Department of Veterans Affairs
Office of Inspector General

Healthcare Inspection
Alleged Quality of Care Issues in the Emergency Department at Northport VA Medical Center Northport, New York

Report No. 12-00999-135 **March 27, 2012**

VA Office of Inspector General
Washington, DC 20420

To Report Suspected Wrongdoing in VA Programs and Operations:
Telephone: 1-800-488-8244
E-Mail: vaoighotline@va.gov
(Hotline Information: http://www.va.gov/oig/contacts/hotline.asp)

Executive Summary

The VA Office of Inspector General Office of Healthcare Inspections performed an inspection to determine the validity of allegations regarding quality of care in the emergency department (ED) at the Northport VA Medical Center (the facility) in Northport, NY. Specifically, a complainant alleged that:

- A facility ED physician failed to diagnose an acute myocardial infarction.
- A facility ED physician behaved unprofessionally.

We did not substantiate the allegation that a facility ED physician failed to diagnose an acute myocardial infarction. While the patient in question was ultimately shown to have had an acute myocardial infarction, we found that the ED physician in question initiated an appropriate evaluation for a patient presenting to an ED with atypical chest pain. The physician obtained a targeted history and physical examination, an electrocardiogram, and appropriate blood tests. However, the patient refused to remain in observation and left against medical advice, cutting short his evaluation.

We did not substantiate the allegation that an ED physician behaved unprofessionally. We did not find evidence that the physician yelled at another patient as alleged, nor did we find evidence of any other unprofessional behavior by the physician. We made no recommendations.

The Veterans Integrated Service Network and Facility Directors concurred with the findings. No further action is required.

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

TO: Director, Northport VA Medical Center (632/00)

SUBJECT: Healthcare Inspection—Alleged Quality of Care Issues in the Emergency Department, Northport VA Medical Center, Northport, NY

Purpose

The VA Office of Inspector General Office of Healthcare Inspections performed an inspection to assess the merit of allegations concerning the quality of care in the Northport VA Medical Center's (the facility) emergency department (ED).

Background

Northport VA Medical Center

The facility's services include primary care, surgery, psychiatry, rehabilitative medicine, and medical specialty care. The facility is part of Veterans Integrated Service Network 3. The facility ED has 15 acute care beds and 3 observation/holding beds and sees approximately 15,000 patients per year.

Acute Myocardial Infarction

Acute myocardial infarction (AMI) is caused by an inadequate blood supply, usually due to coronary artery blockage, that damages the heart muscle.[1] Because heart muscle cells do not regenerate when they die, AMI can result in permanent damage to the heart. The symptoms of AMI include chest pain that radiates to the left arm, neck, or jaw; nausea and vomiting; sweating; and shortness of breath.

Evaluation of patients with chest pain in the ED should begin by considering those conditions that are life threatening, including AMI.[2] A patient who comes to the ED with symptoms that might be due to AMI should have a rapid history and physical, an

[1] Medscape Reference, *Pathology of Acute Myocardial Infarction*, updated April 6, 2011, http://emedicine.medscape.com/article/1960472-overview, accessed February 2012.
[2] Boie, Eric T. *Initial Evaluation of Chest Pain.* Emergency Medicine Clinics of North America - November 2005 (Vol. 23, Issue 4, Pages 937–957, DOI: 10.1016/j.emc.2005.07.007).

electrocardiogram (ECG), and appropriate laboratory tests, including blood tests for cardiac markers, such as troponin,[3] that indicate injury to heart muscle.[4]

While a normal ECG does not preclude AMI, an abnormal ECG can be significant. Some ECG changes, such as ST-segment elevation, are highly suspicious for AMI; other changes are not as suspicious and require further evaluation.[5] Troponin levels in the blood begin to rise 4–6 hours after the onset of cardiac injury, peak at 18–24 hours, and remain elevated for up to 2 weeks.[6] A single elevated troponin level in a patient with chest pain can indicate AMI, but a single normal level does not usually rule it out.

If the initial ECG or troponin level is abnormal and indicates possible AMI, or if strong suspicion of AMI remains despite negative tests, the patient should be admitted to the hospital. Alternatively, patients with atypical chest pain[7] of unknown cause should remain under observation to undergo further testing to determine if AMI is present.[8] Studies show that patients with one or more negative troponin levels 8–12 hours after the onset of pain are at low risk for AMI.[9]

According to Veteran's Health Administration (VHA) policy, patients can remain in observation status for up to 23 hours and 59 minutes for extended monitoring, evaluation, and treatment.[10] Evaluation of atypical chest pain for possible AMI is an indication for placing a patient in observation status in VHA facilities with observation beds.

Allegations

A complainant called the OIG Hotline division with concerns regarding the care he received from a physician in the facility ED in February 2011. The complainant alleged that:

- A physician incorrectly diagnosed the complainant/patient's chest pain as bronchitis, but it was later diagnosed as AMI at another hospital.
- An ED physician behaved unprofessionally, yelled at another patient in the ED, and upset the complainant/patient's wife.

[3] Troponin is a protein found in heart muscle that is released into the blood when the heart is damaged, such as with AMI.
[4] National Institute for Health and Clinical Excellence, *Chest Pain of Recent Onset*, March 2010.
[5] Boie, Eric T. *Initial Evaluation of Chest Pain.* Emergency Medicine Clinics of North America - November 2005. (Vol. 23, Issue 4, Pages 937–957, DOI: 10.1016/j.emc.2005.07.007).
[6] Lee, Thomas, Goldman, Lee. *Evaluation of the Patient with Acute Chest Pain*. The New England Journal of Medicine. April 20, 2000. Volume 342; Number 16. Page 1187–1195.
[7] Atypical chest pain is used to designate chest pain that is not typical of angina pectoris or AMI.
[8] Ibid.
[9] Clinical Policy: *Critical Issues in the Evaluation and Management of Adult Patients with Non-ST-Segment Elevation Acute Coronary Syndromes*. American College of Emergency Physicians. September 2006.
[10] VHA Directive 2010-011, Standards for Emergency Departments, Urgent Care Clinics and Facility Observation Beds, March 4, 2010.

Scope and Methodology

To address the allegations, we reviewed the patient's medical records, interviewed facility staff, and reviewed facility documents. We also reviewed industry and VHA standards for the evaluation and management of chest pain in the ED.

We conducted the inspection in accordance with *Quality Standards for Inspection and Evaluation* published by the Council of the Inspectors General on Integrity and Efficiency.

Case Summary

Day 1: The patient went to the facility ED at 3:57 p.m. complaining of chest pain for a week that had worsened that morning. He had a past medical history of bronchitis, elevated cholesterol, anxiety, and depression. A triage nurse described the patient's pain as "sternal, radiating to the throat/L [left] ear and L eye" and noted that the patient rated the pain as 6 out of 10, with 10 being the worse pain imaginable. The patient reported that he took four aspirin and four ibuprofen prior to arrival.

The patient was moved to the treatment area of the ED immediately after triage. An ECG showed normal sinus rhythm with premature atrial contractions[11] but was not suspicious for AMI. His laboratory tests, including a troponin level, were normal, and a chest x-ray was normal.

At 4:05 p.m., a facility ED physician—the individual about whom the complainant/patient complained—examined the patient and described the chest pain in the medical record as pleuritic,[12] noting that the pain worsened with breathing and coughing. The physician also documented that the patient complained of a possible fever ("my head feels warm") but had no nausea or vomiting and no shortness of breath. The physician reviewed the nursing triage note that included the patient's past medical history and noted that the patient was a cigarette smoker.

The patient's initial vital signs showed an elevated blood pressure but were otherwise normal. There were no other significant findings documented on the physical examination. Although the patient did not receive any medication for pain while in the ED, he was nevertheless pain free at the time of discharge, and a repeat blood pressure reading was lower.

[11] Premature atrial contractions are extra heartbeats that originate in the upper chamber of the heart. They are usually considered harmless.
[12] Pleuritic chest pain is sharp pain in the chest that worsens with deep breathing or coughing. Pleuritic chest pain is a form of atypical chest pain.

At 5:15 p.m., an ED nurse documented that the physician wanted to admit the patient to observation, but the patient signed out "against medical advice" (AMA). The physician also documented that he wanted to place the patient on observation, but the patient refused to stay. The physician prescribed an antibiotic and cough syrup, and the patient left AMA with the diagnoses of bronchitis and atypical chest pain.

Day 2: At 5:49 a.m., the patient spoke with a facility telephone triage nurse complaining of chest pain radiating to the jaw, neck, and ear and difficulty breathing for 2 days. The triage nurse told the patient to call 911 and go to the ED. He went to a community hospital later that same day at 6:41 p.m. An initial ECG at this hospital showed changes that were suspicious for AMI, and his troponin level was elevated at 8.35.[13] The patient refused admission and treatment and left AMA about 4 hours after arrival.

Day 3: The patient spoke with his primary care provider at the facility and told her that he had a heart attack. The provider recommended immediate evaluation at the facility, which the patient declined. The patient went to a second community hospital at 3:48 p.m., complaining of chest pain and difficulty breathing. An ECG again showed changes suspicious for AMI, and the patient's troponin level remained elevated at 4.01. The ED physician at this community hospital documented that the patient needed to be transferred to another community hospital to undergo a cardiac catheterization,[14] but the patient refused. He also refused to stay at this community hospital for further treatment for the AMI and left AMA at 6:45 p.m.

Days 7–9: On day 7, the patient went to a third community hospital where he was admitted for complaints of chest pain. A physician at this hospital scheduled a cardiac catheterization for the following day, but the patient refused to undergo the procedure. At 11:00 a.m. on Day 8, the patient insisted on leaving AMA. He returned to the same hospital for readmission the next day and underwent a cardiac catheterization later that afternoon. The test showed single vessel disease with 100 percent blockage of the patient's right main coronary artery, the blood vessel that supplies blood to the right side of the heart. The patient left the hospital AMA 5 hours after the procedure.

Inspection Results

Issue 1: Failure To Diagnose

We did not substantiate that a facility ED physician failed to diagnose the patient's AMI. While the patient in question was ultimately shown to have had an acute myocardial infarction at another hospital, the ED physician initiated an appropriate evaluation for possible AMI at the time of presentation to the facility. The initial ECG and troponin

[13] Although normal levels for troponin vary with the type of test used, values greater than 2.0 are considered abnormal.

[14] Cardiac catheterization is a procedure used to detect problems with the heart, including blockages in the coronary arteries that can cause AMI.

levels in the facility ED were negative, and the physician followed industry standards in recommending that the patient remain in observation for a repeat ECG and troponin level. However, the patient refused observation and left AMA before the evaluation was complete.

The next troponin level, drawn approximately 24 hours later at a community hospital, was elevated. Because of the length of time between troponin levels, we are unable to precisely ascertain when the patient's AMI occurred, except to note that it most probably began at least 4–6 hours prior to the time at which the second troponin level was drawn. If the patient had remained at the facility for observation on Day 1, it is possible, but not certain, that his repeat troponin level would have been elevated. The patient's decision to leave leaving the facility AMA impaired the ability to diagnose and treat his condition.

Issue 2: Physician Behavior

We did not substantiate that the physician engaged in unprofessional behavior in the ED. The complainant alleged that he heard the ED physician yell at a patient in a nearby bed when the patient arrived at the ED. The complainant also alleged that the physician had a disagreement with the complainant's wife and that the VA Police were present and "just laughed."

We found no evidence that the physician yelled at another patient on the night when the patient was present, nor did we identify anyone at the ED who witnessed unprofessional behavior by the physician on that night. In addition, we found no prior record of complaints alleging unprofessional behavior on the part of the physician at the facility or with his state licensing board.

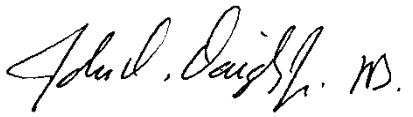
The physician recalled that he spoke with the complainant's wife and that she became upset but that the VA police were not present. VA police have no record of responding to a call in the ED call that evening.

Conclusion

We did not substantiate the allegations. A facility ED physician initiated an appropriate evaluation for a patient with atypical chest pain and made an appropriate recommendation for the patient to remain at the facility for further observation, but the patient refused observation and left AMA. We did not find evidence that the physician acted unprofessionally. We made no recommendations.

Comments

The Veterans Integrated Service Network and Facility Directors concurred with the findings. No further action is required.



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

Appendix A

VISN Director Comments

Department of Veterans Affairs **Memorandum**

Date: March 16, 2012

From: Director, VA New York/New Jersey Veterans Healthcare Network, (10N3)

Subject: **Healthcare Inspection—Alleged Quality of Care Issues in the Emergency Department, Northport VA Medical Center, Northport, NY**

To: Director, Bedford Office of Healthcare Inspections (54BN)

Thru: Director, Management Review Service (10A4A4)

1. I have reviewed and concur with the findings concerning Alleged Quality of Care Issues in the Emergency Department, Northport VA Medical Center, Northport, NY.

2. Should you have any questions, please do not hesitate to contact Pam Wright, RN MSN, VISN 3 QMO at telephone #718-741-4125.

Michael A. Sabo, FACHE
Network Director

Appendix B

Medical Center Director Comments

Department of Veterans Affairs **Memorandum**

Date: March 16, 2012

From: Director, Northport VA Medical Center (632/00)

Subject: **Healthcare Inspection—Alleged Quality of Care Issues in the Emergency Department, Northport VA Medical Center, Northport, NY**

To: Director, VA New York/New Jersey Veterans Healthcare Network, (10N3)

I have reviewed and concur with the findings.

Philip C. Moschitta

PHILIP C. MOSCHITTA
Director

OIG Contact and Staff Acknowledgments

OIG Contact	For more information about this report, please contact the Office of Inspector General at (202) 461-4720.
Acknowledgments	Claire McDonald, MPA, Project Leader Lynn Sweeney, MD, Team Leader Jeanne Martin, PharmD George Wesley, MD

Appendix C

Report Distribution

VA Distribution

Office of the Secretary
Veterans Health Administration
Assistant Secretaries
General Counsel
Director, VA New York/New Jersey Veterans Healthcare Network, (10N3)
Director, Northport VA Medical Center (632/00)

Non-VA Distribution

House Committee on Veterans' Affairs
House Appropriations Subcommittee on Military Construction, Veterans Affairs, and Related Agencies
House Committee on Oversight and Government Reform
Senate Committee on Veterans' Affairs
Senate Appropriations Subcommittee on Military Construction, Veterans Affairs, and Related Agencies
Senate Committee on Homeland Security and Governmental Affairs
National Veterans Service Organizations
Government Accountability Office
Office of Management and Budget
U.S. Senate: Kirsten E. Gillibrand, Charles E. Schumer
U.S. House of Representatives: Timothy H. Bishop, Steve Israel

This report is available at http://www.va.gov/oig/publications/reports-list.asp.