



Department of Veterans Affairs Office of Inspector General

Healthcare Inspection

Alleged Anesthesia Staffing and Quality of Care Issues VA Caribbean Healthcare System San Juan, Puerto Rico

To Report Suspected Wrongdoing in VA Programs and Operations

**Telephone: 1-800-488-8244 between 8:30AM and 4PM Eastern Time,
Monday through Friday, excluding Federal holidays**

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Executive Summary

The purpose of this review was to determine the validity of allegations regarding insufficient anesthesiologist staffing and inadequate intra-operative and post-operative patient monitoring by anesthesiologists at the San Juan VA Medical Center in San Juan, Puerto Rico.

We did not substantiate the allegation of insufficient anesthesiologist staffing. The medical center employed six full-time anesthesiologists, and during the time frame we reviewed, there were never fewer than five on duty. While we found that anesthesiologists were not always present in the surgical suite prior to 7:30 a.m., surgeries did not begin until that time and their presence was not required. We could neither confirm nor refute the allegation that only one anesthesiologist was on duty one day 2 years ago. Although 5 of the 16 full-time Certified Registered Nurse Anesthetist (CRNA) positions were vacant at the time of our visit, 2 had been hired and would soon be reporting for duty. We identified no negative impact on patient outcomes as a result of these vacancies.

We did not substantiate the allegation that anesthesiologists failed to monitor patients during or after surgical procedures. Both an anesthesiologist and a CRNA are present at the beginning of each procedure. The CRNA remains to provide continuous monitoring and the anesthesiologist circulates between two operating rooms. We also found that monitoring was continued as required in the recovery phase.

We determined that anesthesia staff failed to properly document the identity of the practitioner who administered each medication during a procedure. We recommended that anesthesia staff be required to properly document medication administration in the anesthesia record.

The VISN and Healthcare System Directors agreed with our findings and recommendation and provided an appropriate action plan. All CRNA staff will receive training and managers will monitor compliance with medication administration documentation requirements. We will follow up on proposed actions until they are completed.



DEPARTMENT OF VETERANS AFFAIRS
Office of Inspector General
Washington, DC 20420

TO: Director, VA Sunshine Healthcare Network (10N8)

SUBJECT: Healthcare Inspection – Alleged Anesthesia Staffing and Quality of Care Issues, VA Caribbean Healthcare System, San Juan, Puerto Rico

Purpose

The VA Office of Inspector General (OIG), Office of Healthcare Inspections conducted an inspection to determine the validity of allegations regarding insufficient anesthesiologist staffing and inadequate intra-operative and post-operative patient monitoring by anesthesiologists at the San Juan VA Medical Center (the medical center) in San Juan, Puerto Rico.

Background

The medical center, part of the VA Caribbean Healthcare System, is in Veterans Integrated Service Network (VISN) 8. It is a tertiary care facility which provides medical, surgical, mental health, geriatric, rehabilitation, spinal cord injury, and dental services for veterans in Puerto Rico and the U.S. Virgin Islands. The medical center has eight operating suites and performed 4,524 major surgical procedures during fiscal year (FY) 2008. The services of both anesthesiologists and certified registered nurse anesthetists (CRNAs) are utilized in the provision of anesthesia care.

The OIG received allegations from an anonymous complainant who reported that:

- Anesthesiologist staffing was insufficient.
- Patients classified as American Society of Anesthesiologists (ASA) levels III and IV¹ scheduled for neurosurgery, cardiac bypass surgery, nephrectomy,² and orthopedic surgery were brought to the surgical suites before 7:30 a.m., when there was frequently only one anesthesiologist on duty.
- One day “about 2 years ago,” only one anesthesiologist was on duty for an entire day.

¹ASA classification is a ranking of the patient’s physical status and corresponding risk of sedation. ASA II: mild systemic disease. ASA III: A patient with severe systemic disease. ASA IV: A patient with severe systemic disease that is a constant threat to life.

² The excision of a kidney.

- Anesthesiologists did not always monitor patients during and after the administration of anesthesia.

Scope and Methodology

We conducted a site visit at the medical center February 9–11, 2009. We interviewed the Chief of Surgery, the Chief of Anesthesiology, the Acting Chief of Nurse Anesthetists, the operating room nurse manager (NM), the quality manager, operating room anesthesia and nursing staff, and medical center management. We reviewed patient medical records, local policies and procedures, Veterans Health Administration (VHA) directives, Joint Commission (JC) standards,³ and other pertinent documents. We also reviewed anesthesia staff credentialing and privileging documents, anesthesia staffing schedules, and quality management documents (Operative Procedure Committee minutes, mortality and morbidity data, and operating room utilization data.) In addition, we toured the surgical suites and the post-anesthesia care unit (PACU).

Because VHA policy⁴ directs facilities who employ both anesthesiologists and CRNAs to use a team approach when providing anesthesia care to patients, we included both disciplines in our review. Consequently, the term “anesthesia staff” is used throughout this report, except where distinctions are necessary for accuracy.

We conducted the review in accordance with *Quality Standards for Inspections* published by the President’s Council on Integrity and Efficiency.

INSPECTION RESULTS

Issue 1: Anesthesia Staffing

Anesthesiologist Staffing

We did not substantiate the allegation of insufficient anesthesiologist staffing. At the time of our site visit, the medical center employed six full-time anesthesiologists. There were no vacant positions. We reviewed time and attendance records for the first quarter of FY 2009 and found there were never fewer than five anesthesiologists on duty during that time period, and one anesthesiologist provided on-call 24-hour emergency coverage every calendar day. We reviewed operative schedule delay data and found delays that could be attributed to anesthesiologist availability accounted for only 1.5 percent of operative delays during the first quarter of FY 2009. None of the employees we interviewed voiced concerns related to anesthesiologist staffing.

While we found that anesthesiologists were not always present in the surgical suite prior to 7:30 a.m., we also found that their presence was not always required. We reviewed

³ VHA policy states medical facilities will meet or exceed JC standards.

⁴ VHA Handbook 1123, *Anesthesia Services*, March 7, 2007.

surgery schedules and found the first surgeries of the day are scheduled to commence at 7:30 a.m. We confirmed that surgical patients are brought to the surgical suites prior to 7:30 a.m. in preparation for 7:30 a.m. procedures; however, an anesthesiologist's presence in the surgical suite prior to the administration of anesthesia is not required by local policy, VHA policy, JC, or ASA standards of practice. In addition, the operating room NM told us there were adequate numbers of qualified, licensed nursing staff to monitor all pre-operative patients, including those classified as ASA levels III and IV prior to the administration of anesthesia. We found there were no reported incidents related to the quality of care provided to patients brought to the surgical suite before 7:30 a.m.

We could neither confirm nor refute the allegation that only one anesthesiologist was on duty for an entire day "about 2 years ago" due to the lack of specificity and the elapsed time between the allegation and the alleged incident.

CRNA Staffing

While there were five vacant full-time CRNA positions at the time of our site visit, we found no evidence that these vacancies negatively impacted the quality of anesthesia care provided at the medical center.

The FY 2009 budget allowed for 16 full-time CRNA positions. At the time of our visit, the medical center employed 11 full-time CRNAs and had hired 2 CRNAs who had not yet reported for duty. Two of the remaining three vacancies had only existed since December 2008. To address the immediate CRNA staffing vacancies, the medical center was in the process of contracting with a CRNA on a fee basis.

We reviewed operative schedule delay data and found delays that could be attributed to CRNA availability accounted for 5.3 percent of operative delays during the first quarter of FY 2009. We found there were no reported incidents related to the quality of care CRNAs provided to patients receiving anesthesia.

We reviewed the medical center's recruitment efforts and found managers were actively advertising for CRNAs in local newspapers and USA Jobs, the Federal government's official job site. Additionally, the medical center offers recruitment incentives to attract qualified CRNA staff. Despite these efforts, CRNA staffing remains a challenge that is not unique to the San Juan VA Medical Center.⁵

⁵ GAO, Report to The Honorable Daniel K. Akaka, Chairman, Committee on Veterans' Affairs, United States Senate: *Many Medical Facilities Have Challenges in Recruiting and Retaining Nurse Anesthetists* (December 13, 2007).

Issue 2: Quality of Anesthesia Care

We did not substantiate the allegation that anesthesiologists failed to monitor patients during or after surgical procedures.

We reviewed the credentialing and privileging files of all 17 anesthesia practitioners and found that all had the requisite professional credentials and qualifications to appropriately provide anesthesia care. We interviewed staff knowledgeable about the monitoring of surgical patients during and after receiving anesthesia and found that all believed anesthesiology staff monitored patients safely and in accordance with local policy. We reviewed quality management data and performance improvement committee minutes and found no anesthesia-related complications reported during FY 2008 or the first quarter of FY 2009.

We reviewed the electronic medical records and hard copy anesthesia flow sheets of 31 patients who received deep sedation, general anesthesia, and spinal anesthesia⁶ during the first quarter of FY 2009. Our sample consisted of ASA II, III, and IV patients whose surgical procedures included neurosurgery, cardiac bypass surgery, nephrectomy, and orthopedic surgery.

We found documentation that patients received pre-anesthesia assessments within 30 days of their scheduled surgical procedure as required. These assessments included a review of medical, anesthesia, and medication history; physical examination; and an assignment of an ASA classification. All records contained required documentation of a re-evaluation immediately before the administration of anesthesia to ensure the patient's condition had not changed since the pre-assessment.

Intra-Operative Monitoring

During a surgical procedure, anesthesia staff provide continuous monitoring of respiratory rate, oxygenation, cardiac rhythm, heart rate, and blood pressure.

Medical center practice was to have both an anesthesiologist and a CRNA present during the induction phase of anesthesia.⁷ Documentation supported that this occurred in the 31 cases we reviewed. Anesthesia staff we interviewed told us that after patients are safely induced and in stable condition, the CRNA would remain to monitor the patient and the anesthesiologist would circulate between two surgeries. The CRNAs we interviewed believed they could summon the anesthesiologist immediately if needed.

The 31 intra-operative anesthesia flow sheets we reviewed were in compliance with JC standards and the local intra-operative monitoring policy. Anesthesia staff documented

⁶ Local policy requires that those anesthetics are to be administered by an anesthesiologist with appropriate clinical privileges, or a CRNA working in conjunction with an appropriately credentialed anesthesiologist.

⁷ The initial administration of anesthetic agents and the establishment of a depth of anesthesia adequate for surgery.

monitoring prior to the administration of medication and at least every 5 minutes thereafter throughout the procedure.

Post-Anesthesia Monitoring

We also found that monitoring was continued as required in the recovery phase. An anesthesiologist is assigned to the PACU for the purpose of performing and documenting post-anesthesia evaluations and writing discharge orders. We reviewed appropriate records for documentation of the anesthesiologist's post-anesthesia evaluation and written discharge order from the PACU. Only one of the records reviewed did not contain this information. However, the record contained a PACU nursing note indicating the patient had been discharged by an anesthesiologist.

Issue 3: Documentation of Medication Administration

Although not one of the complainant's allegations, we identified an additional issue that required management attention. Anesthesia staff failed to properly document administered medications. We learned that an anesthesiologist and a CRNA are both present and administer medications to patients during the initial administration of anesthesia. We also learned that occasionally CRNAs relieve each other during lengthy surgeries. Consequently, a minimum of two anesthesia employees administered medications to the patients we reviewed. Anesthesia staff failed to document the identity of the employee who administered each medication, as required by standard documentation practice and local policy, in 29 of the 31 anesthesia records we reviewed.

Although the anesthesia record template required entry of the name of the employee who administered each medication, all but one CRNA who completed these forms entered "Not Applicable" instead of a name.

We brought this issue to the attention of senior managers who agreed the identities of those who administer medications to patients must be documented in the medical record.

Conclusions

We did not substantiate the allegation of insufficient anesthesiologist staffing. Although CRNA vacancies existed, we identified no negative impact on patient outcomes as a result. We also did not substantiate the allegation that surgical patients were not monitored appropriately before, during, and after the administration of anesthesia. We found, however, that anesthesia staff failed to properly document the identity of the practitioner who administered medications during a procedure.

Recommendation

Recommendation 1. We recommended that the VISN Director ensure that the System Director requires anesthesia staff to properly document medication administration in the anesthesia record.

Comments

The VISN and Healthcare System Directors concurred with our findings and recommendation and provided an appropriate action plan. All CRNAs will receive training, and compliance with medication administration documentation requirements will be monitored. We will follow up on the proposed actions until they are completed.

(original signed by:)

JOHN D. DAIGH, JR., M.D.
Assistant Inspector General for
Healthcare Inspections

VISN Director Comments

**Department of
Veterans Affairs**

Memorandum

Date: March 25, 2009

From: Director, VA Sunshine Healthcare Network (10N8)

Subject: **Healthcare Inspection – Alleged Anesthesia Staffing and Quality of Care Issues, VA Caribbean Healthcare System, San Juan, PR**

To: Director, St. Petersburg Office of Healthcare Inspections
(54SP)

Director, Management Review Office (10B5)

I have reviewed and concur with the recommendations and responses from the VA Caribbean Healthcare System.

(original signed by:)

Nevin M. Weaver, FACHE

System Director Comments

**Department of
Veterans Affairs**

Memorandum

Date: March 25, 2009

From: Director, VA Caribbean Healthcare System (672/00)

Subject: **Healthcare Inspection – Alleged Anesthesia Staffing and Quality of Care Issues, VA Caribbean Healthcare System, San Juan, PR**

To: Director, Sunshine Healthcare Network (10N8)

We thank you for allowing us the opportunity to review and respond to the subject report.

We concur with the conclusions and the recommendation presented by the Office of the Inspector General. We present you the plan of action designed to correct the area where we were provided with a recommendation.

(original signed by:)

WANDA MIMS, MBA

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

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

OIG Recommendations

Recommendation 1. We recommended that the VISN Director ensure that the System Director requires anesthesia staff to properly document medication administration in the anesthesia record.

Concur

Target Completion Date: July 30, 2009

The VA Caribbean Healthcare System Chief Anesthesia, Surgery Service will ascertain that training is provided to all CRNA staff on how to document the provider of each medication administration within the Surgical Package, by using the OR Option; thus, allowing data to be transferred to CPRS (in view of the fact that the Anesthesia Option does not allow this data entry). Attendance at the training will be documented to ascertain 100 percent compliance.

The target date for the completion of the training is May 29, 2009.

In addition, the VA Caribbean Healthcare System's Chief, Anesthesia Surgery Service will establish an ongoing monitor for the compliance of medication administration documentation and will report monthly to the Director until 100 percent compliance is reached and sustained.

OIG Contact and Staff Acknowledgments

OIG Contact	Christa Sisterhen, Director St. Petersburg Regional Office of Healthcare Inspections (727) 395-2419
Acknowledgments	Stephanie Hensel

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