Department of Veterans Affairs
Office of Inspector General

Office of Healthcare Inspections

Report No. 13-02599-311

Healthcare Inspection

Laboratory Delays and Alleged Staff Training Issues Memphis VA Medical Center Memphis, Tennessee

September 16, 2013

Washington, DC 20420

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Executive Summary

The VA Office of Inspector General Office of Healthcare Inspections conducted an inspection in response to allegations made by two complainants about delays impacting patient care and a lack of training in the Pathology and Laboratory Medicine Service at the Memphis VA Medical Center, Memphis, TN. Specifically, the complainants alleged that: laboratory tests were not processed or reported in a timely manner, employees were not allowed to be trained on vital laboratory equipment and processes, and a patient experienced a delay in care while waiting for results from laboratory tests necessary for further treatment.

We substantiated the allegation that laboratory tests were not processed in a timely manner. We found that 23 of 50 (46 percent) laboratory tests ordered urgently were not processed within the two-hour time frame required by local policy. We also found that 47 of 50 (94 percent) of these tests were not processed within one hour as expected by the facility and Veterans Integrated Service Network 9 leadership.

We did not substantiate the allegation that there were delays in reporting test results with critical values to ordering providers.

We substantiated the allegation that a patient experienced a lengthy delay in treatment while waiting for laboratory test results necessary for further evaluation. This issue was resolved while we were on site.

We did not substantiate the allegation that Pathology and Laboratory Medicine Service staff were not allowed to be trained on vital laboratory equipment and processes.

We recommended that: the Facility Director ensure that processes be strengthened to ensure that laboratory turnaround times adhere to facility and Veterans Integrated Service Network 9 expectations, and that the Facility Director ensure that policies and processes are put in place to establish consistent and appropriate methods for data collection and analysis of laboratory test processing times.

Comments

The VISN and Facility Directors concurred with the inspection results (see Appendixes A and B, pages 5–7, for the full text of their comments). We will follow up on the planned actions until they are completed.

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

Purpose

The VA Office of Inspector General (OIG) Office of Healthcare Inspections conducted an inspection to assess the merit of allegations made by two complainants regarding delays impacting patient care and a lack of training in the Pathology and Laboratory Medicine Service (PLMS) at the Memphis VA Medical Center, Memphis, TN (the facility).

Background

The facility is part of Veterans Integrated Service Network (VISN) 9. The facility has 244 beds and provides acute medical and surgical, as well as a full range of primary, specialty, and subspecialty care.

On April 10, 2013, a complainant contacted the OIG and alleged that:

- Laboratory tests were not processed in a timely manner.
- Laboratory test results were not reported in a timely manner, causing delays in patient care, specifically in the Emergency Department (ED) and the Operating Room (OR).
- Employees were not allowed to be trained on vital laboratory equipment and processes.

On April 29, 2013, another complainant contacted the OIG and alleged that:

- A patient experienced a delay in care due to waiting for laboratory test results necessary for further treatment.

Scope and Methodology

We conducted a site visit May 28–29, 2013. We interviewed executive leaders, administrative and clinical staff from PLMS, and staff from other areas of the facility. We reviewed Veterans Health Administration (VHA) and facility policies, electronic health records (EHR), PLMS employee training and competency validation documentation, quality assurance documents, meeting minutes, and standards from the College of American Pathologists and The Joint Commission.

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.

Inspection Results

Issue 1: Processing of "Stat" Tests

We substantiated the allegation that laboratory tests were not processed in a timely manner.

Turnaround time (TAT) for the purposes of this report is the time from when the specimen (usually blood, urine, or tissue) arrives in the laboratory until the time results are available in the EHR. It should be noted that TAT does not include the time required to obtain specimens and transport them to the laboratory, which can cause substantial additional delays in results availability. Laboratory tests with stat[1] urgency are typically ordered for patients in the ED, pre-operative patients about to go to the OR, or patients requiring urgent treatment.

The local policy, which expired in March 2012, indicated that stat laboratory tests should be processed within two hours. However, we were told by the clinical leadership and other staff that the expectation is a one-hour TAT for stat laboratory tests. Additionally, VISN 9 has a performance measure target of 80 percent of stat laboratory tests to be processed within one hour.

We reviewed facility PLMS performance improvement data and found that staff measured TAT in several different ways, with a lack of consistency in data collection and analysis methods. We reviewed the TAT data reported by the facility to VISN 9 and found that this data was incorrectly calculated**.**

Of the various methods of data collection utilized by PLMS staff, we found that TAT data that was manually collected and analyzed by a supervisor, for stat laboratory tests ordered in the ED, was the most reliable. The supervisor found that 5 of 12 tests reviewed in November 2012 and 6 of 17 tests reviewed in April 2013 did not meet the one-hour expectation. These results were corroborated by our review of the EHRs of 50 patients treated in the ED with critical value[2] results from stat laboratory tests completed during March and April 2013. We found that 23 of 50 (46 percent) of these tests were not processed within the two-hour time frame, and 47 of 50 (94 percent) were not processed within the one-hour time frame expected by clinical leadership.

Another TAT measured by PLMS was the time it took to process surgical specimen pathology results. The College of American Pathologists requires that surgical specimens requiring analysis have results available within 2 working days. According to facility performance improvement data from October 1, 2012, through March 31, 2013,

[1] Stat is an abbreviation of the Latin term statim, meaning "immediately." It is often used in medical context such as in hospital emergency rooms when something is needed urgently.

[2] According to VHA Directive 2009-019, *Ordering and Reporting Test Results*, March 24, 2009, a critical test result is defined as those values or interpretations that, if left untreated, could be life threatening or place the patient at serious risk.

1,015 of 3,330 surgical pathology cases (31 percent) were not processed within 2 working days.

Issue 2: Reporting of Critical Value Results and Results for OR Patients

We did not substantiate the allegation that laboratory tests were not reported in a timely manner. Local policy requires that laboratory results with critical values be reported to the ordering provider within 45 minutes.

Of the 50 patients treated in the ED who had critical value results during March and April 2013, we found that 49 of 50 (98 percent) of the test results were reported within 45 minutes of completion of the test. This correlated with PLMS performance improvement data from March 2013, which showed that 100 percent of 128 laboratory tests with critical values were reported within 45 minutes of test completion.

We reviewed OR performance improvement data for October 2012 through May 2013. We found that of 973 OR delays, only 15 (1.5 percent) were related to PLMS. Neither the Chief of Surgery nor the OR Nurse Manager identified any issues related to PLMS causing delays for surgical patients.

Issue 3: Employee Training

We did not substantiate the allegation that employees were not allowed to be trained on vital lab equipment and processes. VHA policy[3] requires that employees' competency be assessed annually, and that PLMS provide staff development and continuing education opportunities.

We reviewed training files of 15 PLMS employees, with emphasis on those who work the night shift in the Core Laboratory and are required to be proficient in different areas. We found that 14 of 15 employees had documentation of all required training, and 12 of 15 had documentation of current competency validation.

Issue 4: Delay in Patient Care

We substantiated the allegation that a patient experienced a lengthy delay waiting for laboratory tests results that were necessary for treatment decisions.

In April 2010, the patient underwent a total knee replacement at the facility, and a revision was done in May 2012. Symptoms persisted for the patient, and the orthopedic surgeon suspected a possible allergy to the metals used in the implant.

In March 2013, a lymphocyte transformation test (LTT) was ordered by the surgeon because of the possibility of metal allergies, and blood was drawn for processing. The LTT is a specialized test requiring that the blood sample be obtained using a special kit and processed in an outside laboratory. PLMS staff learned these facts after the blood

[3] VHA Handbook 1106.01, Pathology and Laboratory Medicine Service Procedures, October 8, 2008

was drawn. The kit was subsequently ordered with the intent that the patient would have blood re-drawn using the correct process. The kit arrived at the facility in April 2013; however, there was miscommunication between the surgeon and PLMS, and the patient was never notified that a re-draw was necessary. During our site visit, the surgeon contacted the patient and coordinated test completion with PLMS.

Conclusions

We substantiated the allegation that laboratory tests were not processed in a timely manner. We found that 23 of 50 (46 percent) ED stat laboratory tests were not processed within the two hour established time frame, and that 47 of 50 (94 percent) of these tests were not processed within the one-hour time frame expected by facility clinical leadership and VISN 9. We also found that the correct measure of turnaround time was inconsistently applied.

We did not substantiate the allegation that critical value results and results for operating room patients were not being reported in a timely manner to ordering providers.

We did not substantiate the allegation that employees were not allowed to be trained on vital laboratory equipment and processes.

We substantiated the allegation that a patient experienced a lengthy delay waiting for laboratory tests results necessary for further treatment. The issue was resolved while we were on site.

Recommendations

1. We recommended that the Facility Director ensure that processes be strengthened to ensure that laboratory turnaround times adhere to facility and VISN 9 expectations.

2. We recommended that the Facility Director ensure that policies and processes are put in place to establish consistent and appropriate methods for data collection and analysis of laboratory turnaround times.

Appendix A

VISN Director Comments

Department of Veterans Affairs **Memorandum**

Date: August 9, 2013

From: Director, VA Mid South Healthcare Network (10N9)

Subject: **Healthcare Inspection – Laboratory Delays and Alleged Staff Training Issues, Memphis VA Medical Center, Memphis, TN**

To: Director, Bay Pines Office of Healthcare Inspections (54SP)
Director, Management Review Service (VHA 10AR MRS OIG Hotline)

1. Please see the attached response by the VA Medical Center, Memphis, TN to the Healthcare Inspection - Laboratory Delays and Alleged Staff Training Issues, OIG Hotline on-site review conducted May 28-29, 2013.

2. I concur with the updated responses.

3. If you have any questions or need additional information, please contact Cynthia Johnson, VISN Quality Manager, at (615) 695-2143.

(original signed by:)
Jim Hayes, Acting Deputy Network Director for
JOHN E. PATRICK

Appendix B

Facility Director Comments

Department of Veterans Affairs **Memorandum**

Date: August 7, 2013

From: Director, Memphis VA Medical Center (614/00)

Subject: **Healthcare Inspection – Laboratory Delays and Alleged Staff Training Issues, Memphis VA Medical Center, Memphis, TN**

To: Director, VA Mid South Healthcare Network (10N9)

1. Attached please find the response to the Healthcare Inspection – Laboratory Delays and Alleged Staff Training Issues, OIG Hotline on-site review conducted May 28-29, 2013.

2. I concur with the responses.

3. If you have any questions regarding the information provided, please contact Jan Slate, Accreditation Manager, Quality Management and Performance Improvement. Mrs. Slate can be reached at (901) 577-7379, menu choice #5.

(original signed by:)
C. DIANE KNIGHT, MD, CMD

Attachment

Comments to OIG's Report

The following Director's comments are submitted in response to the recommendations in the OIG report:

OIG Recommendations

Recommendation 1. We recommended that the Medical Center Director ensure that processes be strengthened to ensure that laboratory turnaround times adhere to facility and VISN 9 expectations, and CAP standards.

Concur

Target date for completion: August 31, 2013

Facility response: The Facility Service had reviewed and updated the existing Service Policy Memorandum (Number: 113-14) now titled: "Defined Turnaround Times for Clinical Pathology Laboratory Testing" to ensure that laboratory turnaround times adhere to Facility, VISN 9 and College of American Pathologists (CAP) standards. Additionally, all Pathology and Laboratory Medicine (PLMS) Staff will be educated on the new, updated laboratory turnaround time policy. PLMS Supervisors will be required to review the policy with their assigned employees and will obtain signature of the employees acknowledging notification and understanding of the new change in policy. Moreover, in accordance to the updated policy, PLMS is implementing a plan to consistently track turnaround times from specimen arrival to results reporting.

Recommendation 2. We recommended that the Facility Director ensure that policies and processes are put in place to establish consistent and appropriate methods for data collection and analysis of laboratory turnaround times.

Concur

Target date for completion: September 30, 2013

Facility response: PLMS will establish a data capturing system to ensure consistent and appropriate data collection and analysis of laboratory turnaround times. Additionally, the Facility Service will institute a new Quality Management monitor of laboratory turnaround times. Appropriate training and education of PLMS personnel will also be planned and implemented. Initially, monitoring of laboratory turnaround times will be done manually and electronically. However, the Facility Service is exploring alternative methods to capture the data electronically. Monitoring of laboratory turnaround times will be reported monthly at PLMS Supervisor and Facility QA meetings.

Appendix C

OIG Contact and Staff Acknowledgments

Contact	For more information about this report, please contact the OIG at (202) 461-4720.
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