterans Health Administration’s (VHA’s) Acquisition COTR Handbook and additional training will be held in August 2005. COTRs will monitor contracts and ensure payments are made in accordance with contract terms. On the waste management contract, a log will be maintained to track the weight of waste removed from the facility. Invoices will be compared to the log to ensure accurate billing per contract specifications. The Lead Contracting Officer has developed an enhanced review process to ensure the completion of preaward and postaward contractual actions. The improvement plans are acceptable, and we will follow up on the completion of planned actions.

**Radiology Services – Increasing VA Radiologist Productivity Will Reduce Costs and Help Meet Timeliness Standards**

**Conditions Needing Improvement.** Productivity for VA and some contract radiologists providing services for the healthcare system during FY 2004 was generally low and could be improved. Productivity standards for radiologists have not been established VA-wide, thus a valuable management tool was not available to assess workload output and cost
effectiveness. The healthcare system experienced a shortage of VA radiologists\(^2\) in 2003 that resulted in the need for more expensive radiologist services contracts. Healthcare system radiologists are paid considerably less than radiologists in the New England area,\(^3\) which has made it difficult to recruit and retain highly qualified staff. The goal of potentially achieving an increase in productivity and reducing contract costs can be reached by implementation of market salaries for VA radiologists (as envisioned by the pay bill\(^4\) passed in December 2004). We estimate the healthcare system has an opportunity to reduce future costs by as much as $2,363,281 if radiologists’ productivity standards are implemented, recruitment efforts are successful, and contract workload and related costs are reduced. Also, an increase in productivity will help the healthcare system meet the new VHA performance measure of verifying images in 2 days versus 4.

Relative Value Unit Benchmark. In March 2004, the Director of the VHA radiology product line informed the OIG\(^5\) that there were no productivity standards for VA radiologists, and he advocated the use of Relative Value Units (RVUs)\(^6\) to assess radiologist productivity. He stated that 5,000 RVUs per year would be the norm for full-time VA radiologists who have collateral administrative, educational, or research duties.

Although there are various factors that can impact a VA radiologist’s productivity, such as lack of support staff, time involved with supervising or training residents, and medical equipment limitations, we agreed that 5,000 RVUs was a reasonable benchmark for assessing the healthcare system radiologists’ productivity. The healthcare system’s Chief, Radiology Service, indicated a fundamental reason why productivity is low, in part, is because of time spent by the healthcare system radiologists in “apprenticeship” mode with the residents working alongside staff, asking questions, discussing individual cases, editing their electronic dictation reports, and participating in frequent consultations. The Chief commented that there was no measure that he was aware of that satisfactorily deals with quantifying these issues. However, the RVU and cost results that we presented were a useful management tool that the Chief indicated would be helpful in assessing his staff’s productivity.

---

\(^2\) Five VA radiologists’ employment terminated during June and July 2003.

\(^3\) VA Boston Healthcare System radiologists’ average salary is $242,799 per year. New England private sector radiologists’ average salary is $343,343 per year.

\(^4\) “Department of Veterans Affairs Health Care Personnel Enhancement Act of 2004,” Public Law 108-445, signed by the President on December 3, 2004, eliminates the current physician and dentist special pay system. Instead, a 3-tiered system consisting of base pay, market pay, and performance pay will be implemented effective January 8, 2006.

\(^5\) See OIG Report No. 04-01371-177, issued August 11, 2004, Issues at VA Medical Center Bay Pines, Florida and Procurement and Deployment of the Core Financial and Logistics System (CoreFLS).

\(^6\) RVUs are numbers established by Medicare and used in its fee formula, along with practice and malpractice expenses. The RVU indicates the professional value of services provided by a physician. RVUs take into account calculations involving patients and procedures performed, along with the skill of the physician and the risk of the procedure.
Productivity Analysis. Our analysis showed that the measurable amount of work produced during FY 2004 by healthcare system and some contract radiologists was considerably low, particularly when compared with the productivity of other contract radiologists working for the healthcare system. The total workload output in FY 2004 for the 6 FTE VA radiologists (which consisted of 5 full-time and 2 part-time employees) was 16,272 RVUs, which equates to an average of 2,712 RVUs per FTE. This is significantly below the 5,000 RVU figure that is considered feasible to obtain. The following figure illustrates the results of our productivity analysis (RVUs per FTE) amongst the major radiologist services providers:

![Figure 1: RVUs per FTE Boston HCS FY 2004](image)

The low productivity (2,712 RVUs) for the VA radiologists (Figure 1) can partly be attributed to not having a permanent Chief, Radiology Service from July 2003 to January 1, 2005. When we presented our preliminary productivity analysis to the new Chief, he immediately initiated remedial actions to improve productivity and reduce contract costs by efficiently coordinating and monitoring the workload distribution.

Cost Analysis. In FY 2004, the healthcare system incurred $5,043,123 in costs for the services of 12.91 radiologists. The healthcare system contracted for 6.91 FTE of radiologist services at a total cost of $3,586,331 (71 percent of total costs). The additional $1,456,792 (29 percent of total costs) was spent on salaries and benefits for 6 FTE staff radiologists. The largest source of contracted services came from the Lahey Clinic, which provided 7,999 hours of services at a total cost of $2,264,109. The Lahey Clinic contract was developed in anticipation of the resignation of five VA Radiology Service staff, which occurred during June and July 2003. The contract was structured to provide 4.5 FTE radiologists to the healthcare system for up to for 4 years, beginning with June 12, 2003 (1 base year and 3 option years). The prices for Lahey Clinic
radiologist services ranged from $277 per hour during the base year to $333 an hour for the third option year. In FY 2004, the healthcare system paid $277 per hour from October 2003–May 2004 and $295 per hour from June 2004–September 2004.

The FTE and cost distribution of radiologists’ services is provided in the table below, along with the total RVU productivity figures for the three contractors and VA staff. As shown in the table, the healthcare system spent $5,043,123 for 12.91 FTE contract and staff radiologists, who collectively produced 54,461 RVUs. The average cost per FTE was $390,636. The variance between the high cost of the Lahey Clinic’s and VA’s cost per FTE was $323,228 ($566,027 - $242,799). The cost per RVU, which incorporates both productivity and cost figures, has a wide variation from $50 for fee basis to $206 for Vista Staffing radiologists.

<table>
<thead>
<tr>
<th>Source</th>
<th>Service Hours</th>
<th>FTE</th>
<th>Average Cost Per FTE</th>
<th>Total Cost</th>
<th>Total RVU Output</th>
<th>Cost Per RVU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vista Staffing</td>
<td>2,858</td>
<td>1.43</td>
<td>$518,469</td>
<td>$741,410</td>
<td>3,600</td>
<td>$206</td>
</tr>
<tr>
<td>Lahey Clinic</td>
<td>7,999</td>
<td>4.00</td>
<td>$566,027</td>
<td>$2,264,109</td>
<td>22,862</td>
<td>99</td>
</tr>
<tr>
<td>VA Staff</td>
<td>12,000</td>
<td>6.00</td>
<td>$242,799</td>
<td>$1,456,792</td>
<td>16,272</td>
<td>90</td>
</tr>
<tr>
<td>Fee Basis</td>
<td>2,968</td>
<td>1.48</td>
<td>$392,441</td>
<td>$580,812</td>
<td>11,727</td>
<td>50</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>25,825</strong></td>
<td><strong>12.91</strong></td>
<td><strong>$390,636</strong></td>
<td><strong>$5,043,123</strong></td>
<td><strong>54,461</strong></td>
<td><strong>$93</strong></td>
</tr>
</tbody>
</table>

The following is a financial analysis using the healthcare system’s cost per RVU, which is a measurement that is calculated using both costs and productivity figures.

**Target RVU Cost.** The healthcare system should establish a performance measure to ensure that it is paying a reasonable cost per RVU that is based on the industry standard. The 2004 Radiology Field Survey, which was conducted by VA’s Radiology Program Office reported that $50 per RVU was the average cost for public sector radiologist services, which is close to the private sector cost. In FY 2004, the healthcare system paid an average of $93 per RVU for all radiologist services, which is $43 above the industry standard of $50 per RVU. The figure on the next page illustrates the cost per RVU that the healthcare system incurred for Vista Staffing, Lahey Clinic, VA radiologists, and fee basis compared with the target RVU cost of $50.
As shown in Figure 2, fee basis radiologists’ actual RVU costs matched the target cost of $50 per RVU. The fee basis radiologists’ high performance level of 7,924 RVUs per FTE, combined with their reasonable cost for services, shows their cost per RVU is in alignment with the industry standard of $50. The high productivity numbers for fee basis radiologists can partly be attributed to their irregular schedules, which allow them to read images during non-business hours.

The VA staff radiologists incurred a high RVU cost because of their low productivity output of 2,712 RVUs per FTE. If the productivity level for the 6 FTE staff radiologists had been 5,000 RVUs per FTE, the cost per RVU would have been $49. With the addition of a Chief, Radiology Service and a viable means of quantitatively monitoring and measuring productivity, it is reasonable to expect VA staff radiologists to produce an average of 5,000 RVUs per FTE.

Workload Distribution. In FY 2004, 54,461 RVUs represented the combined productivity for VA staff (16,272), fee basis (11,727), Lahey Clinic (22,862), and Vista Staffing radiologists (3,600). The VA staff radiologists accounted for 30 percent of the total RVU output, and contract radiologists produced the remaining 70 percent. If each of the VA staff radiologists were to reach the target performance level of 5,000 RVUs in FY 2005, they would produce 30,000 RVUs (6 FTE x 5,000 RVUs), which equates to an increase of 55 percent of the total RVU output (vs. 30 percent for FY 2004). The additional 24,461 RVUs would be the remaining workload to be completed by contract sources, or by additional VA staff radiologists that might be hired.

---

7 In FY 2004, 6 FTE VA staff radiologists produced 16,272 RVUs. If each radiologist had produced 5,000 RVUs, the entire output would have been 30,000 RVUs. The cost per RVU would have been $48.56 ($1,456,792/30,000 RVUs).
The following figures compare the FY 2004 radiologists’ workload distribution (Figure 3) to FY 2005 projected workload distribution (Figure 4) with the assumption that VA staff radiologists would meet the 5,000 RVU performance level.

**Increasing VA Staff Productivity.** As shown in Figure 3, 38,189 RVUs were outsourced to contract radiologists in FY 2004. An increase in VA staff productivity from 2,712 (shown in Figure 1) to 5,000 RVUs would increase the in-house workload output by 13,728 RVUs. Thus, increasing VA staff productivity would reduce the need for outsourced radiologists’ services from 38,189 RVUs to 24,461 RVUs. Using the FY 2004 actual outsourcing cost of $93.91 per RVU ($3,586,331/38,189), an increase in VA staff productivity would eliminate the need for $1,289,197 (13,728 RVUs x $93.91 per RVU) in radiologist contract costs.

**New Performance Measurement.** A new performance measure was established VA-wide for FY 2005 to improve the timeliness of verifying imaging reports. The time for verification was changed from 4 to 2 days. The goal is to ensure that radiologist reports are available in time to make a difference in patient care. In FY 2004, the healthcare system met the performance goal of verifying images within 4 days 87 percent of the time. The new performance measure presents a substantial challenge, and several factors, such as staffing and efficient management of workload can have an impact on meeting the goal.

**Summary of Cost Analysis.** In FY 2004, the healthcare system spent a total of $5,043,123, covering all VA and contract radiologists, which collectively produced 54,461 RVUs. The combined average cost per RVU (Figure 2) was approximately $93, ranging from $50 for fee basis radiologists to $206 for Vista Staffing radiologists. The in-house cost per RVU for VA staff radiologists was $90, which is reflective of low productivity.

---

8 The effective date for implementation is the fourth quarter of FY 2005.
At a productivity level of 5,000 RVUs per FTE, the healthcare system staff radiologists reduce their cost per RVU to $49. Additionally, an increase in staff productivity can reduce the amount of outsourced radiologists’ services required by 13,728 RVUs. The reduction would reduce the outsourcing workload from 38,189 RVUs to 24,461 RVUs. In FY 2004, the healthcare system paid $93.91 per outsourced RVU. If the healthcare system can obtain the additional 24,461 RVUs at a price of $50 per RVU, either by recruiting staff radiologists, or by cost-efficient outsourcing services (such as fee basis), the surplus workload could be completed for a cost of $1,223,050.

Without making adjustments for the FY 2004 salaries – plus benefits – of the healthcare system staff radiologists, it would cost $1,456,792 in radiology services for the 30,000 RVUs. If the supplementary workload of 24,461 RVUs could be completed at the target price of $50 per RVU, it would cost an additional $1,223,050 ($50 per RVU x 24,461 RVUs). Therefore, the RVU workload of 54,461 that cost $5,043,123 in FY 2004 could potentially be provided for $2,679,842 ($1,456,792 + $1,223,050), resulting in an estimated future cost avoidance of $2,363,281.

**Recommendation 2.** We recommended that the VISN Director ensure the Healthcare System Director: (a) develops an action plan to improve the productivity of VA-employed radiologists; (b) monitors and distributes the department’s workload in a cost effective manner; (c) reviews the radiology contracts and implements steps to either reduce costs, renegotiate terms where possible, or eliminate contractual arrangements where and if feasible; (d) ensures contracting officers conduct analyses for any future radiology contracts to make sure prices are reasonable; and (e) ensures radiology services contracts specify productivity and performance standards.

The VISN and Healthcare System Directors agreed with the findings and recommendations and reported that a Veterans Health Information Systems and Technology Architecture (VistA) productivity report titled “RVU Report by Staff Physician” will be reviewed monthly by the Chief, Radiology Service. The report will be used to adjust individual physician rotation schedules as well as clinical rotation responsibilities to ensure that individual physicians achieve greater productivity. The Chief, Radiology Service will review the Picture Archive Communication System (PACS) reports for unread films. Productivity levels of radiologists will be monitored to ensure the cost effective use of VA and contract radiologists. The healthcare system terminated the radiology contract with Lahey Clinic on June 12, 2005. Contracting officers will take steps to either reduce costs, renegotiate contract terms, or eliminate contractual arrangements, if feasible. Current contracted radiologists will be monitored for productivity to ensure cost effectiveness and the potential for cost reduction. Future radiology contracts will incorporate cost and productivity figures, based on VHA established standards. Contracting officers will ensure that any potential future contracts be competitively bid to ensure cost effective prices. The healthcare system will develop productivity and performance standards for all radiologist contract services, based on
VHA established standards. The improvement plans are acceptable, and we will follow up on the completion of planned actions.

**Medical Care Collections Fund – Collections From Insurance Carriers Could Be Increased**

**Condition Needing Improvement.** The healthcare system could increase MCCF revenue by validating and reviewing coders’ suspended lists and the “RNB Report,” not canceling valid third-party outpatient bills, and identifying and billing all outpatient and inpatient services. Our review of statistical samples of patient care encounters found that missed billing opportunities were the result of documentation errors, improper coding, and insufficient review and monitoring of MCCF reports. We estimate that during FY 2004 an additional $4.3 million could have been billed, and MCCF revenues could have been increased by about $1.5 million, or 7 percent of the $21.5 million collected.

**Monitoring “RNB Reports.”** We reviewed three segments of the “RNB Report” for FY 2004; Nonbillable Provider (Resident), No Documentation, and Insufficient Documentation. As of January 26, 2005, there were 2,788 encounters valued at $847,330 in the 3 segments of the “RNB Report” for treatment provided during FY 2004.

Coding staff review documentation such as provider progress notes, test results, and surgical reports of patient encounters to determine if they are billable. Medical care provided by VA is billable for both professional fees for the healthcare providers’ services and institutional fees for supplies and other staff services. For outpatient visits, professional fees and institutional fees can both be billed in most cases. For inpatient visits, VA may also bill professional and institutional fees, but inpatient institutional fees are a per diem charge. If coding staff determine that an encounter is billable, they assign diagnoses codes from the International Classification of Diseases (ICD-9-CM) and procedure codes from Common Procedural Terminology (CPT) and forward the coded encounter to billing staff, who process the bill.

If the coding staff determines there is insufficient documentation to bill a medical care encounter, they request additional information from the provider, list the encounter on their “Suspended List,” and forward the list to the healthcare system compliance officer for follow-up action. These questioned encounters remain on the individual’s “Suspended List” for 2 weeks. If, after 2 weeks, no additional documentation has been submitted by the provider, the encounter is removed from the “Suspended List” and placed on the “RNB Report.” Following are the results of our review of three sections of the “RNB Report.”

- **Nonbillable Provider (Resident).** There were 1,628 encounters valued at $531,880 (average encounter value of $326.71) listed in this segment of the “RNB Report.” A review of a statistical sample of 50 encounters determined that 28 (56 percent) of
these should not have been placed on the “RNB Report” because they were properly documented in the Computerized Patient Record System (CPRS). However, coding staff missed this documentation, and these 28 encounters were not billed for an additional $16,128. In seven encounters, documentation of supervision was missed by coding staff, and both professional and institutional fees were billable. In two encounters, documentation was again overlooked and only institutional fees were billed where professional fees were also billable. In 19 encounters, professional fees were not billable because supervision of the residents was not documented; however, institutional fees should have been billed. Projecting our sample results to the universe, we estimate that an additional $297,960 could have been billed based on the 56 percent error rate and the average encounter value of $326.71. Based on the healthcare system’s average collection rate of 33.6 percent, we estimate that an additional $100,115 could have been collected.

- **No Documentation.** There were 1,048 encounters valued at $294,318 (average encounter value $280.84) listed in this segment of the “RNB Report.” A review of a statistical sample of 49 encounters determined that 11 (22.4 percent) of these should not have been placed on the “RNB Report” because they were properly documented in CPRS. In these 11 encounters, documentation of 6 diagnoses, 1 test result, and 4 signed medical notes was missed by the coders and the encounters should have been billed for an additional $9,330. Projecting our sample results to the universe, we estimate that an additional $65,997 could have been billed based on the 22.4 percent error rate and the average encounter value of $280.84. Based on the healthcare system’s average collection rate of 33.6 percent, we estimate that an additional $22,175 could have been collected.

- **Insufficient Documentation.** There were 112 encounters valued at $21,132 (average encounter value $188.68) in this segment of the “RNB Report.” A review of a statistical sample of 35 encounters determined that 17 (48.6 percent) of these should not have been placed on the “RNB Report” because they were properly documented in CPRS. In these 17 encounters, documentation of 2 test results and 15 signed medical notes was overlooked by coding staff and should have been billed for an additional $3,942. Projecting our sample results to the universe, we estimate that an additional $10,189 could have been billed based on the 48.6 percent error rate and the average encounter value of $188.68. Based on the healthcare system’s average collection rate of 33.6 percent, we estimate that an additional $3,424 could have been collected.

Two issues came to our attention relating to missed billing opportunities. In some cases, attending physicians appear to have used the “Receipt Acknowledged” signature block in CPRS rather than the “Cosigned” signature block to document resident supervision. In other cases, providers did not record diagnoses in the progress notes in CPRS, although they had been included on the encounter forms in the Patient Care Encounter file, which
is not a permanent part of the patient’s medical record. Insurers will not reimburse VA without a documented diagnosis.

These billable services had not been identified because there was no individual assigned responsibility for conducting periodic reviews of the “RNB Report,” and healthcare system management was not monitoring the coders’ “Suspended Lists” to identify billable episodes of care and correct documentation deficiencies. Based on the total number of encounters (2,788) in the 3 segments in our review, additional follow-up is needed not only on the “RNB Report” but particularly for the “Suspended Lists” to prevent the encounters from ever reaching the “RNB Report.” If the provider does not respond to the coding staff request for additional documentation within the 2-week period, healthcare system management should be notified by the compliance officer and further action should be taken by the service chief or the Chief of Staff.

Monitoring of the “RNB Report” would have detected the inappropriate entries. Timely and more aggressive follow-up of the coders’ “Suspended Lists” would have improved billing and collections and prevented most of these 2,788 encounters, valued at over $847,000, from being listed on the “RNB Report.” Based on our review of the three segments of the “RNB Report,” we estimate that an additional $374,141 could have been billed and $125,714 could have been collected for patient care provided in FY 2004.

Cancelled Bills Report. As of January 26, 2005, there were 45,507 cancelled outpatient bills valued at $16,605,806 from FY 2004 on the “Cancelled Bills Report.” We estimate that 2.6 percent of the value of the “Cancelled Bills Report” appeared on the report more than once; therefore, the actual value of the cancelled outpatient bills was $16,167,143 (average bill value of $355.27). We reviewed a statistical sample of 122 cancelled outpatient bills and determined that 6 (4.9 percent) should not have been cancelled and should have been billed for an additional $1,359. In four cases, bills were cancelled because provider signatures were overlooked. In one case, staff failed to bill for services provided by a nurse practitioner (NP), although an NP is a billable provider. In the remaining case, preauthorization for VA provided care was not obtained as required by the insurer. These cancellations occurred because healthcare system staff did not monitor the “Cancelled Bills Report” to ensure entries were appropriate. Inappropriate cancellations could be prevented by conducting periodic reviews of the bills on the report. Projecting our sample results to the universe, we estimate that an additional $792,259 could have been billed based on the 4.9 percent error rate and the average record value of $355.27. Based on the healthcare system’s average collection rate of 33.6 percent, we estimate that an additional $266,199 could have been collected.

Outpatient Billing Review. As of January 31, 2005, 139,511 outpatient encounters valued at $28,243,796 were billed to third party payers for care delivered in FY 2004. A
A statistical sample of 136 outpatient encounters, billed at $277,939 was selected for review. We identified 31 errors in our sample, which included coding, billing, and documentation of medical records/medical supervision errors. Twenty-nine of the 136 were underbilled by $29,176 (10.5 percent of the billed amount). Two episodes of unbillingable care were billed $393 (0.14 percent of the billed amount). In addition to our sample of 136, we also reviewed 100 percent of outpatient encounters with values of over $20,000 each and found that 1 of 2 was unbillable.

- Underbilled Encounters. Underbilling occurred in 29 episodes of care in our sample. Twenty-two episodes involved coding and billing errors and 7 cases involved documentation of resident supervision errors. Following are examples of coding and billing errors:
  - Six billable pathology examinations had not been coded and therefore could not be billed. This resulted in missed billing opportunities of about $4,800.
  - One cytology examination had not been coded and therefore could not be billed. This resulted in a missed billing opportunity of $464.
  - The seven errors related to the documentation of resident supervision resulted in the following:
    - Adequate documentation was overlooked in four medical notes resulting in approximately $6,975 in professional fees not being billed, although institutional fees had been billed.
    - In one case, documentation of resident supervision for a primary care visit was overlooked and neither professional nor institutional fees were billed, resulting in a missed billing opportunity of approximately $235.
    - Professional fees were not billed at approximately $2,280 for a retinal procedure in which resident supervision was not documented.
    - A “GC” CPT code modifier, was added unnecessarily in one case where the attending physician had written an addendum to the resident’s note. “GC” modifiers must be added to procedure codes when billing for professional services where resident supervision is documented, but the attending physician did not add any additional notes to the medical record. Although this does not affect billing, it results in a 20 percent reduction in collection, as insurers discount the charges by 20 percent when this modifier appears on the bill.

Health Information Management (HIM) staff, through the coding process, can ensure complete and improved medical record documentation by returning medical records with inadequate documentation to the providers. HIM and MCCF staff should both have
review processes that can identify medical record documentation that is inconsistent or incomplete, charges that are missed, and modifiers that are used incorrectly. Improvement in these areas will increase both billing and collections as well as improve the quality of documentation.

Projecting our sample results to the universe valued at $28,243,796, we estimate that $2.96 million could have been underbilled. Based on the healthcare system’s average collection rate of 33.6 percent, we estimate that an additional $996,441 could have been collected.

- **Unbillable Encounters.** Generally, the healthcare system’s compliance function seems to be working well in detecting unbillable care. We only found 2 encounters that should not have been billed, or 1.5 percent of the 136 bills. These had been billed for $393, or 0.14 percent of the sample’s value. Both encounters were eye examinations performed by students, but students are not permitted to conduct examinations and their services are not billable per the Federal Register. The healthcare system collected $64.95 for this care and should make refunds accordingly.

  Additionally, as part of our 100 percent review of outpatient bills over $20,000, we identified one episode of care that should not have been billed because it was for service-connected care. Staff cancelled the bill valued at $36,417 as a result of our review. The healthcare system had not collected any payment for this care.

  Projecting our sample results to the universe valued at $28,243,796, we estimate that $39,541 may have been erroneously billed.

**Inpatient Billing Review.** For FY 2004, 6,524 inpatient bills valued at $46,882,780 were billed to third party payers for hospitalization charges, consisting of room and board and ancillary facility charges, and charges for professional services. We reviewed a statistical sample of 50 inpatient stays. A total of $2,765,972 was billed for these inpatient stays consisting of $2,617,471 (94.6 percent of total billed) in hospitalization charges and $148,501 (5.4 percent of total billed) in professional services.

  For the 50 inpatient stays reviewed, 54 bills for hospitalization were issued in the amount of $2,617,471. The hospitalization charges were accurate on these bills and the resulting collections of $457,797 were appropriate.

  In addition to hospitalization charges, we identified 235 billable professional services for these 50 patients. We determined that 149 of the 235 had been appropriately billed at a total of $148,501. However, 86 valued at $12,641 (8.5 percent of the total billed) were not billed. Of the 86 unbilled professional services, 72 had not been billed due to coding and billing errors, and 14 were not billed because resident supervision had not been documented. These missed billing opportunities occurred because inpatient records were
not reviewed to ensure that all billable episodes of care were properly documented, coded, and billed. Examples of these missed billing opportunities follow:

- Thirty-six of the 72 billable professional procedures that were not coded and billed involved radiology studies such as x-rays, ultrasounds, computerized tomography scans, and magnetic resonance imaging. Coders were unaware that radiology professional fees were not being billed. They believed that the procedures were going directly to billing through the radiology computer software package. The failure to code and bill radiology studies resulted in a billing loss of approximately $2,687 in our sample. As a result of our review, HIM staff are now processing radiology studies so they can be billed properly.

- Five of the 14 professional visits that were not billed because supervision of the residents was not documented involved hospital discharges. The discharge process was billable at $231 in 2004. The failure of attending physicians to cosign the discharge notes resulted in a billing loss of $1,155 in our sample.

For our review of the 50 inpatient stays, we estimate that an additional $215,192 could have been billed and $72,305 could have been collected for inpatient care provided in FY 2004. The compliance reviews conducted at the healthcare system are limited in scope to episodes of care that have been coded and billed. These reviews should be expanded to include all episodes of care within sampled inpatient stays to ensure all billable care was coded and billed. Timely and aggressive follow-up would ensure properly documented progress notes could be coded and billed.

Statistical Projections. The samples were drawn with a confidence level of 95 percent and a precision rate of +/- 5 percent. The following is a summary of the projected additional billable amounts and collections.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sample Size</th>
<th>Errors</th>
<th>Projected Billable Amount</th>
<th>Projected Collectible Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reasons Not Billable Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Billable Provider (Resident)</td>
<td>50</td>
<td>28</td>
<td>$297,960</td>
<td>$100,115</td>
</tr>
<tr>
<td>No Documentation</td>
<td>49</td>
<td>11</td>
<td>65,997</td>
<td>22,175</td>
</tr>
<tr>
<td>Insufficient Documentation</td>
<td>35</td>
<td>17</td>
<td>10,189</td>
<td>3,424</td>
</tr>
<tr>
<td>Cancelled Bills Report</td>
<td>122</td>
<td>6</td>
<td>792,259</td>
<td>266,199</td>
</tr>
<tr>
<td>Outpatient Episodes of Care</td>
<td>136</td>
<td>31</td>
<td>2,965,599</td>
<td>996,441</td>
</tr>
<tr>
<td>Inpatient Bills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitalization Charges</td>
<td>54</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Professional Fees</td>
<td>235</td>
<td>86</td>
<td>215,192</td>
<td>72,305</td>
</tr>
<tr>
<td>Totals</td>
<td>681</td>
<td>179</td>
<td>$4,347,196</td>
<td>$1,460,659</td>
</tr>
</tbody>
</table>
Conclusion. The healthcare system could increase MCCF billings and collections by improving documentation of medical care and the supervision of residents, and ensuring that HIM and MCCF staff identify and process all billable patient health care services. The healthcare system compliance officer should provide aggressive follow-up on the coding staff “Suspended Lists” to correct documentation deficiencies and identify inappropriate cancellations of bills. Healthcare system management needs to assign responsibility for reviewing and following up on the “RNB Report” to correct inaccurate reporting and documentation deficiencies and take action on billable encounters. Healthcare system management also needs to assign responsibility for monitoring the “Cancelled Bills Report” for inappropriate cancellations. Health care providers should receive additional training on documentation requirements, including identifying diagnoses in the progress notes, annotating service-connected care, and properly documenting resident supervision. HIM staff should receive additional training on the use of CPT code modifiers to prevent unnecessary decreases in collections. Compliance reviews should be expanded to include a full review of patients’ records to ensure all billable patient care was coded and billed. By strengthening controls, the healthcare system has the opportunity to increase MCCF revenues by about $1.5 million annually.

Recommendation 3. We recommended that the VISN Director ensure that the Healthcare System Director requires that:

a. Timely and aggressive follow-up is provided for the coders’ “Suspended Lists.”

b. A monitoring system is established to review the “RNB Report,” correct documentation deficiencies, and take action on billable encounters.

c. Healthcare system staff conduct periodic reviews of the “Cancelled Bills Report.”

d. Health care providers receive additional training on diagnoses, resident supervision, and service-connected care documentation requirements.

e. HIM staff receive additional training on the use of CPT code modifiers.

f. Internal controls are established and compliance reviews are expanded to capture all episodes of care that need to be coded and billed.

The VISN and Healthcare System Directors agreed with the findings and recommendations and reported that HIM will review the “Suspended Lists” using the Quadramed Software Package and CPRS to locate documentation for coding and billing third party carriers. Cases of no documentation, insufficient documentation, and nonbillable provider (resident) will be brought to the compliance officer and the Medical Records Committee for action. The “RNB Report” will be reviewed monthly by the compliance officer and the coders will be notified of needed corrections. Coders will make necessary corrections and code appropriately. Daily audits will be conducted of the “Cancelled Bills Report” by the Chief, MCCF. A training program will be developed and provided to health care providers on documentation requirements. HIM staff will receive refresher training on the use of CPT code modifiers at the monthly coding roundtable and at staff meetings. Internal monitoring systems will be developed to include periodic sampling to ensure that all billable patient care episodes are captured, properly coded,
and billed. The improvement plans are acceptable, and we will follow up on the completion of planned actions.

**Equipment Accountability – Inventories Should Be Properly Performed and Controls Strengthened**

**Conditions Needing Improvement.** Management needed to improve procedures to ensure that nonexpendable and sensitive equipment is properly accounted for and safeguarded. VA policy requires that periodic inventories be done to ensure that equipment is properly accounted for and recorded in accountability records called Equipment Inventory Lists (EILs). Acquisition and Materiel Management Service (A&MMS) staff are responsible for coordinating the EIL inventories, which includes notifying all services when inventories are due and following up on incomplete or delinquent inventories.

As of January 31, 2005, the healthcare system had 209 EILs listing 34,411 equipment items with a total acquisition value of about $144.1 million. We identified five equipment accountability issues that required corrective action.

**Equipment Inventory Procedures.** VA policy requires responsible officials such as service chiefs or their designees to conduct annual or biennial inventories of nonexpendable equipment. These officials must evaluate the need for all equipment assigned to them and sign and date their EILs certifying that equipment was accounted for. We found the following equipment inventory deficiencies:

- Responsible officials did not complete 154 (74 percent) of 209 annual inventories within the required 10-day or 20-day (when equipment items exceed 100) periods after receiving notifications that the inventories were due. Fifty-eight EILs were delinquent from 11 to 30 days, and the remaining 96 EILs were delinquent from 31 days to 27 months.

- A&MMS staff did not determine whether 4,883 items (acquisition value = $15.6 million) that appeared on the EILs as “out of service” were appropriately listed in this category. A&MMS staff indicated that approximately 200 of these items were assigned to the Clinical Engineering Service and were waiting repairs or were in storage and were legitimately “out of service.” Property clerks, who were responsible for data entry, were incorrectly placing equipment pending disposition into the “out of service” category. Also, some of the items should not have been listed in the Automated Engineering Management System/Medical Equipment Reporting System (AEMS/MERS) because they were part of the physical plant and should not be considered nonexpendable equipment.
A total of 240 employees had the capability to add, edit, or delete nonexpendable property data in the EIL database. We found that a review was needed to determine if the options access for each employee was justified. A&MMS and Information Resource Management (IRM) staffs were in the process of evaluating each employee’s options access to ensure they had a need for such access. The integrity of the property database was vulnerable to manipulation or misuse because so many employees had access to the system.

We determined that 5,568 items of computer equipment (acquisition value = $5,842,615) from a universe of 10,780 IT items (acquisition value = $11,565,939) recorded in AEMS/MERS were all listed on IRM’s EIL. Many personal and laptop computers and printers were included on IRM’s EIL. The healthcare system’s local information systems security policy states that service chiefs and managers are responsible for protecting all assets in their assigned areas of management control from theft, damage, and unauthorized access or use. We believe that to improve accountability controls, service chiefs (or responsible EIL officials) should be held accountable for all laptop and personal computers that are physically located in their respective service areas. These items should be listed on the individual services’ EILs and not on IRM’s EIL.

Accuracy of EILs. To assess equipment accountability, we reviewed a statistical sample of 98 equipment items (combined acquisition value = $1,917,720). We were able to locate 53 (54 percent) of the 98 items. Forty-five items had accountability discrepancies:

- Forty-two were improperly listed on EILs rather than as disposed equipment.
- Two computers (total acquisition value = $12,808) and a fluorometer system (acquisition value = $5,984) could not be located.

In addition, 28 (29 percent) of the 98 equipment items did not have locations listed in AEMS/MERS as required.

We also performed a review of leased vehicles and found the following deficiency:

- Fifteen vehicles leased from the General Services Administration (GSA) were not recorded on an EIL.

Sensitive Equipment. VA policy requires that certain sensitive equipment items be accounted for regardless of cost, life expectancy, or maintenance requirements. Sensitive items are those, such as computer equipment, that are subject to theft, loss, or conversion to personal use. During FYs 2003, 2004, and 2005 through December 2005, the healthcare system acquired 4,966 items of IT related equipment (total value = $5,843,697). To ensure these items were properly recorded and accounted for, we judgmentally selected 60 items for review. Six items had accountability discrepancies:
• The loan documentation for one laptop computer was not completed.

• The location of one laptop computer was not shown correctly on an EIL.

• Seven items had been turned in and should not have been listed on the EILs. They should have been placed in the disposed category.

We also determined that accountability controls needed to be strengthened for disposing IT equipment. IT equipment no longer needed (for example, outdated or broken) is placed on pallets and sent to a contractor for disposal. These equipment items are vulnerable to theft, loss, or conversion to personal use because no VA employee signs a document verifying that the items being disposed were in fact accounted for, removed from the warehouse, and sent to the contractor.

**Loaned Equipment.** VA policy requires that equipment loans to employees be made through A&MMS. Also, A&MMS is required to review documentation to make sure equipment is returned when the loan period expires. Documentation was not completed for laptop computers loaned to VA employees. During our onsite review, A&MMS and IRM staff completed the appropriate documentation for laptop computers loaned to 53 of 97 employees, and documentation for the remaining 44 loaned laptops was pending.

**Disposed Equipment.** A&MMS staff could not provide documentation supporting the disposal of nonexpendable property assigned to the healthcare system. VA policy requires that the availability of excess property be advertised to other VA facilities for 10 days. If no other VA facility is interested in acquiring the property, it is reported to GSA. When an agency has excess property that is no longer needed, the Code of Federal Regulations requires the agency to submit that information to GSA for mandatory utilization and donation screening. If GSA is unsuccessful in locating an interested organization, GSA authorizes the agency to dispose of the property. A&MMS staff did not have documentation to show they followed the mandatory disposal procedures.

The healthcare system’s local policy states that excess property must be turned in to the Chief, A&MMS on VA Form 90-2237, “Request, Turn In, and Receipt for Property or Services.” A&MMS staff did not require the form to be completed. The form documents the custody, control, and disposal of property that has been determined to be excess to needs, abandoned, and/or forfeited or outdated. It requires accountability signatures, dates, and other information that helps validate proper disposition of equipment.

We randomly selected 21 items (acquisition value = $468,528\(^{10}\)) from the property database that had been turned in during FYs 2003 or 2004 (universe of 914 items, acquisition value = $3,584,634) to determine whether the disposition of property was

---

\(^{10}\) Three of the 21 items (all 3 listed as computers) did not have acquisition values recorded. The computers were purchased in October 2003, August 2003, and May 2004.
properly documented. VA Forms 90-2237 had not been completed and A&MMS staff could not provide supporting documentation for disposition of 19 of 21 items.

One item in our sample, listed as a Neoware System thin client (purchased October 2002 with no acquisition value recorded) showed that as of February 6, 2005, the computer was disposed of in May 2004 via a turn-in to Dell. However, as of February 18, 2005, the computer was listed on a nursing home EIL. A&MMS staff could not tell us who entered the data changing the item’s status from “turned-in” to “in use.” This example shows that the integrity of the database is vulnerable to misuse and manipulation.

Since there was no chain of custody or receipt-type documents providing an audit trail for 19 of the 21 disposals nor any documents containing accountability signatures verifying the disposals, we concluded that nonexpendable equipment at the healthcare system is at high risk to theft or misuse.

**Recommendation 4.** We recommended that the VISN Director ensure that the Healthcare System Director requires that:

a. Responsible officials or their designees perform the physical inventories of nonexpendable property and ensure that property data recorded in AEMS/MERS is complete and accurate in accordance with VA policy.

b. Controls are strengthened to account for property listed on an EIL as “out of service.”

c. Employee access to the EIL database is restricted to employees who need access.

d. Service chiefs or responsible EIL officials are held accountable for computers that are located in their services.

e. Documentation is prepared to verify that disposed IT equipment is accounted for.

f. Documentation is prepared for loaned equipment.

g. Procedures are established to ensure proper documentation is completed for nonexpendable property that is turned-in, transferred, or destroyed and required disposal procedures are followed.

The VISN and Healthcare System Directors agreed with the findings and recommendations and reported that services will be held to the required timeframes for completing inventories. A&MMS will review the listing of “out of service” equipment, cleanse the database, and prepare “Reports of Survey” for unaccounted for equipment. A&MMS will reduce the number of employees who have access to add, edit, or delete equipment in the EIL database. IRM and A&MMS will update equipment management policies requiring service chiefs to be responsible and accountable for IT equipment in their services. A&MMS procedures now require the signature of the Chief, A&MMS or Chief, Storage & Distribution for computer equipment to be disposed. Documentation has been prepared for loaned computers. Healthcare system policy has been updated to reflect current procedures for excess nonexpendable property. The improvement plans are acceptable, and we will follow up on the completion of planned actions.
Procurement of Prosthetic Supplies – Purchases Need To Comply With VA’s Purchasing Hierarchy

Conditions Needing Improvement. Management needs to ensure that prosthetic supplies are purchased in compliance with VA’s purchasing hierarchy and that staff receive hierarchy training. VA policy requires medical facilities to purchase supplies according to the hierarchy, which organizes vendors from the most to least preferred sources as follows: national contracts, and Blanket Purchase Agreements (BPAs), local BPAs, Federal Supply Schedule (FSS) contracts, local non-FSS contracts, and open market purchases. We identified the following two conditions that required corrective action.

Prosthetic Supplies. Procurement staff did not purchase prosthetic supplies (hip and knee components) from preferred sources, such as VA national contracts and FSS contracts. During FY 2004, the healthcare system purchased various supplies and services from 124 vendors (with purchases greater than $250,000 from each) with payments totaling $138 million.

To determine if the healthcare system purchased prosthetic supplies effectively, we reviewed 116 purchases of hip and knee components (value = $695,687) from 2 vendors. We found that procurement personnel did not comply with the purchasing hierarchy and purchased hip and knee components on the open market, the least preferred purchasing source. We obtained data from the VA National Acquisition Center showing that an FSS vendor and national contract vendors offered comparable items at lower prices. Procurement staff made 99 hip and knee component transactions at a cost of $584,516 before national contracts were awarded on June 7, 2004. A comparison of prices paid by the healthcare system to FSS prices showed that the healthcare system could have paid 42 percent less for hip and knee components. Procurement staff made 17 hip and knee component transactions at a cost of $111,171 after the national contracts were awarded. The healthcare system did not obtain waivers required by VHA in order to make the 17 purchases from other than national contracts. A comparison of prices paid by the healthcare system to national contract vendor prices showed that the healthcare system could have paid 21 percent less for hip and knee components. We estimated the healthcare system could have saved $268,842 (42 percent x $584,516 plus 21 percent x $111,171) by purchasing these products from the FSS vendor and national contract vendors.

Purchasing Hierarchy Training. VHA policy requires that all procurement staff receive training on the VA purchasing hierarchy. A&MMS management was unaware of the training requirement. Management indicated that procurement staff had received training on required sources of supply as part of initial and refresher training. However, none of the 164 employees who purchased supplies received training on the purchasing hierarchy.
Recommendation 5. We recommended that the VISN Director ensure that the Healthcare System Director requires that: (a) procurement staff purchase prosthetic supplies according to VA’s purchasing hierarchy, (b) procurement staff obtain waivers for hip and knee purchases not made from national contracts, and (c) training on the VA purchasing hierarchy is provided to all procurement staff.

The VISN and Healthcare System Directors agreed with the findings and recommendations and reported that procurement staff will purchase supplies according to the procurement hierarchy. An audit process will be developed and implemented to review compliance with the VA purchasing hierarchy. The healthcare system will comply with VHA policy and obtain waivers if prosthetic products on national contracts do not meet the needs of patients. Also, training on the purchasing hierarchy will be provided to new purchase cardholders as well as part of annual refresher training. The improvement plans are acceptable, and we will follow up on the completion of planned actions.

Controlled Substances Accountability – Inspection Deficiencies Should Be Corrected and Other Controls Strengthened

Conditions Needing Improvement. Healthcare system management needed to strengthen controls to fully comply with VHA policy and address weaknesses in controlled substances inspection procedures. Also, controls should be strengthened as required by VA policy to prohibit one individual from controlling all aspects of a transaction. We identified four deficiencies that required corrective actions.

Controlled Substances Inspections. VHA policy requires medical facilities to conduct monthly unannounced inspections of all controlled substances storage and dispensing locations. To evaluate controlled substances accountability, we reviewed inspection reports for the 3-month period October 2004–December 2004, interviewed inspectors, and observed an unannounced inspection of selected areas where controlled substances were stored and dispensed. We identified the following inspection deficiencies:

- Inspectors were not comparing drugs held for destruction to VistA electronic reports to ensure drug stock removed from inventory for destruction was properly accounted for.
- Inspectors did not verify that pharmacy staff were conducting required 72-hour controlled substances inventories.
- Inspectors did not perform a random physical count of a minimum of 10 percent or a maximum of 50 Schedule II prescriptions dispensed from the outpatient pharmacy vault.
Inspectors did not verify that all controlled substances purchased since the last inspection had been placed into inventory stock.

One inspector at the Boston CBOC conducted all the inspections for a 44-month period from June 2001 to January 2005. Controlled substances inspectors should not be assigned to inspect the same area for 2 consecutive months.

**Inspector Training.** VHA policy requires the Controlled Substances Coordinator to conduct the training program for controlled substances inspectors. The Coordinator did not conduct inspector training, but instead this training was done by Pharmacy Service staff. In addition, documentation of this training was not maintained for 13 (33 percent) of 39 inspectors as required.

**Segregation of Duties.** VA policy prohibits one individual from controlling all the key aspects of a transaction such as ordering and receiving the same goods. The Pharmacy Supervisor at the Boston CBOC was the only employee purchasing and receiving controlled substances. Also, the Pharmacy Supervisor was the only pharmacist conducting all mandated 72-hour inventories of controlled substances.

**Pharmacy Policy.** VHA policy requires that the OIG Office of Investigations be notified of any suspected theft, diversion, or suspicious loss of drugs. The notification requirement was not included in the healthcare system’s local policy.

**Recommendation 6.** We recommended that the VISN Director ensure that the Healthcare System Director requires that: (a) controlled substances inspectors conduct inspections in accordance with VHA policy, (b) the Controlled Substances Coordinator conducts inspector training and maintains documentation, (c) segregation of duties is maintained when ordering and receiving controlled substances, and (d) healthcare system policy complies with VHA policy.

The VISN and Healthcare System Directors agreed with the findings and recommendations and reported that inspectors will complete national web-based computer training by September 30, 2005. The Controlled Substances Coordinator is developing a comprehensive training program to review all required procedures for controlled substances inspections. Refresher training will be provided annually for all inspectors. The Pharmacy Operations Manager will conduct spot checks to assess compliance with segregation of duties. Local policy will be updated to comply with VHA policy. The improvement plans are acceptable, and we will follow up on the completion of planned actions.
Information Technology Security – Controls Needed To Be Strengthened

Condition Needing Improvement. We reviewed healthcare system IT security to determine if controls and procedures were adequate to protect automated information systems (AIS) from unauthorized access, disclosure, modification, destruction, and misuse. We identified the following four issues that required corrective actions.

Physical Security. Physical access to AIS must be limited to only personnel who have a legitimate need for access. At the Jamaica Plain campus, the IRM administration room is adjacent to the computer room, separated only by a glass window. Electronic access card records disclosed that 99 non-IRM personnel had access to the computer room. During our review, the Information Security Officer (ISO) and Police Service took corrective action and removed access for all 99 employees.

Communication closets are located throughout VA medical facilities. Access to these rooms must also be limited to individuals having legitimate need for access. If someone with malicious intent gained access to one of these rooms they could cause harm to the healthcare system’s AIS. VHA policy states that signage must not inform the public where an information system is located in any particular building or area. Although there was no sign on the door of the communication closet that we were shown, the door had a window that allowed a view of the contents of the room. During our review, corrective action was taken to cover this window.

Hard Drive Sanitation. Prior to disposal of obsolete computer equipment, management must ensure that all sensitive information has been removed from the hard drives. We selected six computers that had been recently disposed of and requested documentation verifying the hard drives had been properly sanitized. Management could only provide documentation for one of the six computers. Without documentation, we could not be sure that hard drives had been sanitized prior to disposal.

Background Investigations. Background investigations are required for all personnel who have computer access to sensitive data and information. We reviewed background investigations for eight employees who held positions requiring background investigations (such as the Chief Information Officer, ISO, and IRM staff). As of February 10, 2005, background investigations had not been initiated for two of the eight employees including one who had been employed since 1985. The remaining six employees were identified as programmers, who have total access to all AIS resources. While the ISO had recently identified these six positions as high risk due to their job duties, Human Resource Management personnel continued to classify these positions as moderate risk, requiring less than full background investigations. These positions should
be classified as high risk because of their assigned duties and full background investigations conducted.

**Automatic Session Timeout.** The automatic password protected screensaver was not activated throughout the healthcare system. Most Microsoft Windows operating systems have a built-in feature that will time-out after a computer has been left idle for a specified period of time. This feature ensures the protection of sensitive patient, employee, and financial information when employees leave their stations, leaving sensitive information displayed on the monitor. VHA requires that the automatic interactive-session timeout be implemented for all computers.

**Recommendation 7.** We recommended that the VISN Director make sure that the Healthcare System Director takes action to: (a) limit and control physical access to AIS to only those with a legitimate need, (b) ensure hard drives are properly sanitized prior to disposal and that this is properly documented, (c) identify IRM staff requiring full background investigations because of their job duties and initiate background investigations, and (d) activate the password-protected automated session timeout on all healthcare system computers.

The VISN and Healthcare System Directors agreed with the findings and recommendations and reported that access to AIS will be controlled and limited to those individuals who have a legitimate need. The procedure for sanitizing hard drives has been strengthened and IRM will maintain a copy of the sanitation certificates. The ISO has initiated high-risk background investigations on all IRM personnel having high level access. A password protected screensaver was to be activated throughout the healthcare system by August 1, 2005. The improvement plans are acceptable, and we will follow up on the completion of planned actions.

**Pressure Ulcer Prevention and Management – Aspects of the Program Needed To Be Improved**

**Conditions Needing Improvement.** Pressure ulcers are common causes of morbidity (i.e., infections) for immobile hospitalized and long-term care patients. Hospital costs and lengths of hospital stays are significantly increased for patients who develop pressure ulcers. While the healthcare system had established processes that addressed pressure ulcer prevention and management, managers needed to implement a skin care policy to establish consistent documentation requirements. Managers also needed to ensure that hospital-acquired pressure ulcer data is accurate.

**Skin Care Policy.** The healthcare system had not established a comprehensive skin care policy to govern the prevention and management of pressure ulcers. As a result, we

11 A pressure ulcer is any lesion caused by unrelieved pressure, typically on a bony prominence that results in damage to underlying tissue.
found inconsistencies, especially in the documentation of interventions aimed at prevention and treatment of pressure ulcers. For example, a review of 10 medical records showed that 3 patients (2 at Brockton and 1 at West Roxbury) experienced a worsening of their pressure ulcers. In all three cases, there was no evidence in the medical records or on treatment flow sheets to support that the patients were turned and repositioned on a regular basis. However, nursing employees stated that patients were turned and repositioned every 2 hours. There was documentation in one patient’s medical record that indicated the patient chose to remain awake throughout the night to ensure that the patient was turned and repositioned. Additionally, interviews with nursing employees revealed an inconsistent understanding of what constituted appropriate documentation for turning and repositioning patients.

A skin care policy should also establish criteria for referring patients to designated pressure ulcer specialists or teams, define response times for following up on the referrals, and establish assessment and treatment protocols.

**Data Collection.** While the healthcare system implemented pressure ulcer tracking processes, there was an inconsistent understanding about the definition of “hospitalized-acquired” versus “community-acquired” pressure ulcers. For example, if a patient with a pressure ulcer was transferred from Brockton to West Roxbury for acute care, some nursing employees at West Roxbury coded the ulcer as being community-acquired because the patient came from another facility, even though the facility was part of the healthcare system, and the ulcer was acquired at Brockton. This potentially caused hospital-acquired pressure ulcers to be underreported, making it impossible for the healthcare system to determine the actual hospital-acquired pressure ulcer rate. Definitions of hospital-acquired and community-acquired pressure ulcers should be clarified so incidents of hospital-acquired ulcers are accurately reported and thoroughly analyzed.

**Recommendation 8.** We recommended that the VISN Director ensure that the Healthcare System Director requires that: (a) a skin care policy be established and implemented and (b) data on hospital-acquired pressure ulcers be accurately collected and thoroughly analyzed.

The VISN and Healthcare System Directors agreed with the findings and recommendations and reported that by August 31, 2005, the healthcare system’s interdisciplinary skin care policy would reflect the VISN policy, which is currently under development. In addition, pressure ulcer tracking tools are being revised and would be released by July 31, 2005. The improvement plans are acceptable, and we will follow up on the completion of planned actions.
Emergency Preparedness – Animal Research Laboratory Security and Employee Training Needed To Be Improved

Conditions Needing Improvement. The emergency preparedness program was well organized. However, healthcare system managers needed to improve the security of the animal research laboratory area and provide employee training about the proper use and application of personal protective equipment (PPE).

Security of Animal Research Laboratory. Our inspection of the Brockton animal research laboratory found an exterior door to a laboratory in Building 46 open. We also found another inner door and the door of the animal containment room open. A Research Service employee told us that staff move between research buildings (Buildings 46 and 48) frequently, and it was inconvenient to unlock the doors each time. However, VHA policy requires that research laboratories be secured at all times. The lack of security increased the risk of unauthorized access to research areas and presented safety risks to the animals in the containment room. Managers took corrective action while we were onsite.

PPE Training. A review of training records for 20 employees showed that most aspects of employee emergency preparedness training were accomplished. However, only 4 of the 20 records had documentation that the employees received training in the appropriate use of PPE. This training would include the proper application and use of respirators and correct techniques for putting on gloves and other protective clothing. VHA policy requires that emergency preparedness training for employees include education in the proper use and application of PPE.

Recommendation 9. We recommended that the VISN Director ensure that the Healthcare System Director takes actions to: (a) secure all research areas and require employees to comply with VA security directives and (b) provide PPE training for employees.

The VISN and Healthcare System Directors agreed with the findings and recommendations and reported that steps have been taken to secure the animal research laboratory area. The laboratory exterior door in Building 46 is now tied into the security system. Employees have been instructed on the requirement to secure the research space. In addition, PPE training will be completed by October 2005. The improvement plans are acceptable, and we will follow up on the completion of planned actions.
VISN 1 Director Comments

Department of Veterans Affairs

Memorandum

Date: July 7, 2005

From: VISN 1 Director

Subject: Combined Assessment Program Review of the VA Boston Healthcare System, Boston, MA.

To: Assistant Inspector General for Auditing (52)


If you have any questions, please contact Mr. Michael Lawson, Director BHCS 857 203 3000.

(Original signed by:)

Jeannette Chirico-Post, MD
Network Director
Healthcare System Director Comments

Department of Veterans Affairs

Memorandum

Date: July 6, 2005

From: Director, VA Boston Healthcare System (523/00)

Subject: Combined Assessment Program Review of the VA Boston Healthcare System, Boston, MA.

To: Network Director (10N1)

Attached please find on pages 36-48 our comments regarding the OIG/CAP review of the VA Boston Healthcare System.

(origin signed by:)

MICHAEL M. LAWSON
Healthcare System Director’s Comments to Office of Inspector General’s Report

The following Director’s comments are submitted in response to the recommendations in the Office of Inspector General Report:

OIG Recommendations

Recommendation 1. We recommend that the VISN Director ensure that the Healthcare System Director requires: (a) contracting officers to strengthen controls to prevent potential conflicts of interest, (b) contracting officers to make sure contract employees are qualified in accordance with contract requirements, (c) COTRs receive proper training, (d) COTRs properly monitor contracts and payments are made in accordance with contract terms, and (e) contracting officers correct contract administration and documentation deficiencies.

Concur Target Completion Date: Noted Below

(a.) Effective FY 2004, VABHS implemented a new system which includes review of all existing enhanced sharing contracts, which includes scarce medical service contracts, for healthcare services by the lead contracting officer. This review will ensure VA employees who participated in the acquisition process and or contract administration are free of potential conflicts of interest. As of October 2004, the contracting officers have received annual mandatory training on conflict of interest. The contracting officer will require VA employees participating in the acquisition process or contract administration to disclose and document whether or not the employee has a financial interest with the prospective contractor. Guidance will be requested from Regional Counsel in the event the healthcare system identifies a potential conflict of interest. Completion date: A review of all enhanced sharing contracts was completed by the Lead Contracting Officer in Jun 2005. Subsequent reviews will be conducted annually.
(b.) A review is being initiated in conjunction with the Chief of Staff's Office to validate written qualifications in scarce medical contracts. A one-time review will be conducted concurrently to ensure contract staff meet accepted qualifications. A new procedure has been implemented whereby the COTR, in conjunction with the contracting officer, maintains a checklist of required qualifications as specified in the contract. Qualifications of potential contract employees are checked against this list, and no contract staff is hired without demonstrating that all such requirements have been met. This checklist is kept on file in the respective service, with a copy forwarded to A&MMS for their records. This new process will be phased in as contracts are renewed or new contracts are pursued. Target Completion Date: December 31, 2005.

(c.) Following the OIG/CAP review in February 2005, COTRs certified their review of VHA’s Acquisition COTR Handbook. In addition, COTR in-person training is being provided in August 2005. Completion Date: February 2005

(d.) VABHS is currently in the process of reviewing and revising the scope of work for new perfusionists and medical physicist contracts to be awarded when the current option year expires on September 30, 2005. For the waste disposal contract, Environmental Management Service is now maintaining a log-book to track the number of boxes of waste by weight and the date they were picked up by the contractor for disposal. Future invoices will be compared against this log to ensure accurate billing per contract specifications. COTRs will monitor contracts and ensure payments are made in accordance with contract terms. Target Completion Date: September 30, 2005

(e.) The Lead Contracting Officer has developed and begun implementation of an enhanced review process to ensure required pre and post contractual requirements are completed. All scarce medical contracts will continue to be reviewed against an established checklist annually. In addition, all contracts requiring legal and technical review will be reviewed using the established checklist by the Lead
Contract Officer or designee prior to award. Completion Date: February 2005.

Agree with Monetary Benefits - $194,837

Recommendation 2. We recommend that the VISN Director ensure the Healthcare System Director: (a) develops an action plan to improve the productivity of VA-employed radiologists; (b) monitors and distributes the department’s workload in a cost effective manner; (c) reviews the radiology contracts and implements steps to either reduce costs, renegotiate terms where possible, or eliminate contractual arrangements where and if feasible; (d) ensures contracting officers conduct analysis for any future radiology contracts to make sure prices are reasonable; and (e) ensures radiology service contracts specify productivity and performance standards.

Concur Target Completion Date: Noted Below

(a.) In April, VHA implemented a VISTA productivity report titled “RVU report by staff physician”. This report is uploaded into an excel sheet and reviewed monthly by the Chief, Radiology Service. The report is utilized to adjust individual physician rotation schedules as well as clinical rotation responsibilities to ensure that individual physicians achieve greater productivity. Completion Date: December 2005

(b.) In addition to the monthly VHA VISTA RVU productivity report, the Chief, Radiology Service reviews the PACS system reports for unread films. Both systems are utilized to monitor productivity levels of individual radiologists and ensure cost effective use of VA and contract radiologists. Completion Date: December 2005

(c.) Beginning in March 2004, VABHS took steps to reduce the radiology contract. Without a less costly bid or sufficient VA radiology staff it was not possible to discontinue the contract in FY04. Aggressive recruitment of a Radiology Chief and VA staff radiologist during the fall and winter of 2004, resulted in notification to the Lahey contractor in early March of the likelihood of replacing the contract. The intent to terminate was conveyed in April 2005
with the contracted ending on June 12 of 2005. Rebuilding this large, subspecialty tertiary referral center radiology department has been a challenge that VABHS has met successfully. Contracting Officers will take steps to either reduce costs, renegotiate contract terms, or eliminate contractual arrangements if feasible. Current contracted radiologists will be monitored for productivity to ensure cost effectiveness and the potential for cost reduction. Target Date for Completion: Contract terminated June 2005, productivity compliance by December 2005.

(d.) To ensure the Boston HCS receives cost effective services, any potential future radiology contracts will incorporate cost and productivity figures, based on VHA established standards. Contracting Officers will ensure that any potential future contracts will, once again, be competitively bid to ensure cost effective services. Documentation supporting cost effective pricing, based on expected workload and productivity performance of contractors, will be maintained in the contract files.

(e.) As addressed in the above recommendation, VABHS will develop productivity and performance standards for all radiologist contract services, based on VHA established standards.

Recommendation 3. We recommend that the VISN Director ensure that the Healthcare System Director requires that:

a. Timely and aggressive follow-up is provided for the coders’ “Suspension Lists.”
b. A monitoring system is established to review the “RN B Report,” correct documentation deficiencies, and take action on billable encounters.
c. Healthcare system staff conduct periodic reviews of the “Cancelled Bills Report.”
d. Healthcare providers receive additional training on diagnoses, resident supervision, and service connected care documentation requirements.
e. HIM staff receive additional training on the use of CPT code modifiers.
f. Internal controls are established and compliance reviews are expanded to capture all episodes of care that need to be coded and billed.

**Concur**  
**Target Completion Date:** Noted Below

(a.) In the fall of 2004, VA Boston began developing third class software to trigger notification of the attending physician and/or service chief of missing documentation. This software is targeted for use during 4th quarter 2005. Guidance changed several times during the year however staff have been educated on the final procedures for timely management and follow-up of suspended list(s). On a weekly basis, HIMS will review the suspense list by utilizing the Quadramed Software Package and CPRS to locate documentation for coding/billing third party carriers. Cases of “No documentation, Insufficient Documentation, and Nonbillable Provider (Resident)” will be brought to the local Compliance Officer, Medical Executive Committee (MEC) and Medical Records Committee for action. **Target Completion Date:** September 30, 2005.

(b.) A monitoring system has been established to include the following: RNB report is reviewed monthly by the Compliance Officer, and coders are notified of any needed corrections. Coders make necessary corrections and code appropriately. This is currently in place, at all facilities with a standard reporting format to the VISN for RNB. HIMS and MCCF staff validate encounters for documentation deficiencies and non-billable provider (resident); attending physicians and/or service chiefs are notified of missing documentation for correction. Appropriate documentation is entered by the provider. Documentation issues are tracked at the Medical Executive Committee (MEC) and are considered in recredentialing. Compliance reviews and trends RNB results; spot-checks for accuracy. Results reported to the MEC. MCCF/HIMS/Compliance Officer will provide report of frequency and outcome results of documentation deficiencies to Compliance, MEC and Medical Record Committee for appropriate action. **Target Completion Date:** September 30, 2005.
(c.) Probe audits of the Cancelled Bills Report will be conducted daily by the Chief, MCCF and Program Analyst. This has occurred since August 2004 but would not have been reflected in retrospective period covered by the OIG CAP review. Effective July 2005, will begin trending this data for performance measures. Target Date for Completion: Completed in August 2004; trending data July 2005

(d.) Training program will be developed and provided to healthcare providers to cover areas identified. Will utilize EES training via satellite, MCCF Utilization Management nurses, and HIMS staff to provide this training at clinical service staff meetings and at the MEC. Target Date for Completion: December 31, 2005

(e.) HIM staff will receive refresher training on the use of CPT code modifiers at monthly coding roundtable and on an ongoing basis at staff meetings (updates). Completion Date: May 31, 2005

(f.) The following reports are being reviewed by HIMS, MCCF and Compliance: Suspended list in Quadramed, ACM reports in Quadramed, Diagnostic Measures Reports in VISTA, RNB, Local Scorecard for performance measures. HIMS, MCCF and Compliance staff will collaborate to develop internal monitoring systems which will include periodic sampling to assure that all billable patient care episodes are captured, properly coded and billed. Target Completion Date: December 31, 2005

Agree with Monetary Benefits - $1,460,659

Recommendation 4. We recommend that the VISN Director ensure that the Healthcare System Director requires that:

a. Responsible officials or their designees perform the physical inventories of nonexpendable property and ensure that property data recorded in AEMS/MERS is complete and accurate in accordance with VA policy.

b. Controls are strengthened to account for property listed on an EIL as “out of service.”
c. Employee access to the EIL database is restricted to employees who need access.

d. Service chiefs or responsible EIL officials are held accountable for computers that are located in their services.

e. Documentation is prepared to verify that disposed IT equipment is accounted for.

f. Documentation is prepared for loaned equipment.

g. Procedures are established to ensure proper documentation is completed for nonexpendable property that is turned-in, transferred, or destroyed and required disposal procedures are followed.

Concur

Target Completion Date: Noted Below

(a.) Stricter procedures have been implemented, and Services are held to the timeframe for completing equipment inventories (10-20 days). A&MMS will notify the Medical Center Director via e-mail of all delinquent CMR’s and a notice will be sent from the Director’s Office to the using service requiring corrective action. Completion Date: February 2005

(b.) The 4,883 items represent equipment from 1952-2004 and the merging of two large databases during the integration of two tertiary Medical Centers within the past five years. A&MMS will review the listing of “out of service” equipment from 1952-2004 and conduct a database cleansing in conjunction with a Report of Survey for all equipment that has outlived life expectancy and appears to be historical information that was never removed from the AEMS/MERS package. Target Completion Date: July 31, 2005

(c.) A&MMS is reviewing the list of employees who have the ability to add, edit, or delete nonexpendable property data in the EIL database and will significantly reduce the number of employees to those who require access. Target Completion Date: June 30, 2005

(d.) A&MMS & IRM did agree with the OIG/CAP team that service chiefs and managers are responsible for protecting all assets in their assigned areas of management control from theft, damage, and unauthorized access or use, but that the that IT equipment should remain on IRM’s CMR.
IRM & A&MMS will update their equipment management policies to include more specific procedures requiring Service Chiefs to be responsible and accountable for IT equipment in their service. Target Completion Date: July 31, 2005

(e.) As of February 10, 2005, A&MMS procedural change now requires the signature of the Chief, A&MMS or Chief, Storage & Distribution for all ADP equipment entered into Lot 1 for disposal. Completion Date: February 2005

(f.) The remaining 44 Revocable Licenses for loaned computers have been completed. Target Completion Date: April 26, 2005

(g.) VA Boston Policy (MCM-90-00-LM “Custody, Control and Disposal of Excess Property”) will be updated to reflect current procedures. Target Completion Date: July 31, 2005

Recommenda­tion 5. We recommend that the VISN Director ensure that the Healthcare System Director requires that: (a) procurement staff purchase prosthetic supplies according to the purchasing hierarchy, (b) procurement staff obtain waivers for hips and knee purchases not made from national contracts, and (c) training on the purchasing hierarchy is provided to all procurement staff.

Concur

Target Completion Date: Noted Below

(a.) Procurement staff will purchase supplies according to the procurement hierarchy. AMMS in collaboration with Fiscal will develop and implement an auditing process to review compliance with the purchasing hierarchy. The audit will be done in conjunction with the existing fiscal audits which reviews all cardholders and documentation. The results of the audits will be used to provide feedback and educate any staff found not in full compliance with the hierarchy. Target Completion Date: December 31, 2005.

(b.) Since the national contract went into effect on June 8, 2004, four waivers have been used in purchasing non-contract hip and knee prostheses. VABHS will comply with VHA policy in that waivers may be used only if prosthetic products
on national contracts do not meet the particular needs of a patient. Completed: June 2004

(c.) VABHS will insure that all procurement staff are provided with purchasing hierarchy training as part of the orientation process prior to issuing purchase cards. The Credit Card Coordinator for VABHS is responsible for providing Credit Card Training to all credit card holders. Credit cards will not be issued to an individual until they have completed the training which includes a segment on the hierarchy for required sources of supply. In addition to the initial training, all credit card holders are required to complete annual refresher training. In this training there is also a segment on required/preferred sources for products and services. Target Completion Date: December 31, 2005

**Agree with Monetary Benefits - $268,842**

**Recommendation 6.** We recommend that the VISN Director ensure that the Healthcare System Director requires that: (a) controlled substances inspectors conduct inspections in accordance with VHA policy, (b) the Coordinator conducts inspector training and maintains documentation, (c) separation of duties is maintained when ordering and receiving controlled substances, and (d) healthcare system policy complies with VHA policy.

**Concur**

**Target Completion Date:** Noted Below

(a.) Prior to the OIG/CAP visit, 6 new CS inspectors were appointed for the VA Boston (Causeway St.) OPC. This allows inspection assignments to be rotated among the inspectors (based on a schedule developed annually) so that no inspector reviews the same area 2 or more months in a row. All current inspectors have been mandated to complete the National Web-based computer training for Inspectors and provide certificates of completion. Target Completion Date: September 30, 2005

(b.) The Coordinator is conducting a new comprehensive training program which will include a PowerPoint presentation, handouts, special guest speakers, etc. to review
all required procedures for controlled substances inspections. All current Inspectors have been mandated to complete the National Web-based computer training for inspectors and provide certificates of completion. Refresher training will be provided annually for all CS Inspectors. Target Completion Date: September 30, 2005

(c.) Pharmacists were counseled and the policy was emphasized regarding the specific and explicit requirements/mandates for separation of duties. On a quarterly basis, the Pharmacy Operations Manager will conduct spot-checks to assess compliance with the separation of duties. Completion Date: February 2005

(d.) The policy for loss of controlled substances has been amended to include notification of the OIG Criminal Investigation branch. This was completed before their formal visit ended. Although this statement was not in the policy, the procedure had always been followed, and OIG had been notified for each loss whenever theft or diversion occurred. Completion Date: February 2005

Recommendation 7. We recommend that the VISN Director make sure that the Healthcare System Director takes action to: (a) limit and control physical access to AIS resources to only those with a legitimate need, (b) ensure hard drives are properly sanitized prior to disposal and that this is properly documented, (c) identify IRM staff requiring full background investigations because of their job duties and initiate background investigations, and (d) activate the password-protected automated session timeout on all medical center computers.

Concur Target Completion Date: Noted Below

(a.) Information Security Officer met with the Police and Security Service, who maintain and monitor access to the computer room and the adjacent IRM administration room. It was stressed that only those individuals identified by the CIO, in writing, will be provided electronic access to these rooms. The ISO will meet monthly with Police and Security service and ask that a review be done to ensure that no unauthorized
persons have been given access to these rooms. Communication closets have been inspected to ensure that there is no identifying signage as well as blocking the glass on any closets containing windows. Completion Date: February 2005.

(b.) The procedure for sanitizing hard drives has been strengthened and closely monitored. VABHS will follow those guidelines outlined in VISN Policy 10N1-38 and utilizes the sanitization certificate as a hard copy. The certificate contains the name of the person sanitizing the hard drive, the Information Security Officer and the Chief Information Officer. A copy of this certificate accompanies the equipment when delivered to A&MMS for disposal and a copy is kept on file in the IRM Office. Completion Date: February 2005

(c.) The Information Security Officer met with Human Resource personnel and reviewed all position classifications in IRM, and throughout the Medical Center, to assign a security risk level using the criteria found in VA Directive 0710. The ISO signed and forwarded VA Form 2280 to Human Resources, to initiate a high-risk background check on all IRM personnel identified as having high level access. Additionally, HR has initiated procedures for the ongoing identification and initiation of appropriate background checks on all employees based on their official duties and security risk level. Target Completion Date: Forms to be submitted to VACO by September 30, 2005.

(d.) A password-protected screensaver will be installed on all PCs and thin clients during June and July. Once the deployment is completed and users are trained on how to use it, it will be activated throughout Boston HCS. Target Completion Date: August 1, 2005

**Recommendation 8.** We recommend that the VISN Director ensure that the Healthcare System Director requires that: (a) a skin care policy be established and implemented and (b) data on hospital-acquired pressure ulcers be accurately collected and thoroughly analyzed.
Concur  

**Target Completion Date:** Noted Below

(a.) An Interdisciplinary Skin Care policy is under development by VISN 1. The VA Boston local policy will reflect the VISN policy. Definitions of hospital acquired/community acquired pressure ulcers will be stated in the policy. The policy will also provide guidance and procedures for ulcer staging/tracking/treatment, medical record documentation, and reinforce the process of risk identification and preventive treatment based on patient risk for skin breakdown. Target Completion Date: August 31, 2005

(b.) Pressure ulcer tracking has been in place since January 2005. The co-chairs of the Nursing Skin Care Committee review pressure ulcer data monthly. Pressure ulcer data is validated, pressure ulcer rates are calculated, and feedback provided to the unit Nurse Manager and Skin Care Representative. Further data analysis and corrective action are developed and implemented at the unit level. The pressure ulcer tracking tools are being revised and will be released by July 31, 2005. Target Completion Date: July 31, 2005

**Recommendation 9.** We recommend that the VISN Director ensure that the Healthcare System Director takes actions to: (a) secure all research areas and require employees to comply with VA security directives and (b) provide PPE training for employees.

Concur  

**Target Completion Date:** Noted Below

(a.) Research Service, Police, and Engineering cooperated to resolve all issues related to the incident, and the unsecured exterior door to the Research building was corrected immediately after the incident. This door/lock is now tied into the Access Security System and alarms in the Police and Security Office if the door is left unsecured. The employees were reminded by Research Service of the requirement to secure the space. The area of animal research security and the issues surrounding this were addressed at the time of the visit. Completion Date: February 2005
(b.) The medical center is committed to providing the staff to support the PPE training, decontamination drills and emergency management needs and will pursue the support staff needs through appropriate channels. The online documentation of training has been revised, which will allow easier record retrieval when training is provided in emergency preparedness for required personnel. Emergency preparedness training for the police and five engineering personnel has been completed. Clinical personnel required for the emergency preparedness/decontamination program are volunteers and are being medically cleared by employee health prior to receiving training. The PPE training will be completed by October 2005. Target Completion Date: October 31, 2005
## Service Contract Administration Deficiencies

<table>
<thead>
<tr>
<th>Contract Deficiencies</th>
<th>Perfusion Services</th>
<th>Chief Cardiology Services</th>
<th>Dermatology Services</th>
<th>Radiation Oncology Services</th>
<th>Medical Physicist Services</th>
<th>Ambulance Services</th>
<th>Elevator Maintenance Services</th>
<th>Transcription Services</th>
<th>Infectious Waste Removal Services</th>
<th>Ambulance Services</th>
<th>Engineering Supplies Services</th>
<th>Radiology Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfusion</td>
<td>$2,158,000</td>
<td>$153,000</td>
<td>$309,000</td>
<td>$928,000</td>
<td>$1,514,000</td>
<td>$4,532,000</td>
<td>$3,100,000</td>
<td>$2,171,626</td>
<td>$819,040</td>
<td>$3,014,589</td>
<td>$4,000,000</td>
<td>$13,851,842</td>
</tr>
</tbody>
</table>

### Head of the Contracting Activity Responsibilities

- Contracting officer exceeded warrant authority: X

### Contracting Officer Responsibilities

- Potential conflict of interest: X
- Workload analysis not conducted: X
- Market research not conducted: X
- Pricing analysis not conducted: X
- Legal/technical review not conducted: X
- EPLS database search not timely conducted: X
- Price negotiation memorandum not prepared: X
- Physicians not board certified: X
- Background investigations not conducted: X
- Inappropriate appointment of COTR: X
- COTRs not timely trained: X
- Written justification to exercise option not prepared: X

### COTR Responsibilities

- VA employees, other than COTR, validated services/certified payments: X
- Unallowable re-delegation of COTR duties: X
## Monetary Benefits in Accordance with IG Act Amendments

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Explanation of Benefit(s)</th>
<th>Better Use of Funds</th>
<th>Questioned Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1b</td>
<td>Questioned costs resulting from contracting officers not ensuring contract personnel were board certified in accordance with contract requirements (Perfusion Services).</td>
<td></td>
<td>$194,837</td>
</tr>
<tr>
<td>3</td>
<td>Better use of funds by increasing MCCF collections by validating suspended lists and the “RNB Report,” preventing cancellation of valid third-party outpatient bills, and identifying and billing all outpatient and inpatient services.</td>
<td></td>
<td>$1,460,659</td>
</tr>
<tr>
<td>5a</td>
<td>Better use of funds by purchasing prosthetic supplies according to the VA purchasing hierarchy.</td>
<td>268,842</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$1,729,501</td>
<td>$194,837</td>
</tr>
</tbody>
</table>
# OIG Contact and Staff Acknowledgments

<table>
<thead>
<tr>
<th>OIG Contact</th>
<th>Philip D. McDonald  781-687-3140</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgments</td>
<td>Maureen Barry</td>
</tr>
<tr>
<td></td>
<td>Stephen Bracci</td>
</tr>
<tr>
<td></td>
<td>John Cintolo</td>
</tr>
<tr>
<td></td>
<td>Bertha Clark</td>
</tr>
<tr>
<td></td>
<td>Sheila Cooley</td>
</tr>
<tr>
<td></td>
<td>Nicholas Dahl</td>
</tr>
<tr>
<td></td>
<td>Maureen Hamilton</td>
</tr>
<tr>
<td></td>
<td>David Irwin</td>
</tr>
<tr>
<td></td>
<td>Matthew Kidd</td>
</tr>
<tr>
<td></td>
<td>Jeanne Martin</td>
</tr>
<tr>
<td></td>
<td>James McCarthy</td>
</tr>
<tr>
<td></td>
<td>Patricia McGauley</td>
</tr>
<tr>
<td></td>
<td>Amy Mosman</td>
</tr>
<tr>
<td></td>
<td>Katherine Owens</td>
</tr>
<tr>
<td></td>
<td>Steven Rosenthal</td>
</tr>
<tr>
<td></td>
<td>Jackie Stumbris</td>
</tr>
<tr>
<td></td>
<td>Joseph Vivolo</td>
</tr>
</tbody>
</table>
Report Distribution

VA Distribution

Office of the Secretary
Veterans Health Administration
Assistant Secretaries
General Counsel
Director, Veterans Integrated Service Network 1 (10N1)
Director, VA Boston Healthcare System (523/00)

Non-VA Distribution

House Committee on Veterans’ Affairs
House Appropriations Subcommittee on Military Quality of Life and Veterans’ Affairs
House Committee on Government Reform
Senate Committee on Veterans’ Affairs
Senate Appropriations Subcommittee on Military Construction and Veterans’ Affairs
Senate Committee on Government Affairs
National Veterans Service Organizations
Government Accountability Office
Office of Management and Budget
U. S. Senate:  Edward M. Kennedy, John F. Kerry
U.S. House of Representatives:  John W. Oliver, Richard E. Neal, James P. McGovern,
Barney Frank, Martin T. Meehan, John F. Tierney, Edward J. Markey,
Michael E. Capuano, Stephen F. Lynch, William D. Delahunt

This report will be available in the near future on the OIG’s Web site at http://www.va.gov/oig/52/reports/mainlist.htm. This report will remain on the OIG Web site for at least 2 fiscal years after it is issued.