Department of Veterans Affairs
Office of Inspector General

Combined Assessment Program Review of the VA Connecticut Healthcare System West Haven, CT

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VA Office of Inspector General
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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.

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During the week of March 21-25, 2005, the Office of Inspector General (OIG) conducted a Combined Assessment Program (CAP) review of the VA Connecticut Healthcare System (system). The purpose of the review was to evaluate selected system 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 425 employees. The system is under the jurisdiction of Veterans Integrated Service Network (VISN) 1.

Results of Review

The following organizational strength was identified:

- The system developed a relational database that tracked performance measures and generated provider specific information for the Ambulatory Care Service Line.

This CAP review focused on 12 areas. The system complied with selected standards in the following areas:

- Controlled Substances Accountability
- Environment of Care
- Quality Management

We identified nine areas that needed additional management attention. To improve operations we made the following recommendations:

- Improve pressure ulcer management and documentation.
- Forward sole source contracts with affiliated medical schools valued at $500,000 or more for OIG pre-award audits, verify that contracted services are provided before payments are made, and improve contract administration.
- Improve VA radiologist productivity and reduce the cost of outsourced radiology services.
- Increase Medical Care Collections Fund (MCCF) revenue by validating and reviewing the Reasons Not Billable Report (RNB Report), and identifying and billing all patient services and fee basis care provided to insured patients.
- Improve inventory procedures and controls for nonexpendable equipment.
- Improve compliance with the supply purchasing hierarchy.

- Strengthen controls to ensure purchase cardholders comply with the Federal Acquisition Regulation (FAR) and obtain competition for purchases exceeding $2,500.
- Improve controls to ensure that prosthetic representatives inspect veterans' homes and instruct veterans on the safe use and maintenance of home durable medical equipment.
- Strengthen controls for information technology (IT) security.

This report was prepared under the direction of Ms. Katherine Owens, Director, and Ms. Jeanne Martin, Associate Director, Bedford Office of Healthcare Inspections.

Director Comments

The VISN and Healthcare System Directors agreed with the CAP review findings and recommendations and provided acceptable improvement plans. (See Appendix C, beginning on page 28, for the full text of the Director's comments.) We will follow up on the implementation of planned actions until they are completed.

(original signed by:)
JON A. WOODITCH
Acting Inspector General

Introduction

System Profile

Organization. Located in West Haven and Newington, Connecticut, the system consists of a tertiary care facility, an ambulatory care center, and community-based outpatient clinics (CBOCs) in Danbury, New London, Stamford, Waterbury, Winsted, and Windham, Connecticut. Its referral service area includes eight Connecticut counties.

Programs. The system provides comprehensive ambulatory, primary, medical, surgical, psychiatric, specialty, and long-term care. Additionally, it has programs in physical medicine and rehabilitation, neurology, oncology, dentistry, and geriatrics. The system has 156 acute care beds and 40 nursing home beds.

Affiliations and Research. The system is affiliated with Yale University and the University of Connecticut (UConn) Schools of Medicine, and UConn's School of Dentistry. The system supports approximately 600 resident and intern positions each year. In addition, affiliations with 85 other schools allow the system to train more than 600 students in nursing and allied health disciplines.

During Fiscal Year (FY) 2004, the system was involved in over 380 active research projects in medicine, psychiatry, neurology, surgery, dermatology, and radiology. The research funding for FY 2004 was approximately $33.3 million.

Resources. The system's budget for FY 2003 totaled approximately $233 million; the FY 2004 budget totaled approximately $272.5 million. FY 2003 staffing was 1,697 full-time employee equivalents (FTE); FY 2004 staffing was 1,742 FTE, which included 216 physician and 504 nursing FTE.

Workload. In FY 2003, the system treated 52,186 unique patients. During FY 2004, 53,243 unique patients were treated. Inpatient workload totaled 4,538 discharges for FY 2003, and 4,672 for FY 2004. For FY 2005 (through February 11) inpatient discharges totaled 1,073. The outpatient workload for FY 2003 totaled 493,920 visits and 512,731 for FY 2004. For FY 2005 (through February), workload totaled 127,181outpatient 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, quality management, 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 QM, patient care administration, and general management controls. QM is the process of monitoring the quality of patient care to identify and correct harmful practices or conditions. Patient care administration is the process of planning and delivering patient care. 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 activities:

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

The review covered facility operations for FY 2004 and FY 2005 through February 2005, and was done in accordance with OIG standard operating procedures for CAP reviews.

In this report we make recommendations and suggestions for improvement. Recommendations pertain to issues that are significant enough to be monitored by the OIG until corrective actions are implemented.

Results of Review

Organizational Strengths

The system developed a computerized relational database that supported the Ambulatory Care Service Line's performance measures and generated clinic and provider specific information. Clinical data on 100 percent of the patient population with diagnoses of diabetes, hypertension, or coronary artery disease were collected and used to provide each primary care team with information about how their patients ranked against national benchmarks and targets. All data were generated from Veterans Health Information Systems and Technology Architecture system, and no chart reviews were necessary. The database consisted of 12 main tables and 2 supporting tables. Each table had a common link to at least one other table and in most cases, could be linked to several tables. This linking ability allowed data to be generated in multiple formats such as by clinic, provider, and even by type of provider (physician, resident, nurse practitioner, or physician assistant).

Opportunities for Improvement

Pressure Ulcer Prevention and Management - Aspects of the Program Needed To Be Improved.

Conditions Needing Improvement. Pressure ulcers[1] are common causes of morbidity for immobile hospitalized and long-term care patients; consequently, hospital costs and lengths of stay are significantly higher for patients who develop pressure ulcers. System managers need to develop and implement a skin care policy that defines who may perform wound care, establish response times for wound care consults, and create turning and repositioning documentation protocols. Managers also need to establish processes to determine the efficacy of pressure ulcer treatments and to improve cost impact data analysis.

Medical Record Documentation. A review of 10 medical records showed that 4 patients experienced a worsening of their pressure ulcers. Of the four patients, three were in the Medical Intensive Care Unit (MICU). An interview with an MICU nursing employee indicated that nurses believed that MICU patients who were in specialty beds did not require turning and repositioning on a regular basis (usually every 2 hours). Two other patients' records showed that there was inconsistent documentation to support that the patients were turned and repositioned regularly.

Interviews with registered nurses (RNs) and nursing assistants revealed that there was no consensus among nursing employees about what constituted appropriate documentation for turning and repositioning. For example, one nursing employee reported that turning and repositioning was documented on nursing assistants' assignment sheets and then verbally reported to the charge nurse. Another reported that this information was documented on the activity of daily living flow sheets, and a third nursing employee reported that the entire process was verbal with no documentation required.

In October 2004, the Skin Care Committee identified that turning and repositioning documentation needed to be standardized and enforced, but at the time of the CAP review, this had not occurred.

Skin Care Policy. Nursing Service policy that directs the prevention and management of pressure ulcers establishes that only RNs can provide wound care to patients with stage I-IV pressure ulcers.[2] However, there was no system-wide pressure ulcer policy that established assessment and treatment protocols for non-nursing employees. For example, one medical record showed that physical therapists and a health technician provided

[1] A pressure ulcer is any lesion caused by unrelieved pressure, typically on a bony prominence, that results in damage to underlying tissue.

[2] This is a method of documenting the seriousness of pressure ulcers. A stage I ulcer indicates redness of the skin with no skin breakdown, while a stage IV ulcer has significant depth and possible bone visibility.

wound care for a patient with a stage III pressure ulcer. While there was evidence that these employees were trained to provide wound care, this practice was not consistent with the current nursing policy governing wound care.

In addition, there was no established timeframe for the wound care specialist or the pressure ulcer team to respond to consults. One medical record showed that a patient waited 10 days for the wound care specialist to respond to a consult. The patient's pressure ulcer worsened in the mean time. The wound care specialist's position was increased from a .3 FTE to a .8 FTE 2 weeks prior to the CAP visit; this should improve consultation response time.

Data Analysis. While data were provided to indicate improvements in the incidence of pressure ulcers, there was no evidence of a correlation of those improvements with specific interventions (specialty beds, wound care consults, and wound care templates). In addition, the facility's cost impact data was limited to bed and wound care product costs and did not address delayed discharges or increased lengths of stay due to pressure ulcers.

Recommended Improvement Action 1. We recommended that the VISN Director ensure that the system Director requires that: (a) appropriate medical record documentation requirements for the turning and repositioning of patients be established, (b) a pressure ulcer policy be developed and implemented that defines assessment and treatment protocols for all employees who provide wound care and expected response times for pressure ulcer consults, and (c) data analysis includes treatment efficacy and cost impact information.

The VISN and Healthcare System Directors agreed with the findings and recommendation. They reported that the nursing policy governing skin integrity was updated to include specific documentation requirements; a system policy is being developed that will define assessment and treatment protocols for all employees who provide wound care; and efficacy of treatment and cost impact data will be aggregated and analyzed. The implementation plans are acceptable, and we will follow up on the planned actions until they are completed.

Service Contracts – Contract Administration and Compliance with VA Policy Needed To Be Improved

Condition Needing Improvement. VISN and system managers needed to improve oversight of the contracting activity by ensuring that contracting officer technical representatives (COTRs) closely monitor contracts, and contracting officers perform responsibilities in accordance with the Federal Acquisition Regulation (FAR) and VA policy. To evaluate the effectiveness of the contracting activity, we reviewed 15 contracts valued at $14.8 million from a universe of 158 service contracts valued at $66.3 million. We identified the following issues that required management attention.

Pre-Award Audits of Sole Source Contracts Were Not Conducted. VHA policy requires that sole source contracts with affiliated medical schools valued at $500,000 or more be sent to the VA OIG Contract Review and Evaluation Division for pre-award audits. The primary purpose of the audits is to determine whether the prices are fair and reasonable in accordance with VA regulations and policy. Two contracts, with a total value of about $2.55 million, met the dollar threshold but were not sent for the required audits. We estimated that pre-award audits for these two contracts would have resulted in reduced costs of $332,531.[3]

Anesthesiology Services Were Not Properly Monitored. The system had a $432,000 non-competitive contract with the affiliate to provide anesthesiology services from July 2004 through February 2005. Because the COTR did not properly monitor the contract, the healthcare system overpaid the affiliate $58,990 for contract services. The contract required the COTR to maintain time and attendance logs to demonstrate that the system received contract services. Payment to the affiliate for services was based on one unit of anesthesiology services equaling 10 hours of work. Cardiac anesthesiology services were paid at a rate of $2,300 per unit, and non-cardiac anesthesiology services were paid at a rate of $1,900 per unit. The contract required that contract anesthesiologists be present at the system and perform the required services or the contract costs would be decreased.

The COTR did not require anesthesiologists to sign in and out of a logbook when they provided scheduled, overtime, or emergency service hours to the facility, as specified in the contract. The contract also stated that the contractor shall be paid for actual work performed. However, the COTR validated services and authorized payment to the contractor based on scheduled operating days rather than for actual hours worked.

- Our review of an anesthesiology service schedule and invoices for an 8-month period ending February 2005 showed the system paid the affiliate $355,725 for 73.5 units of cardiac anesthesiology services and 98.25 units of non-cardiac anesthesiology services based on scheduled operating days.

- However, a review of operating room logs of actual work performed showed the contractor should have been paid $296,735 for 69.0 units of cardiac anesthesiology services and 72.65 units of non-cardiac anesthesiology services.

- As a result, the system overpaid the affiliate 4.5 units of cardiac services and 25.60 units of non-cardiac services in the amount of $58,990.

The COTR did not properly monitor the contract and verify that invoices submitted by the affiliate accurately reflected work performed as required by the contract.

[3] The OIG has determined that pre-award audits have resulted in potential average savings of 21 percent of the proposed contract prices and that 62 percent of potential savings is sustained during contract negotiations. Applying these percentages to the total estimated value of the two contracts resulted in estimated cost savings of $332,531($2,554,000 x 21 percent x 62 percent).

Price Reasonableness for Perfusion Services Contract Was Not Assured. The system had a $554,000 sole source contract with the affiliate for perfusion services from October 2004 through September 2007. The contracting officer did not administer this contract in accordance with FAR and VHA policy and did not ensure the price reasonableness of the contract. The contracting officer did not provide supporting documentation related to workload analysis, market research, and price analysis. We also found that a legal and technical review was not conducted, nor was a mandatory pre-award audit. Further, mandatory background investigations of contract personnel and mandatory COTR training were not performed. A comparison of pricing with another VISN 1 perfusion services contract showed that the system's contract contained a higher labor rate by approximately 22 percent ($83/hour compared with $68/hour). As a result, there was no assurance of the price reasonableness of the perfusion services contract.

Patient Transportation Services Were Not Properly Monitored. The system had a $2 million contract for 14 drivers to provide patient transportation for ambulatory and non-ambulatory patients from July 2000 through June 2005. The contract also included the inter-facility transport of system employees, medical supplies, and laboratory specimens. We found that the contracting officer did not ensure that the contractor complied with contract requirements. We identified the following deficiencies:

- The contractor did not maintain adequate liability insurance coverage for drivers as required. The contract required the contractor to maintain contract liability insurance of not less than $1,000,000 per driver per occurrence. We found the total aggregate liability insurance coverage for the 14 drivers was only $2 million.

- One of the 14 drivers did not have a public passenger transportation endorsement. This endorsement ensures that the driver has a valid operator's license, has passed a physical examination that meets Department of Transportation requirements, has been fingerprinted, and has undergone a certified criminal background check.

- Only one contract driver possessed a commercial driver's license, which is needed to drive 15 passenger vans. In FY 2005, the system purchased three 17 passenger vans for patient transportation. The vans had not been placed in service because the contractor drivers did not have the required commercial drivers' licenses.

The contracting officer needed to ensure the contractor maintained adequate liability insurance and that drivers possessed a public passenger transportation endorsement and a commercial driver's license, as required by contract terms.

Lack of 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 pre-award and post-award contractual actions. Our review of the 15 contracts found the following contract administration deficiencies:

- Pre-Award Contractual Actions. Contracting officers did not forward three contracts valued at $4.1 million to the VA Office of Acquisition and Materiel Management (OA&MM) for legal and technical review, as required by VA policy. Workload analysis was not conducted for six contracts, market research was not conducted for five contracts, and pricing analysis was not conducted for one contract. For five 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. In addition, a solicitation was not adequately advertised for one contract.

- Post-Award Contractual Actions. Contracting officers did not conduct post-award contractual actions including 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 the contract terms for five contracts. In addition, contracting officers did not ensure that COTRs were timely trained for 14 contracts (COTRs were trained prior to the CAP review). Also, COTRs were not appointed in a timely manner for four contracts.

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

Recommended Improvement Action 2. We recommended that the VISN Director ensure the System Director requires that:

(a) Contracting officers send all sole source contracts with affiliated medical schools valued at $500,000 or more to the OIG for pre-award audits.
(b) Contracting officers initiate background investigations.
(c) Contracting officers conduct analysis to ensure prices are reasonable.
(d) COTRs receive proper training.
(e) COTRs properly monitor contracts.
(f) Contracting officers correct contract documentation deficiencies.
(g) Management improves oversight of the contracting activity.

The VISN and Healthcare System Directors agreed with the findings and recommendation. They reported that sole source contracts with affiliated medical schools with values of $500,000 or more will be evaluated for pre-award audits, effective immediately; background investigations are being documented and evidence of the investigations is available in the contract files; contracting officers are conducting price analysis; and COTR training will be maintained on a routine basis. Additionally, the Directors reported that COTRs have been trained to monitor contracts and correct documentation deficiencies, and an approach to monitoring has been developed and will

be implemented in FY 2006. The implementation plans are acceptable, and we will follow up on the planned actions until they are completed.

Radiology Services – VA Radiologists' Productivity Needed To Be Increased

Conditions Needing Improvement. Productivity for VA radiologists at the system in FY 2004 was found to be low and could be improved, and unnecessary contract costs could be eliminated. The system spent $273,550 in FY 2004 for contract radiologists to read and verify general radiology examinations at the Newington campus. Prior to the contract, a workload analysis had not been conducted to determine if system staff radiologists could absorb the Newington campus workload because the software to enable Relative Value Units (RVU)[4] analysis was distributed to the system a few weeks before the CAP review. Before our review, system management did not use any weighted measurement tool to quantitatively monitor and measure the productivity of its radiologists. Our analysis showed that an increase in the system's staff radiologists' productivity would eliminate an estimated $492,000 (over 2 years) that the system planned to spend on contract costs for radiology services at its Newington campus.

Productivity and Cost Benchmarks. During March 2004, the Director, VHA National Radiology Program, informed the OIG that there were no productivity standards for VA radiologists; and he advocated the use of RVUs to assess their productivity[5]. He stated that 5,000 RVUs would be a reasonable norm for full-time VA radiologists who have collateral administrative, educational, or research duties.

There are various indicators (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. Based on the findings in the above cited report and discussions with Director, VHA National Radiology Program, we determined that 5,000 to 6,000 RVUs was a reasonable benchmark to use in assessing the system's radiologists productivity. We used 5,000 RVUs as a benchmark for VA staff radiologists because of their administrative, training, and teaching duties that reduced time available for clinical work. For contract radiologists, a benchmark of 6,000 RVUs was used due to the absence of any collateral duties.

We used FY 2004 RVU productivity numbers and cost data for staff and contract radiologists to compute a productivity cost measurement figure. We used "cost per RVU," which divides the total compensation per radiologist by the number of RVUs

[4] RVUs are numbers established by Medicare and are used in its fee formula, along with practice and malpractice expenses. The work 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.

[5] See OIG Report No. 04-01371-177, issued 8/11/04, "Issues at VA Medical Center Bay Pines, Florida and Procurement and Deployment of the Core Financial and Logistics System (CoreFLS)."

produced, as a benchmark because it incorporates both compensation and productivity of the radiologists.

The 2004 Radiology Field Survey, which was conducted by VA's Radiology Program Office, reported "Pay plus benefits per RVU was about $50, which is very close to private sector benchmarks." Additionally, during the January 14, 2005, National Monthly Radiology Conference Call, the Director, VHA National Radiology Program, stated that the pay and RVU structure in the academic and private sector was as follows:

- Academic Sector salary: $271,000 / 5,500 RVUs per FTE = $48.00 in compensation per RVU
- Private Sector salary: $345,000 / 7,100 RVUs per FTE = $49.00 in compensation per RVU

Productivity Analysis. The system contracted services to provide general radiology coverage at the healthcare system's Newington campus, which is located approximately 40 miles from the main hospital in West Haven. During FY 2004, the contract radiologists provided 1,168 hours of radiology services. The following table shows how VA staff and the Newington campus contract radiologists compared with the productivity (5,000–6,000 RVUs) and cost benchmarks ($50 per RVU).

Table 1

Employment Source	Total FTE	Total Cost	Total RVU Output	RVU per FTE	Cost per RVU
VA Staff	9.35	$2,088,019	30,263 RVU	3,237 RVU	$69
Newington Contract Radiologists	.56	$273,550	1,953 RVU	3,488 RVU	$140

As illustrated in Table 1, our analysis showed that the measurable amount of work produced during FY 2004 by VA staff and Newington campus contract radiologists was below the 5,000 RVUs per FTE benchmark. The total workload output for the 9.35 FTE VA radiologists was 30,263 RVUs, which equates to an average of 3,237 RVUs per FTE. The total workload produced by the .56 FTE contract radiologists was 1,953 RVUs, which equates into a productivity level of 3,488 RVUs per FTEE (1,953 RVUs / .56 FTE).

Target RVU Cost. Table 1 shows the VA staff radiologists' average RVU cost was $69.00, which is $19 ($69 - $50) above the industry standard. The Newington campus contract radiologists' high cost of $140 per RVU is reflective of their low productivity numbers and the average hourly cost of $234.

If the VA staff radiologists produce at a level of 5,000 RVUs per FTE, their total workload output would be 38,375 RVUs. The system incurred $273,550 in outsourcing costs for 1,953 RVUs produced by the contract radiologists. The procedures completed by the contract radiologists were primarily X-Rays and ultrasounds, which were read by general radiologists (no neuroradiology or interventional radiology services were provided).

Table 2

Employment Source	Total FTE	Total Cost	Total RVU Output	RVU per FTE	Cost per RVU
VA Staff	9.35	$2,088,019	32,216	3,446	$65

As shown in Table 2, the system staff radiologists could absorb this additional workload (1,953 RVUs) by increasing the 9.35 FTE staff radiologists' productivity from 3,237 to 3,446 RVUs per FTE. Subsequently, by increasing productivity without increasing costs, the VA staff radiologists would reduce their cost per RVU to $65, which is $4 ($69 - $65) closer to the $50 benchmark. While still below the productivity and cost benchmarks, the healthcare system would realize substantial cost avoidance for contract services over the next two years.

Cost Avoidance. The system established a replacement contract to provide the radiology services at the Newington campus. The contract was structured for radiologists to provide 150 days of radiology coverage from February 1, 2005, through January 31, 2006, at a rate of $1,600 a day ($200 an hour), for a total of $240,000 for the first contract year. The cost for the second year of the contract increased to $252,000, as a result of a rate increase to $1,680 per day. The projected two-year cost of the contract is $492,000. When provided this information during the survey, the facility immediately discontinued the Newington Radiology Contract.

Our analysis showed that VA staff radiologists could absorb the additional workload by remotely reading the exams. The healthcare system made a $1.4 million initial investment for the acquisition of a commercial Picture Archive Communication System (PACS) in 1997. Through the use of PACS technology, medical service providers have the capability to capture, store, view and share radiology images. The facility subsequently spent considerable amount of money upgrading the program's tape library and recently installed a new operating system. PACS provides the system's staff radiologists with the technology to read Newington's caseload from the main campus in West Haven.

The previous contract radiologists stopped providing radiologist services at the Newington campus January 31, 2005. Since the replacement radiologists did not start providing services until the beginning of March 2005, there were no contract radiologists

providing service at the Newington campus throughout the month of February 2005. The healthcare system's staff radiologists covered the workload by remotely reading exams without encountering any notable problems. Our analysis also supports that 9.35 FTE VA staff radiologists could absorb the additional workload (1,953 RVUs) by increasing productivity 209 RVUs per FTE (1,953 RVUs / 9.35 FTE). Our analysis also shows that the healthcare system can save $492,000 in contract costs by distributing the Newington campus workload to VA staff radiologists.

Recommended Improvement Action 3. We recommended that the VISN Director ensure the System Director: (a) develops an action plan to improve the productivity of VA-employed radiologists; (b) reviews the radiology contracts and implements steps to either reduce costs, renegotiate terms where possible, or eliminate contractual arrangements where feasible; and (c) monitors and measures the productivity of in-house and contract radiologists using RVUs.

The VISN and Healthcare System Directors agreed with the findings and recommendation. They reported that a model for increased productivity was developed and will be implemented in FY 2006; the system discontinued the radiology contract at the Newington campus; and the Class III software that was distributed prior to the CAP visit gave the system the ability to review and target improvements in RVUs per radiologist levels and is consistently used for that purpose. The improvement plans are acceptable, and we will follow up on the planned actions until they are completed.

Medical Care Collections Fund – Improvements Were Needed To Enhance Revenue

Condition Needing Improvement. The system's MCCF program generally performed well during calendar year (CY) 2004, as demonstrated by exceeding their collections goal of $20,072,148 by almost $975,000 during that time. However, some improvements could be made to further enhance revenue. The system could increase MCCF revenue by validating and reviewing the Reasons Not Billable Report (RNB Report) and identifying and billing all patient services and fee basis care provided to insured patients. Our review of statistical samples of patient care episodes (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 CY 2004 an additional $2.6 million could have been billed, and MCCF revenues could have been increased by about $651,179 (3.1 percent) of the $21 million collected.

Reasons Not Billable Report. We reviewed three segments, Non-Billable Provider (Resident), Insufficient Documentation, and No Documentation, of the outpatient RNB Report for CY 2004. These three segments represent missed billing opportunities due to poor documentation by medical care providers. MCCF staff review patient encounter records to determine if sufficient documentation exists for the event to be billed. If so, they forward the encounters to contract coding staff located in Florida, generally within

10 days for outpatient encounters. Coding staff review documentation such as provider progress notes, test results, and surgical reports of patient encounters. Coding staff assign diagnoses codes from the International Classification of Diseases (ICD-9-CM) and procedure codes from Common Procedural Terminology (CPT) and return the coded encounter to MCCF staff, who process the bill. If MCCF staff determine that there is insufficient documentation to bill medical care, they do not send the encounter to the coding staff in Florida; instead they place the encounter in the RNB Report. As of March 9, 2005, there were 4,164 encounters valued at $1,261,538 listed in the three segments of the outpatient RNB Report for treatment provided during CY 2004.

There were only 124 encounters valued at $20,414 in the Non-Billable Provider (Resident) segment and 74 encounters valued at $23,161 in the Insufficient Documentation segment. MCCF staff attributed these low numbers of encounters for these two segments to the system's medical staff bylaws, which require that providers document outpatient care in progress notes or procedure reports and review and sign their documentation within 8 days of providing the care. We saw no evidence of this timeliness rule and its enforcement at any other facilities in VISN 1. The effectiveness of the requirement for timely documentation is reflected in the low number of encounters on these two segments; a comparable-sized facility and a smaller facility had nearly 10 times as many encounters on its lists for these two segments.

In contrast to the other two segments, there were 3,966 encounters valued at $1,217,962 listed in the No Documentation segment of the RNB Report. Based on a statistical sample review of 133 encounters, 54 in the No Documentation segment were incorrectly categorized. This represents an error rate of 40.6 percent. We estimate that in CY 2004, the actual number of encounters that were not billable because of no documentation was 1,610 (3,966 x 0.406) valued at $494,493 (1,217,962 x 0.406). MCCF staff attributed the incorrect categorization of encounters in this segment in part to the episodes of care that have multiple encounters created in order to capture workload such as triage or nursing encounters. New categories have been created in the RNB Report for these non-billable encounters.

The RNB Report must be accurate to make the report meaningful and facilitate efforts to detect and correct documentation deficiencies. The Non-Billable Provider (Resident), Insufficient Documentation, and No Documentation segments of the RNB Report could be used as a tool to monitor provider documentation. When there is no documentation or an encounter is inadequately documented, system management should promptly contact providers and request that proper documentation be submitted.

If providers appropriately documented all medical care provided to veterans in CY 2004, we estimated that an additional $538,068 ($494,493 + $20,414 + $23,161) could have been billed for the encounters on these three segments of the RNB Report; based on the system's average collection rate of 24.2 percent, $130,212 could have been collected.

Outpatient Billing Review. As of March 22, 2005, 118,242 outpatient encounters valued at $27,167,520 were billed to third party payers for care delivered in CY 2004. A statistical sample of 137 outpatient encounters, billed at $388,995 with collections of $104,366 was reviewed. The review identified 27 errors in our sample, which included coding, billing and documentation of medical records errors. Four encounters were over-billed by $201 (0.05 percent of the total billed amount). Twenty-three of the 137 encounters were under-billed by $24,224 (6.23 percent of the total billed amount).

- Over-Billed Encounters. We only found four encounters that were over-billed in the amount of $201, or 0.05 percent of the sample's value. These encounters were over-billed as the result of billing and coding errors. In two instances, the encounter had many radiological procedures, resulting in complex coding. In these instances, billing overlooked certain codes already billed and then created new bills that duplicated codes. In one encounter, miscoding resulted in a bill issued that overstated the complexity of the procedure; finally, one bill was issued for a non-billable event. These over-billed encounters were the result of human error only.

- Under-Billed Encounters. Under-billing occurred in 23 encounters in our sample. Twenty encounters involved coding and billing errors, and three encounters were billed incorrectly as the result of medical documentation errors. Examples of coding and billing, and medical documentation errors follow:

a. Three pathology encounters and one positron emission topography (PET) encounter were overlooked. In two of these instances, the institutional component was billed, while the corresponding pathology professional charge of $222 and the PET professional charge of $608 were not billed. Two pathology encounters were not coded and therefore remained unbilled. The failure to code and bill these procedures resulted in missed billing opportunities of about $486.

b. In a cardiac catheterization encounter, medical staff entered the patient into a cardiac research study immediately following the procedure. As a result, MCCF staff cancelled the bills for the procedure, believing it was research related. This resulted in missed billing opportunities of about $9,784.

c. A colonoscopy was miscoded. The bill, generated as a result of the inaccurate coding, was correctly cancelled by MCCF staff. However, this procedure was not re-coded, resulting in a missed billing opportunity of about $4,323.

d. An encounter related to oncology treatments could not be billed for either professional or institutional fees because the diagnosis was not provided in the medical record documentation. Without a diagnosis, the insurers will not pay. This resulted in missed billing opportunities of about $7,069.

These missed billing opportunities resulted from both human error and internal control weaknesses. Health Information Management, MCCF staff, and the Compliance officer should have review processes that can identify and correct for situations where charges are missed, encounters are not coded, and where medical documentation is inconsistent or incomplete. Improvement in these areas would increase both billing and collections as well as improve medical record documentation.

Projecting our sample results to the universe valued at $27,167,520, we estimated that $1.69 million could have been under-billed. Based on the system's average collection rate of 24.2 percent, we estimated that an additional $409,593 could have been collected.

Fee Basis. The healthcare system paid 8,073 fee-basis claims totaling $2,825,507 to non-VA providers who provided medical care to VA patients during CY 2004. The claims included 7,648 claims for $1,198,093 for outpatient care and 435 claims for $1,726,414 for inpatient care and inpatient ancillary services. Fee basis staff referred claims for patients with health insurance to MCCF staff when the system was billed by the provider, the services provided were reviewed, and the fee basis claims were paid.

To determine if fee basis care was properly billed to patients' insurance carriers, we reviewed a statistical sample of 96 outpatient claims and 79 inpatient and ancillary claims. Of the 96 outpatient claims, 83 claims were not billable to third party payers because the care provided was service-connected; the patient's insurance was not in effect on the date care was provided; or the medical service provided, such as home health care, was not covered by the patient's insurance. The remaining 13 outpatient claims were billable to third party payers (average bill value $372). Eight claims were correctly billed by MCCF for $4,414, but five claims were overlooked and not properly billed by MCCF staff, an error rate of 5.2 percent. These five claims could have been billed for $280.

Of the 79 inpatient claims, 50 claims were not billable to third party payers because the care provided was service-connected; the patient's insurance was not in effect on the date care was provided; or the medical service provided, such as nursing home care, was not covered by the patient's insurance. The remaining 29 inpatient and ancillary claims were billable to third party payers (average bill value of $4,381). Sixteen claims were correctly billed by MCCF staff for $97,689 but 13 claims were not properly billed by MCCF staff, an error rate of 16.5 percent. Seven of these unbilled claims were overlooked by MCCF staff but could have been billed for $33,880. Six unbilled inpatient and ancillary claims resulted because third party payers were identified after the treatment was rendered. The system began using a vendor in January 2005 to identify third party payers for veterans who had previously self-reported they did not have insurance. The vendor's third party payer information was electronically matched against past medical care records, and billable encounters were identified and billed. Outpatient fee basis encounters were identified and billed, as the outpatient fee basis program is tracked electronically. But because the inpatient fee basis program is not managed

electronically and reports are maintained manually, the system did not have a method to identify inpatient fee basis claims that needed to be billed to third party payers. These six claims could have been billed for $4,126.

Table 3: Overall Performance - Fee Basis Claims Billed to Third Party Payers

Outpatient Claims Universe: 7,638	Inpatient/Ancillary Claims Universe: 435
Sample: 96 outpatient claims	Sample: 79 inpatient claims
83 not billable	50 not billable
8 billed—$4,414	16 billed—$97,689
5 not billed—$280	13 not billed—$38,006

As illustrated in the above table, the total number of inpatient and ancillary fee basis claims in CY 2004 was relatively low as compared to outpatient fee basis claims, but the billable value of the missed inpatient and ancillary claims, $38,006, demonstrated the necessity of having a system to identify all billable claims.

Projecting our sample results to the universe, we estimated that an additional $147,684 could have been billed for outpatient fee basis care (5.2 percent error rate x 7,638 outpatient universe x $372 average bill value) and an additional $311,051 could have been billed for inpatient and ancillary fee basis care (16.5 percent error rate x 435 inpatient/ancillary universe x $4,381 average bill value). Based on the system's average collection rate of 24.2 percent, we estimated that an additional $111,014 could have been collected.

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

Table 4

Source	Projected Additional Billable Amount	Projected Additional Collectible Amount
Reasons Not Billable Report		
No Documentation	$494,493	$119,667
Non-Billable Provider (Resident)	20,414	4,940
Insufficient Documentation	23,161	5,605
Outpatient Encounters	1,692,537	409,953
Fee Basis	458,735	111,014
Totals	**$2,689,340**	**$651,179**

Conclusion. The system could increase MCCF billings and collections by improving documentation of medical care and ensuring that MCCF staff identify and process all billable patient healthcare services. 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. MCCF staff should be trained to properly categorize encounters placed on the report to make the report more meaningful and facilitate efforts to detect and correct documentation deficiencies. System providers should receive continuing training on documentation requirements, including identifying diagnoses in the progress notes, and the correct use of progress note templates. Internal controls such as compliance reviews or other monitors should be expanded to include a full review of patients' records to assure all billable patient care was coded and billed, including inpatient fee basis claims. By strengthening controls, the system has the opportunity to increase MCCF revenues by about $651,179 annually.

Recommended Improvement Action 4. We recommended that the VISN Director ensure that the Healthcare System Director requires that:

(a) A monitoring system be established to review the RNB Report, correct documentation deficiencies, and take action on billable encounters.
(b) System management promptly follows up on missing or inadequate documentation by contacting providers and requesting that proper documentation be submitted.
(c) MCCF staff receive additional training on the proper categorization of encounters on the RNB Report.
(d) System providers receive additional training on documenting encounters, including diagnoses and the proper use of progress note templates.
(e) Internal controls be established and compliance reviews are expanded to capture all episodes of care that need to be coded and billed.
(f) A mechanism is developed to identify inpatient fee basis claims that need to be billed after third party payers are identified.

The VISN and Healthcare System Directors agreed with the findings and recommendation. They reported that a monitoring system was implemented to review the RNB report, actions were implemented to correct documentation deficiencies, and processes were implemented on billable encounters; a management system was put in place to follow up on missing or inadequate documentation by contract providers; and MCCF staff received additional training on the RNB report. Additionally, the Directors reported that providers received training about documenting encounters; compliance reviews were expanded to capture episodes of care that require coding and billing; and a mechanism was developed to identify billable fee basis claims which will be implemented in FY 2006. The implementation plans are acceptable, and we will follow up on the planned actions until they are completed.

Equipment Accountability – Inventories Needed To Be Performed, and Controls Needed To Be Strengthened

Condition Needing Improvement. System managers 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 February 24, 2005, the system had 213 active EILs listing 22,352 equipment[6] items with a total acquisition value of about $84 million. We identified three 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 EIL officials did not complete 130 (61 percent) of 213 annual inventories within the required 10 or 20-day (when equipment items exceed 100) periods after receiving notification that the inventories were due. Two EILs were delinquent from 11 to 30 days, and the remaining 128 EILs were delinquent from 31 days to 18 months.

- A&MMS staff did not determine whether 540 items (acquisition value = $1,163,518) that appeared on the current property inventory list as "out of service," were appropriately listed in this category. Clinical engineering staff was actively working on reconciling the "out of service" list during our on-site review. Many of the items were old and were probably turned in (i.e., no longer at the medical center or at the Newington Campus.) However, according to A&MMS staff, the proper paperwork was probably not processed or initiated to delete them from the inventory list.

- Eighty-four employees had the capability to add data in Automated Engineering Management System/Medical Equipment Reporting System (AEMS/MERS), the property database; 66 employees had the capability to turn-in (dispose) items in the property database; 89 had the option to edit; and 66 had the ability for multiple-entry data input. We found that a review was needed to determine if the options for each

[6] 2,185 items (of the 22,352) had an acquisition value over $5,000; the total acquisition value of the 2,185 items = $65,856,456.

employee was justified. The integrity of the database was vulnerable to manipulation or misuse because so many employees had access to the system.

- We reviewed documentation for equipment that was on loan to VA employees and found that out of 136 items listed on the loan forms (VA Form 2105), only 3 had the loan period properly recorded. 35 forms had no dates recorded for the loan period and 98 forms indicated the loans were for an indefinite time period. The local policy on loan of property states the duration of the loan will not exceed a one-year period.

Accuracy of EILs. To assess equipment accountability, we reviewed a statistical sample of 98 equipment items[7] (combined acquisition value = $1,719,513). We were able to locate 71 of the 98 items. We identified the following accountability discrepancies:

- A&MMS staff could not locate 27 (28 percent) of 98 items (acquisition value = $589,396) and Reports of Survey were being prepared during our on-site visit.
- Fifty-seven items did not have locations listed in AEMS/MERS.
- Nine items did not have property bar-code labels on them.
- Data fields in the EIL database had missing data (for example, 28 serial numbers were missing and 4 were missing equipment descriptions).

In summary, we estimated that 602 items, with an acquisition value of $22,573,561, (estimated current value of $901,537) could potentially be unaccounted for. The statistical sample projection is based on a 90 percent confidence level, 10 percent error rate, and a margin of error of 5 percent.

Sensitive Equipment. VA policy requires that certain sensitive equipment 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. As of February 24, 2005, the healthcare system had 10,324 pieces of IT related equipment (acquisition value = $11,698,133).

To evaluate the IT equipment accountability, we reviewed a sample of 40 items (total acquisition value = $143,403). Nine items had accountability discrepancies:

- Eight IT items (acquisition value = $19,752) at the Newington campus could not be found, and Reports of Survey were being prepared for processing.
- One IT item (acquisition value = $3,878) at West Haven could not be found, and a Report of Survey was prepared.

[7] The 98 items were selected from the equipment list of nonexpendable property with each item having an acquisition value over $5,000.

We also determined that a majority (approximately 7,256 out of 10,324 items) of IT equipment was listed on Information Resource Management's (IRM) EIL inventory. Respective service chiefs should be accountable for sensitive IT equipment (for example, laptops computers) that are located in their respective service areas (these items should be listed on their EILs). IRM had not conducted a physical inventory of IT equipment for many years. However, IRM staff recently conducted an extensive IT inventory, but the results were not updated in AEMS/MERS. As a result, the system had no assurance that all sensitive IT items were accounted for.

Recommended Improvement Action 5. We recommended that the VISN Director ensure that the System Director requires that:

(a) Responsible officials or their designees perform the physical inventories of nonexpendable property in accordance with VA policy.
(b) Controls are strengthened to account for property listed on the EIL as "out of service."
(c) Employee access to the EIL database is restricted to employees who need access.
(d) Documentation is prepared for loaned equipment.
(e) Service chiefs are held accountable for computers that are located in their respective services.
(f) Sensitive equipment inventory be recorded in AEMS/MERS.

The VISN and Medical Center Directors agreed with the findings and recommendation. They reported that physical inventories will be performed and documented; the system currently has no equipment in the "out of service" category; and employee access to the EIL database was reduced. Additionally, the Directors reported that a loaned-equipment policy was implemented; service chiefs are now responsible for computers in their respective areas; and all sensitive equipment is currently recorded in AEMS/MERS. The implementation plans are acceptable, and we will follow up on the planned actions until they are completed.

Procurement of Prosthetic Supplies – Purchases Needed To Be in Compliance with VA's Purchasing Hierarchy

Condition Needing Improvement. System managers needed to ensure that prosthetic supplies are purchased in accordance with VA's purchasing hierarchy and clinicians prepare waivers as required. 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 personnel did not purchase prosthetic supplies (hip and knee components) from preferred sources, such as VA national contracts and FSS

contracts. During FY 2004, the system purchased prosthetic supplies on the open market, the least preferred purchasing source.

To determine if the healthcare system purchased prosthetic supplies effectively, we reviewed the purchases of hip and knee components from one vendor with a total cost of $413,946. We found that procurement personnel did not comply with the purchasing hierarchy and purchased hip and knee components on the open market. We obtained data from the VA National Acquisition Center showing that an FSS vendor offered comparable items at lower prices. During FY 2004, procurement personnel made 31 hip and knee purchases at a cost of $229,233 and 27 knee purchases at a cost of $184,713 from the vendor. A comparison of prices paid by the healthcare system to FSS prices showed that the system could have paid 55 percent less for hip components and 47.5 percent less for knee components. We estimated the healthcare system could have potentially saved $213,817 (55 percent x $229,233 and 47.5 percent x $184,713) by purchasing these products from FSS vendors.

Clinical Waivers. Clinicians did not request waivers, as required by the Deputy Under Secretary for Health for Operations and Management. Clinicians may prescribe a supply item that is not on a national contract if the supply item on the contract does not meet the particular needs of a patient. For these cases, the prescribing clinician is required to request in writing, to the Chief of Staff, a waiver for permission to prescribe products not on the national contract. On June 6, 2004, VA awarded national contracts to two vendors for the purchase of hip and knee components. To determine if the system complied with the waiver requirement, we reviewed six purchases of hip and knee components made on the open market from June 9–August 30, 2004. System management indicated that clinicians did not request waivers for the six purchases.

Recommended Improvement Action 6. We recommended that the VISN Director ensure that the System Director takes action to make sure that: (a) procurement personnel comply with the purchasing hierarchy and (b) clinicians request waivers from the Chief of Staff as required.

The VISN and Healthcare System Directors agreed with the findings and recommendation. They reported that compliance with the purchasing hierarchy is being enforced, and clinicians are now required to request waivers from the Chief of Staff. The implementation plans are acceptable, and we will follow up on the planned actions until they are completed.

Government Purchase Card Program – Compliance with the Federal Acquisition Regulation and VA Policy Needed To Be Improved

Condition Needing Improvement. System managers needed to strengthen controls to make sure Government purchase cardholders seek competition for open market purchases exceeding $2,500. For the period from October 1, 2003, through January 31, 2005, the

system had 117 cardholders and 51 approving officials processing 53,995 transactions valued at approximately $24 million. We identified the following condition that required corrective action.

Competitive Procurements. Purchase cardholders did not maintain documentation to support competition for purchases exceeding $2,500. The FAR requires purchase cardholders to use competition to obtain supplies and services at the best prices. Further, cardholders must consider three sources for competition or document the justification for using a sole source.

To determine if the system purchased prosthetic supplies in accordance with FAR, we reviewed 23 stair glide[8] purchases with a total cost of $107,340. We found that cardholders did not comply with the FAR and purchased these stair glides on the open market without obtaining bids from three sources or documenting a justification for using a sole source. Because these actions were not taken, cardholders did not have reasonable assurance that the best prices were obtained or that procurements were made in VA's best interest.

Recommended Improvement Action 7. We recommended that the VISN Director ensure that the System Director requires cardholders to document that competition was sought for purchases over $2,500 or document sole source justification.

The VISN and Healthcare System Directors agreed with the findings and recommendation. They reported purchase cardholders were educated about the requirement to document that competition was sought or to document sole source justification, and each purchase over $2,500 is now sent to the VISN Chief Logistics Officer with VA form 2268 that documents the process. The implementation plans are acceptable, and we will follow up on the planned actions until they are completed.

Durable Medical Equipment – Compliance with VA Policy Needed To Be Improved

Condition Needing Improvement. System managers needed to strengthen controls to ensure that prosthetic representatives inspect veterans' homes before procurement personnel purchase durable medical equipment for home use. Management also needed to ensure veterans are instructed on the safe use and proper maintenance of equipment that is delivered directly to their homes.

Home Inspections. Prosthetic representatives did not inspect veterans' homes before cardholders purchased stair glides for home use. Cardholders purchased 23 stair glides

[8] Electronically operated stair glides are designed to carry a patient from one level of the home to another. In general, there are two types: (a) the platform type, which is designed to carry the patient while seated in a wheelchair and (b) the chair type, which requires a patient to transfer into a specially designed chair which travels up and down the staircase.

valued at $107,340 for home use during the period October 1, 2003, through January 31, 2005. Prior to the purchase of a stair glide, an evaluation team is required to conduct a home inspection to determine if alternative facilities or rooms suitable for the prescribed activity are not available on the accessible level of the home. An evaluation team consists of a prosthetic representative and/or a physical medicine and rehabilitation service therapist. Because these visits were not conducted, the system did not know if alternative facilities or rooms were available that would have disallowed the purchase of these stair glides.

Instruction to Safely Operate and Maintain Equipment. Prosthetic representatives did not make sure veterans received instruction on the safe use and proper maintenance of stair glides that were delivered by outside vendors directly to veterans' homes. Representatives are required to make sure that outside vendors comply with requirements to provide patient education and training on the safe use and maintenance of stair glides and to maintain documentation supporting instruction has been given. Because representatives did not make sure instructions were given and did not assess the ability of veterans to safely operate and maintain these stair glides, veterans were exposed to increased risk of injury, and VA was exposed to increased liability.

Recommended Improvement Action 8. We recommended that the VISN Director ensure that the System Director requires that prosthetic representatives conduct home inspections and vendors instruct veterans on the safe use and proper maintenance of durable medical equipment.

The VISN and Healthcare System Directors agreed with the findings and recommendation. They reported that home inspections for stair glide requests will begin in FY 2006 and vendors have been educated to document that veterans are instructed on the safe use and proper maintenance of DME equipment. The implementation plans are acceptable, and we will follow up on the planned actions until they are completed.

Information Technology Security – Controls Needed To Be Strengthened

Condition Needing Improvement. System managers needed to strengthen IT security controls. We evaluated IT security to determine whether controls and procedures were adequate to protect automated information systems (AIS) resources from unauthorized access, disclosure, modification, destruction, and misuse. We found that the facility Information Security Officer (ISO) was proactively writing and implementing security policies, communicating security information to employees and to the public, and upgrading the facility with modern security features and equipment. The system's Chief Information Officer (CIO) converted the system to mainly a thin client environment. Thin client workstations provide added security features compared to desktop and laptop computers. The following issues required management attention.

Access to AIS Resources. Physical access to AIS resources must be limited to only those personnel who have a legitimate need for access. At the West Haven campus, access to the computer room was controlled by an electronic card reader. We found that 29 people without a need for access to the computer room had key cards which allowed them access. This included 26 current and 3 former employees. The ISO took corrective action while we were on-site by limiting computer room access to only Information Resource Management (IRM) Service employees with a legitimate and demonstrated need for access.

Physical Security. Proper controls and safeguards must be in place to protect each facility's AIS resources, including physical security of the computer room and all communication closets. We found the following physical security deficiencies: (a) the computer room at the West Haven campus included outside windows which could be accessed by the public; (b) the door to the computer room, which is accessed by a public hallway, had a small window through which the contents of the room could be identified; (c) the hinges of the computer room door were on the outside and could be removed by someone wanting to access the room; and (d) the outside window to the central communication closet, which was located on the first floor, did not have protective glass or a protective grate and contained an air conditioning unit that was not used. System management stated that work orders requesting removal of the air conditioning unit and securing the perimeter of the computer room by covering the outside windows with protective grates was submitted prior to our visit.

Background Investigations. Background investigations are required for all personnel who have access to sensitive data and information. We selected nine employees who, because of their job duties and access to sensitive data, held positions requiring a full background investigation (that is, CIO, ISO, and IRM staff). Full background investigations (BIs) had been requested for only four of the nine employees. The BIs had only been completed for one of these four, and were pending for the other three. Rather than full BIs, lower-level, moderate background investigations (MBIs) had been requested for the remaining five employees. The MBIs had been completed for three of the five and were pending for the other two. Full BIs need to be requested for these five employees and HCS officials need to follow up with the Office of Personnel Management on the three pending full BIs to make sure that they are completed.

Hard Drive Sanitation. All sensitive information and data must be removed from hard drives prior to the disposal of computer equipment. We selected ten computers that had been disposed of within the past 2 years (identified by local inventory number) and requested documentation showing that the hard drives had been properly sanitized. The facility ISO and CIO stated that before these computers were disposed of the hard drives were removed and retained in a secure closet, pending further guidance on how to dispose of them. They stated that the retained hard drives are now being shipped out and cleaned through a recently established contract. However, when the hard drives were

initially removed, the local inventory numbers of the computers that they came from were not retained. Therefore, documentation for the ten computers we selected could not be provided. The CIO took corrective action while we were on site and developed a standard operating procedure to capture all of the necessary information prior to the disposal of computer equipment.

Recommended Improvement Action 9. We recommended that the VISN Director ensure that the System Director takes action to: (a) limit and control physical access to automated information system resources to only those with a legitimate need, (b) ensure that the computer room and communication closets are physically secure from unauthorized access, (c) upgrade those employees with a moderate background investigation to a full background investigation and follow-up on all pending background investigations, and (d) ensure that all hard drives are properly sanitized prior to disposal and that this is properly documented.

The VISN and Healthcare System Directors agreed with the findings and recommendation. They reported that access to automated information system resources were limited; the security of computer room and communication closets were upgraded; back ground checks were completed; and a standard operating procedure for equipment turn-in and sanitation of hard drives has been developed and implemented, and a documentation process is in place. The implementation plans are acceptable, and we will follow up on the planned actions until they are completed.

Service Contracts - Contract Administration Deficiencies

Contract Deficiencies	Radiology Services $2,000,000	Anesthesiology Services $432,000	Home Oxygen Services $2,500,000	Acute Renal Study Wake Forest $928,000	Transcription Services $871,500	Acute Renal Study California $961,000	Eyeglasses $342,000	Cardiac Catheter Laboratory Services $435,000	Nephrology Services $209,000	Perfusion Services $554,000	Patient Transportation Services $2,050,000	Durable Medical Equipment Services $1,000,000	Ambulance Services $1,900,000	Transcription Services $500,000	Orthopedic Services $1,500,000
Contracting Officer Responsibilities															
Preaward audit not conducted	X									X					
Workload analysis not conducted	X	X	X		X					X			X		
Market research not conducted		X	X						X	X		X			
Price analysis not conducted			X												
Legal/technical review not conducted			X							X		X			
EPLS database search not conducted			X				X			X	X	X			
Price negotiation memorandum not prepared			X									X			
Background investigations not conducted	X	X						X	X	X	X			X	X
COTR appointment not timely			X				X				X	X			
COTRs not timely trained	X	X	X	X	X	X	X	X	X	X	X		X	X	X
Written justification to exercise option not prepared	X		X					X				X		X	
Solicitation not adequately advertised				X			X								

Note: The VISN Home Oxygen Services Contract was initiated by another facility; responsibility for maintenance of contract was shifted to the VA Connecticut Healthcare System; but when the contract file arrived, it was incomplete.

Appendix B

VISN Director Comments

Department of Veterans Affairs **Memorandum**

Date: September 14, 2005

From: VISN Director

Subject: **VA Connecticut Healthcare System West Haven, CT**

To: Office of Inspector General, Bedford Regional Office of Healthcare Inspections

Attached is the response to the Draft CAP Report for the VA Connecticut Healthcare System review.

If you have any questions, please contact Mr. Roger Johnson of the VA Connecticut Healthcare System at 203-937-4950.

(original signed by:)

TAMMY A. FOLLENSBEE

for Jeannette A. Chirico-Post, MD

Network Director

Appendix C

System Director Comments

Department of Veterans Affairs **Memorandum**

Date: September 7, 2005

From: System Director

Subject: **VA Connecticut Healthcare System West Haven, CT**

To: Ms. Peggy Seleski

Director, Management Review Service (10B5)

Office of Inspector General

Please find comments for VA Connecticut Healthcare System's IG/CAP review on the following pages. VA Connecticut Healthcare System appreciates the professional and constructive approach exhibited by the team and the opportunity to work with the Office of Inspector General to continuously improve the quality of patient care for United States Veterans.

You will find we have concurred with all of the recommendations and findings, in whole or part, and have provided specific corrective actions that have been implemented and/or will be implemented within a specified time frame.

Should you have any questions or concerns regarding comments for VA Connecticut Healthcare System, please do not hesitate to contact me.

(original signed by:)

ROGER JOHNSON

Director, VA Connecticut Healthcare System

System Director's Comments to Office of Inspector General's Report

The following Director's comments are submitted in response to the recommendation and suggestions in the Office of Inspector General Report:

OIG Recommendation(s)

Recommended Improvement Action 1. We recommend that the VISN Director ensure that the system Director requires that: (a) appropriate medical record documentation requirements for the turning and repositioning of patients be established, (b) a pressure ulcer policy be developed and implemented that defines assessment and treatment protocols for all employees who provide wound care and expected response times for pressure ulcer consults, and (c) data analysis includes treatment efficacy and cost impact information.

Concur **Target Completion Date:** December 31, 2005

(a) During the CAP visit the nursing policy #CP-17 (Skin Integrity) was updated to include specific documentation requirements on the ADL flow sheet for the turning and repositioning of patients. Documentation of compliance with the established policy will be monitored by the appropriate nurse manager and addressed with the employee as needed. Issues regarding compliance will be monitored on a quarterly basis by the nursing executive committee, beginning December 2005.

(b) A health system policy is being developed which will define assessment and treatment protocols for all employees who provide wound care. Included in the body of the policy is expected response time for pressure ulcer consults. The response time has been set as 3 business days with coverage by general surgery when Wound/Ostomy Nurse is not available. Compliance with pressure ulcer consult timeliness will be monitored by nursing service, under the direction of the Associate Director of Nursing and Patient Care Services. An initial report of compliance with this plan will be presented at the December 2005 nursing executive committee.

(c) Efficacy and cost impact data will be aggregated, analyzed and presented to the nursing executive committee, then to the medical staff executive committee on a biannual basis by the Wound/Ostomy Nurse. Documentation of this data will be available in the nursing executive minutes and medical staff executive committee minutes beginning December 2005.

Recommended Improvement Action 2. We recommend that the VISN Director ensure the System Director requires that: (a) contracting officers send all sole source contracts with affiliated medical schools valued at $500,000 or more to the OIG for pre-award audits, (b) contracting officers initiate background investigations, (c) contracting officers conduct analysis to ensure prices are reasonable, (d) COTRs receive proper training, (e) COTRs properly monitor contracts, (f) contracting officers correct contract documentation deficiencies, and (g) management improves oversight of the contracting activity.

Concur **Target Completion Date:** December 31, 2005

(a) All sole source contracts with affiliated medical schools with an estimated value of $500,000 or more will be evaluated by the OIG for pre-award audits effective immediately.

(b) As identified at the CAP visit, the contracting officers began to completely and consistently document background investigations and file in a common location (contract file). Evidence of these background investigations are available in the contract file.

(c) VA Connecticut Healthcare System contracting officers routinely conduct analysis to ensure prices are reasonable. Contracting files have been organized to document consistent and complete price analysis.

(d) COTR training was scheduled prior to the CAP survey and COTR training records were available at the start of the CAP survey. Current COTR training will be maintained on a routine basis.

(e-g) COTRs have completed training to understand the requirements regarding contract monitoring and corrective action for deficiencies. Upon completion of the training in March, management initiated a diligent program to oversee contracts. Plans for a systematic approach to monitoring this activity by the Governing Body and system leadership have been developed and will be implemented in FY 2006.

Recommended Improvement Action 3. We recommend that the VISN Director ensure the System Director: (a) develops an action plan to improve the productivity of VA-employed radiologists, (b) reviews the radiology contracts and implements steps to either reduce costs, renegotiate terms where possible, or eliminate contractual arrangements where feasible, and (c) monitors and measures the productivity of in-house and contract radiologists using RVUs.

Concur **Target Completion Date:** December 31, 2005

(a) A model for increased productivity had been developed and will be rolled out FY 2006, coordinating with anticipated salary restructuring.

(b) The CAP survey effectively demonstrated that a significant cost could be avoided by reducing use of contract radiologists at the Newington campus. VA Connecticut Healthcare System immediately discontinued use of contract radiologists for this work.

(c) VACHS has pioneered the use of an RVU-based productivity model (Academic Affairs, pages 682 - 689 July 2004). The ability to review individual radiologists' productivity, now permitted with the Class III software, that was just distributed a few weeks prior to the CAP visit, will allow for the ability to review and target improvement in RVU/radiologist levels. It is now readily available and consistently used. We are unaware of a 'norm' RVU per radiologist FTEE. The literature and associations such as the Medical Group Management Association have cited observed mean RVU/Clinical FTEE. Additionally, the literature (Academic Radiology, September 2005) illustrates the need to understand and consider the sub-specialties within radiology and or mix of exams read by the radiologist (i.e., interventional vs. nuclear studies) in measuring productivity.

Recommended Improvement Action 4. We recommend that the VISN Director ensure that the Healthcare System Director requires that: (a) a monitoring system be established to review the RNB Report, correct documentation deficiencies, and take action on billable encounters, (b) system management promptly follows-up on missing or inadequate documentation by contacting providers and requesting that proper documentation be submitted, (c) MCCF staff receive additional training on the proper categorization of encounters on the RNB Report, (d) system providers receive additional training on documenting encounters, including diagnoses and the proper use of progress note templates, (e) internal controls be established and compliance reviews are expanded to capture all episodes of care that need to be coded and billed, and (f) A mechanism is developed to identify inpatient fee basis claims that need to be billed after third party payers are identified.

Concur **Target Completion Date:** December 31, 2005

(a) A monitoring system has been implemented to review the RNB report for trends and noted issues of concern, to take corrective action of documentation deficiencies and to take action in billable encounters. Of note, 40% of the RNB Report is attributed to "group psychiatry notes." In our current bylaws, it states, "the one exception is in a mental health group setting where a progress note is required once a month for maintenance patients." This issue has already been raised for review with the compliance committee.

(b) A management system is in place to promptly follow-up on missing or inadequate documentation. Identified trends and areas of concern are addressed at a monthly compliance meeting for action planning.

(c) MCCF received additional training on the proper categorization of encounters on the RNB report after the CAP review. Evidence of such competency is available.

(d) Providers have received additional training on encounters, including diagnoses and the proper use of the progress note template. This education took place at the surgical and medicine monthly meetings in June. Administrative officers for the respective areas have been charged with monitoring the encounter action required report and are concurrently working to address issues with the appropriate sections.

(e) Compliance reviews have been expanded to capture all episodes of care that need to be coded and billed.

(f) A mechanism has been developed and will be implemented in FY 2006 to identify inpatient fee basis claims that need to be billed after third party payers are identified by PCM contract.

Recommended Improvement Action 5. We recommend that the VISN Director ensure that the System Director requires that: (a) responsible officials or their designees perform the physical inventories of nonexpendable property in accordance with VA policy, (b) controls are strengthened to account for property listed on the EIL as "out of service," (c) employee access to the EIL database is restricted to employees who need access, (d) documentation is prepared for loaned equipment, (e) service chiefs are held accountable for computers that are located in their respective services, and (f) sensitive equipment inventory be recorded in AEMS/MERS.

Concur **Target Completion Date:** December 31, 2005

(a) A plan has been implemented for responsible officials to document physical inventories of non-expendable property.

(b) The use of "out of service" equipment function has been corrected. When the issue was identified by the CAP review, this was corrected and there is no equipment currently in this category.

(c) Employee access has been significantly reduced from 89 employees to 43 employees. Only employees who need access have privileges.

(d) Loaned equipment process is outlined in local health system policy, which has been reviewed and updated in August 2005 to address the issue identified.

(e) Although responsibility for the CMR has not changed, it will be the practice of VA Connecticut Healthcare System to also hold the individual service chief responsible for computers that are located in their respective areas.

(f) All sensitive equipment inventory has been recorded in AEMS/MERS.

Recommended Improvement Action 6. We recommend that the VISN Director ensure that the System Director takes action to make sure that: (a) procurement personnel comply with the purchasing hierarchy and (b) clinicians request waivers from the Chief of Staff as required.

Concur **Target Completion Date:** December 31, 2005

(a) With a new chief of prosthetics, procurement personnel have made significant strides in complying with a specific purchasing hierarchy which will continue to be enforced in the future.

(b) All clinicians will request waivers from the Chief of Staff as required by policy.

Recommended Improvement Action 7. We recommend that the VISN Director ensure that the System Director requires cardholders to document that competition was sought for purchases over $2,500 or document sole source justification.

Concur **Target Completion Date:** December 31, 2005

Cardholders have been educated regarding the requirement to document that competition is sought for purchases over $2500 or document sole source justification. Each purchase over $2500 is sent to VISN Chief Logistics Officer with VA form 2268, documenting the process for this level of purchase.

Recommended Improvement Action 8. We recommend that the VISN Director ensure that the System Director requires that prosthetic representatives conduct home inspections, and vendors instruct veterans on the safe use and proper maintenance of durable medical equipment.

Concur **Target Completion Date:** December 31, 2005

Prosthetics representatives will conduct home inspections for stair glide requests in FY 2006. Additionally, vendors have been educated to document instruction that is provided to veterans on safe use and proper maintenance of DME. This will be monitored concurrently by the prosthetics department.

Recommended Improvement Action 9. We recommend that the VISN Director ensure that the System Director takes action to: (a) limit and control physical access to automated information system resources to only those with a legitimate need, (b) ensure that the computer room and communication closets are physically secure from unauthorized access, (c) upgrade those employees with a moderate background investigation to a full background investigation and follow-up on all pending background investigations, and (d) ensure that all hard drives are properly sanitized prior to disposal and that this is properly documented.

Concur **Target Completion Date:** December 31, 2005

(a) The information security officer took corrective action while the CAP visit was occurring to limit computer room access to only IRM service employees with legitimate and demonstrated need for access. Access for 29 police officers was removed and a plan was developed for emergency access for police officers, with keys and protocols in place to accomplish legitimate entry.

(b) Actions have been taken on the issues noted by the CAP review. Special screens were ordered for the exterior windows prior to the CAP visit and have since been installed. A new door has been ordered for the computer room, which will resolve the issue of the small window in the door and the hinges. A work order was initiated to remove the old air conditioner located on the exterior of the central closet and cover the window with mesh screening or steel bars.

(c) All background checks were either completed or initiated prior to the CAP review. However, proof of adjudication and appropriate documents were not present in the OPF to substantiate successful adjudication. All sensitivity level designations were appropriate at the time of submission and some have since required upgrading. Those computer specialists requiring upgrades will be submitted by December 2005.

(d) A standard operating procedure for equipment turn-in and sanitation has been developed and implemented. The appropriate EE numbers are now being associated with hard drive serial numbers using VA Form 0751, in accordance with the VHA Directive.

Appendix D

Monetary Benefits in Accordance with IG Act Amendments

Recommendation	Explanation of Benefit(s)	Better Use of Funds	Questioned Costs
1a	Better use of funds by requesting pre-award audits that would reduce contract prices.	$332,531	
1e	Questioned costs resulting from COTRs not validating that billed anesthesiology services had been received.		$58,990
2b	Better use of funds by increasing VA radiologist productivity and reducing the cost of outsourced services.	492,000	
3a, b, e, f	Better use of funds by increasing MCCF billings and collections by improved documentation of medical care and identifying and processing all billable patient healthcare services.	651,179	
5a	Better use of funds by purchasing prosthetic supplies according to the purchasing hierarchy.	213,817	
	Total	$1,689,527	$58,990

Appendix E

OIG Contact and Staff Acknowledgments

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Appendix F

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