



US DEPARTMENT OF VETERANS AFFAIRS OFFICE OF INSPECTOR GENERAL

Office of Healthcare Inspections

VETERANS HEALTH ADMINISTRATION

Failures by Telemetry Medical Instrument Technicians and Leaders' Response at the VA Eastern Colorado Health Care System in Aurora

BE A
VOICE FOR
VETERANS

REPORT WRONGDOING
vaoig.gov/hotline | 800.488.8244

OUR MISSION

To serve veterans and the public by conducting meaningful independent oversight of the Department of Veterans Affairs.

CONNECT WITH US



Subscribe to receive updates on reports, press releases, congressional testimony, and more. Follow us at @VetAffairsOIG.

PRIVACY NOTICE

In addition to general privacy laws that govern release of medical information, disclosure of certain veteran health or other private information may be prohibited by various federal statutes including, but not limited to, 38 U.S.C. §§ 5701, 5705, and 7332, absent an exemption or other specified circumstances. As mandated by law, the OIG adheres to privacy and confidentiality laws and regulations protecting veteran health or other private information in this report.

Visit our website to view more publications.
vaoig.gov



Executive Summary

The VA Office of Inspector General (OIG) conducted a healthcare inspection at the VA Eastern Colorado Health Care System (facility) in Aurora to review telemetry medical instrument technician (MIT) actions and leaders' response to allegations that an MIT (MIT A) changed patient alarm settings and placed a communication device on "DO NOT DISTURB" for long periods of time. Telemetry is the remote measurement and collection of clinical data, which includes non-life-threatening and life-threatening cardiac arrhythmias, respiratory rate, pulse rate, oxygen saturation, and blood pressure to gain insight regarding a patient's condition.¹ During the course of the inspection, the OIG identified that an additional MIT (MIT B) may have engaged in similar practices while on duty. The OIG also identified concerns regarding electronic health record (EHR) documentation, quality and patient safety processes, and leaders' response to two patient safety events, failure to consider an institutional disclosure, as well as concerns with clinical alarm oversight.

In spring 2023, a patient (Patient A) was admitted to the facility for worsening shortness of breath and decreased oxygenation. Two days after hospital admission, a respiratory therapist documented in the EHR that Patient A had an increased need for oxygen support to maintain a normal blood oxygen level. In early afternoon, an attending physician documented Patient A's worsening shortness of breath. Nearly two hours later, the patient was found unresponsive and pulseless. Shortly thereafter, the patient was pronounced dead by the attending physician.

During this review, the OIG found despite Patient A's telemetry monitor alarms alerting MIT A of four critical oxygen desaturations, MIT A failed to document notifying nursing staff of the patient's desaturation alarms. As a result, the OIG could not determine when or how the registered nurse assigned to care for Patient A became aware of Patient A's desaturation event. Through an interview, the OIG learned that MIT A had a practice of not completing the communication logs. The OIG also found that oxygenation strips were not scanned in the EHR as required by Veterans Health Administration (VHA) and facility policy.²

In late summer 2023, MIT B monitored a patient (Patient B) on telemetry based on cardiac symptoms and a significant medical history, including an implantable cardioverter defibrillator

¹ VHA Specialty Care Services and Office of Nursing Services, *VHA Telemetry Guidebook 2020*, February 2020, modified June 6, 2022.

² Oxygenation strips document respiratory activity and blood oxygen level (oxygenation) recorded by the telemetry monitoring system, which can be printed onto paper strips or saved electronically for insertion into the EHR. VHA Directive 1907.01(1), *VHA Health Information Management and Health Records*, April 5, 2021, amended December 11, 2023; Facility Policy MCP 136-10, *Management of Health Information Management (HIM) Scanning*, June 30, 2021.

(defibrillator).³ In the early morning of hospitalization day 6, Patient B described to a registered nurse symptoms that may lead to the defibrillator delivering a shock. Several hours later, the registered nurse documented receiving a telemetry strip from an MIT [not MIT A or B] showing ventricular tachycardia that coincided with the timing of Patient B's reported symptoms.

Upon review of patient event B, the OIG found that although the nurse documented a review of rhythm strips showing ventricular tachycardia, the relevant strips were not scanned into the EHR as required.⁴

The OIG found that telemetry nursing leaders implemented process improvements to address identified concerns with telemetry MIT monitoring and took steps to evaluate MIT actions. However, the OIG concluded that telemetry nursing leaders failed to ensure MITs' adherence to clinical alarm monitoring expectations.

In an interview with the OIG, the assistant chief of inpatient services reported becoming aware of MITs not adhering to alarm monitoring expectations in September 2022 and told the OIG of providing clinical alarm monitoring education to MITs in a staff meeting and reported issuing a letter of expectations. A document review showed the letter of expectations was issued in November 2022 to all MITs outlining roles and responsibilities.⁵

Also in an interview, the assistant chief of inpatient services told the OIG the telemetry nurse manager identified that MITs required additional support and oversight and implemented daily huddles and monthly staff meetings. The telemetry nurse manager told the OIG of actions including initiating non-protected reviews to investigate the alleged actions of MITs A and B and removing MITs A and B from patient care.⁶ The non-protected review for MIT A was initiated in early spring, and MIT A was reassigned to non-patient care duties the following day. Both the initiation of the non-protected review and reassignment of MIT B to non-patient care duties occurred in late summer 2023.

When asked if telemetry nurse leaders audited MIT actions to ensure adherence to alarm monitoring expectations, the assistant chief of inpatient services informed the OIG of requesting reports of MITs performance and compliance but was unable to produce evidence of those

³ "An implantable cardioverter defibrillator is a small battery-powered device placed in the chest . . . that detects and stops irregular heartbeats . . . and delivers electric shocks, when needed, to restore a regular heart rhythm," Mayo Clinic, "Implantable cardioverter defibrillator," accessed January 23, 2024, <https://www.mayoclinic.org/tests-procedures/implantable-cardioverter-defibrillators/about/pac-20384692>.

⁴ Rhythm strip is defined as heart electrical activity and rate (rhythm) recorded by the telemetry monitoring system that can be printed onto paper strips or saved electronically for insertion into the patient EHR. Facility Policy 11-14, *Telemetry Monitoring*, May 2018.

⁵ The assistant chief of inpatient services informed the OIG that assistant chief of inpatient services duties include providing oversight of the telemetry unit. The assistant chief of inpatient services provided meeting minutes that included telemetry education in September, 2022, and issued the letter of expectations on November 14, 2022.

⁶ Non-protected review refers to facility reviews conducted for reasons other than quality assurance, including administrative investigations (i.e., administrative investigation boards and factfindings).

reports when requested.⁷ The telemetry nurse manager indicated completing audits of MITs' alarm monitoring "a few times per month" beginning in March 2023, but was also unable to provide the OIG any records.

The OIG reviewed a list of telemetry-related patient safety reports from spring through early fall 2023, and did not find a patient safety report entered for patient event A. In an interview, the employee who reported the event to the telemetry nurse manager acknowledged knowing about the process for entering Joint Patient Safety Reporting (JPSR) reports but was expecting the supervisors "to take whatever actions that were needed including [entering] a patient safety report." The telemetry nurse manager stated that patient safety staff had previously advised that the person who witnessed the event should enter the JPSR event. One patient safety manager said it was "extremely surprising" that a patient safety report had not been entered for patient event A. The OIG concluded that the failure to enter a JPSR event for patient event A limited the opportunity for quality and patient safety staff to evaluate the event, alert facility leaders, and determine whether further patient safety analysis, such as a root cause analysis, was indicated.

The OIG also found that while a JPSR event was entered for patient event B, a patient safety manager rejected the event after nursing leaders initiated a non-protected review. Further, the risk manager told the OIG that had a JPSR event been entered for patient event A, it would have likely been rejected "because that's a conduct type thing, like a purposeful unsafe act."⁸ VHA guidance states that while purposefully unsafe acts can be rejected for a safety review, events should not be rejected if there is a systematic risk to patient safety.⁹ Ultimately, the OIG concluded that patient safety staff failed to have a follow-up process to review rejected JPSR events.

The OIG also identified concerns with failure to consider an institutional disclosure and lack of clinical alarm governance and oversight.

The OIG made six recommendations to the Facility Director related to medical record documentation, review of the telemetry program, patient safety event reporting, institutional disclosure, and clinical alarm management.

⁷ A spot check is a quick review to examine compliance with outlined expectations and for the purposes of this report is considered an audit. The assistant chief of inpatient services could not recall the dates for when the audits were completed or when the Vocera device usage reports were requested.

⁸ The risk manager told the OIG that the risk manager supervises the facility patient safety managers.

⁹ VHA National Center for Patient Safety, *JPSR Guidebook*, December 2022. Updated versions of the guidebook were published in October, 2023 and December, 2023. All three guidebooks contain similar language about rejection of JPSR events.

VA Comments and OIG Response

The Veterans Integrated Network and Facility Directors concurred with the findings and recommendations and provided acceptable action plans (see appendixes A and B). The OIG will follow up on the planned actions until they are completed.

A handwritten signature in black ink, reading "John D. Daigh, Jr., M.D." in a cursive script.

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

Contents

Executive Summary	i
Abbreviations	vi
Introduction.....	1
Scope and Methodology	3
Inspection Results	4
1. Failure to Document Patient Care in the EHR	4
2. Leadership Response to Telemetry MIT Alarm Monitoring Concerns	9
3. Concerns Regarding Patient Safety Reporting.....	12
4. Failure to Consider an Institutional Disclosure.....	14
5. Lack of Clinical Alarm Governance and Oversight.....	17
Conclusion	18
Recommendations 1–6.....	19
Appendix A: VISN Director Memorandum	21
Appendix B: Facility Director Memorandum.....	22
OIG Contact and Staff Acknowledgments	28
Report Distribution	29

Abbreviations

ADPCS	Associate Director Patient Care Services
EHR	electronic health record
JPSR	Joint Patient Safety Reporting
MIT	medical instrument technician
OIG	Office of Inspector General
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network



Introduction

The VA Office of Inspector General (OIG) conducted a healthcare inspection at the VA Eastern Colorado Health Care System (facility) in Aurora to review medical instrument technician (MIT) actions and leaders' response. During the course of the inspection, the OIG identified additional concerns regarding electronic health record (EHR) documentation, quality and patient safety processes, and leaders' response to two patient safety events, as well as concerns with clinical alarm oversight.

Background

The facility is part of Veterans Integrated Service Network (VISN) 19 and is designated as level 1a, highest complexity.¹ From October 1, 2022, through September 30, 2023, the facility served 101,411 patients and had a total of 148 hospital beds. Through an interview and email correspondence, the OIG learned facility MITs monitor at least 86 beds across multiple units in the hospital.² A quality and patient safety service staff member reported that at the time of inspection, telemetry staffing comprised five nurse leaders and nine MITs.³

Telemetry Monitoring

Telemetry is the remote measurement and collection of clinical data, which includes basic and life-threatening cardiac arrhythmias, respiratory rate, pulse rate, oxygen saturation, and blood pressure to gain insight regarding a patient's condition; the data is used to guide the patient's

¹ VHA Office of Productivity, Efficiency and Staffing (OPES), "Fact Sheet Facility Complexity Model." The VHA Facility Complexity Model categorizes medical facilities by complexity level based on factors including "patient population, clinical services, and teaching and research programs,[and] are scored and weighted to show a facility's complexity level." Complexity Levels include 1a, 1b, 1c, 2 or 3.

² "A medical instrument technician (MIT) is an individual who performs diagnostic examinations or medical treatment procedures as part of the diagnosis and treatment of patients, which can involve operating or monitoring diagnostic and therapeutic medical instruments and equipment associated with [electrocardiograms]." VHA Directive 1102.06, *Management of Electrocardiograms*, March 21, 2023.

³ Through a document review, the OIG found that at the time of the inspection, telemetry nurse leadership included telemetry chiefs, a telemetry nurse manager, and an assistant nurse manager. Of note, through email correspondence, the telemetry nurse manager reported supervising 68 staff.

care.⁴ The integrity of telemetry data is “dependent on the competence . . . reliability, and safe practice of the personnel who monitor telemetry patients . . .”⁵

Clinical Alarm System Safety

In 2013, The Joint Commission highlighted the risks associated with “alarm fatigue,” including clinicians turning off alarms and failing to respond to alarm signals.⁶ Further, The Joint Commission’s National Patient Safety Goals outline the need for hospitals to improve the safety of clinical alarm systems to reduce patient harm and notes that clinical systems, if not managed properly, “can compromise patient safety.”⁷ The Joint Commission also states that hospital leaders should establish alarm safety as a hospital priority by establishing policies and procedures to manage alarms.⁸

Allegations and Related Concerns

On August 11, 2023, the OIG Office of Investigations referred to the Office of Healthcare Inspections allegations that MIT A changed patient alarm settings and placed a Vocera device on “DO NOT DISTURB” for long periods of time.⁹

Office of Healthcare Inspections staff reviewed the allegations regarding MIT A’s actions during a patient safety event and found that a nurse manager completed a factfinding, which partially substantiated the allegation. The staff spoke with the Facility Director to obtain information regarding the patient safety event. The Facility Director shared additional information that raised concerns indicating other MIT’s may be engaging in similar practices while on duty.

Due to patient safety concerns, the OIG opened this inspection to review MIT actions and leaders’ response at the facility.

⁴ VHA Specialty Care Services and Office of Nursing Services, *VHA Telemetry Guidebook 2020*, February 2020, modified June 6, 2022.

⁵ VHA Specialty Care Services and Office of Nursing Services, *VHA Telemetry Guidebook 2020*; Cardiac arrhythmia also known as heart arrhythmia is defined as an irregular heartbeat that “occurs when the electrical signals that tell the heart to beat don’t work properly” causing the heart to beat too slow or too fast. *Mayo Clinic*, “heart arrhythmia,” accessed January 23, 2024, <https://www.mayoclinic.org/diseases-conditions/heart-arrhythmia/symptoms-causes/syc-20350668>.

⁶ Alarm fatigue occurs when “clinicians become desensitized or immune to . . . [alarm] sounds, and are overwhelmed by information . . .” The Joint Commission, Sentinel Event Alert, *Medical device alarm safety in hospitals*, April 8, 2013.

⁷ The Joint Commission E-dition, *Standards Manual*, NPSG.06.01.01, July 2023. “Improve the safety of clinical alarm systems.”

⁸ *Standards Manual*, NPSG.06.01.01.

⁹ Vocera devices allow staff to communicate with each other to improve workflow and patient safety. VA Eastern Colorado Health Care System, *Vocera Training*, 2021.

Scope and Methodology

On September 12, 2023, the OIG initiated a healthcare inspection. The OIG conducted a site visit October 24–26, 2023.

The OIG interviewed VISN leaders, facility executive leaders, a facility leader, service chiefs, telemetry nursing leaders and staff, quality and patient safety service staff, a nurse manager, a former facility physician, a Veterans Health Administration (VHA) contractor, and a consultant.¹⁰

The OIG reviewed relevant VHA and facility policies and procedures, leaders' and staff emails, a telemetry staff Vocera call log, action plans, non-protected reviews, committee charters and meeting minutes, and patient safety reports related to telemetry clinical alarms and patient safety. The OIG also reviewed pertinent aspects of patients' care in EHRs.

In the absence of current VA or VHA policy, the OIG considered previous guidance to be in effect until superseded by an updated or recertified directive, handbook, or other policy document on the same or similar issue(s).

The OIG substantiates an allegation when the available evidence indicates that the alleged event or action more likely than not took place. The OIG does not substantiate an allegation when the available evidence indicates that the alleged event or action more likely than not did not take place. The OIG is unable to determine whether an alleged event or action took place when there is insufficient evidence.

Oversight authority to review the programs and operations of VA medical facilities is authorized by the Inspector General Act of 1978, as amended, 5 U.S.C. §§ 401–424. The OIG reviews available evidence to determine whether reported concerns or allegations are valid within a specified scope and methodology of a healthcare inspection and, if so, to make recommendations to VA leaders on patient care issues. Findings and recommendations do not define a standard of care or establish legal liability.

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

¹⁰ VISN leaders included the Patient Safety Officer and Risk Manager. Facility executive leaders included the Director, Chief of Staff, and the Associate Director Patient Care Services. A facility leader included the Deputy Associate Director Patient Care Services. Service chiefs included the chiefs of Quality and Patient Safety, Cardiology, and Biomedical Engineering. Telemetry nursing leaders and staff included an acting chief, an assistant chief of Inpatient Services, a telemetry nurse manager, a registered nurse, a certified nursing assistant, and telemetry MITs. The OIG also interviewed a Vocera contractor and Philips consultant.

Inspection Results

The OIG reviewed steps taken by telemetry nursing and facility leaders to address MIT actions during two patient safety events (patient event A and patient event B) and other telemetry MIT practices.¹¹ During an interview and document reviews, the OIG was made aware of telemetry MIT concerns, beginning in September 2022, prior to patient event A. Upon review of patient event A and patient event B, the OIG found a lack of relevant documentation in the EHR for both events. In addition, the OIG identified additional concerns regarding patient safety event reporting failures, failure to consider an institutional disclosure, as well as a lack of clinical alarm governance and oversight.

1. Failure to Document Patient Care in the EHR

The OIG found limited documentation of information regarding patient event A and patient event B in the EHRs. As such, the OIG conducted interviews and examined documentation from non-protected reviews and a Vocera call log to better understand the circumstances of the events. Ultimately, due to patient comorbidities and complexity of care, the OIG could not determine if the documentation failures impacted Patient A's and Patient B's clinical care.

Patient Safety Event A

The patient (Patient A), in their late sixties, had a past medical history of lung cancer and chronic obstructive pulmonary disease.¹²

In spring 2023, Patient A was admitted to the facility for worsening shortness of breath and decreased oxygenation. On the day of admission, after discussion with Patient A, the patient's physician completed a Life Sustaining Treatment note that stated Patient A wanted to undergo a trial of intubation, which is mechanical ventilation, if the patient's "... condition was reversible and [the patient] could come off the ventilator [*sic*]."

Two days after hospital admission, a respiratory therapist documented in the EHR that Patient A had an increased need for oxygen support to maintain a normal blood oxygen level. That same morning, a palliative medicine physician documented Patient A's wish was to make it through the weekend so family members could enjoy a trip to "spring training" out of state.¹³

In the early afternoon, attending physician documentation noted Patient A's worsening shortness of breath due to increasing pleural effusion and infiltration of the lung tissue by the lung

¹¹ The team is referencing the two patient safety events as *patient event A*, which is the event that occurred in spring 2023; and *patient event B*, the event that occurred in late summer 2023.

¹² The OIG uses the singular form of they, "their" in this instance, for privacy purposes.

¹³ Palliative medicine is "specialized medical care that focuses on providing relief from pain and other symptoms of a serious illness." *Mayo Clinic*, "palliative care," accessed January 23, 2024, <https://www.mayoclinic.org/tests-procedures/palliative-care/about/pac-20384637>.

cancer.¹⁴ Later that afternoon, per an attending physician note, the patient was found unresponsive and pulseless, at which time a code blue was initiated. Assisted breathing was tried without effect, but cardiac resuscitation was not attempted during the code blue due to the patient's *do not resuscitate* order.¹⁵ The attending physician declared Patient A deceased several minutes later. A telemetry monitor alarms report indicated four oxygen desaturation red alarms were generated (over a span of six minutes) approximately 25–30 minutes prior to Patient A's passing.

Lack of Alarm Notification and Change In Condition Documentation

The OIG found that MIT A failed to document notifying nursing staff of Patient A's oxygen desaturation alarms (desaturation alarms) and a registered nurse failed to document a change in Patient A's condition after staff found Patient A unresponsive and pulseless.¹⁶

The telemetry nurse manager told the OIG that MITs are required to document monitoring information for each assigned patient on a communication log sheet every shift; this information should include MIT notification to nursing staff of a patient's desaturation alarms.¹⁷ Facility policy states that MITs are responsible for immediately notifying the registered nurse of significant changes.¹⁸ Further, a VA standard operating procedure states nursing staff must document any change in a patient's condition in the EHR and documentation must be "accurate, complete . . . and timely."¹⁹

¹⁴ Pleural effusion is the build-up of fluid outside the lungs, Cleveland Clinic, "pleural effusion," accessed January 23, 2024, <https://my.clevelandclinic.org/health/diseases/17373-pleural-effusion-causes-signs--treatment>.

¹⁵ "Cardiopulmonary resuscitation (CPR) is a lifesaving technique that's useful in many emergencies in which someone's breathing or heartbeat has stopped." Mayo Clinic, "cardiopulmonary resuscitation," accessed February 14, 2024, <https://www.mayoclinic.org/first-aid/first-aid-cpr/basics/art-20056600>. In this instance, cardiac resuscitation includes chest compressions and electrical shocks related to the heart rhythm.

¹⁶ Oxygen desaturation, also known as hypoxia, can be a life-threatening condition resulting from low oxygen levels in the body tissues that can cause symptoms such as difficulty breathing. Cleveland Clinic, "hypoxia," accessed January 22, 2024, <https://my.clevelandclinic.org/health/diseases/23063-hypoxia>. Of note, MIT A provided care to Patient A during the patient's event. Change in condition, also known as change in clinical state, is defined as a difference in the patient's condition when compared to the patient's previous assessment; Gabrielle Burdeu et al., "Clinical cues used by nurses to recognize changes in patients' clinical states: A systematic review," *Nursing & Health Sciences*, 23 (2021): 9-28 <https://onlinelibrary.wiley.com/doi/10.1111/nhs.12778>.

¹⁷ The telemetry nurse manager informed the OIG in an interview that telemetry monitoring information includes the patient's diagnosis, telemetry activity, and who was notified regarding telemetry activity.

¹⁸ Facility Policy 11-14, *Telemetry Monitoring*, May 2018.

¹⁹ VA Standard Operating Procedure, *Veterans Administration Approved Enterprise Standard Acute Inpatient/Rehabilitation Nursing Admission Screening, Assessment, and Standards of Care*, September 20, 2022. This standard operating procedure was in place during the time of the events discussed in this report. It was revised and replaced by VA Standard Operating Procedure, *VA Approved Enterprise Standard (VAAES) Nursing Admission Screen, Assessment, and Standards of Care Standard Operating Procedure (SOP)*, September 20, 2022, revised November 02, 2023. The 2023 standard operating procedure contains the same or similar language regarding nursing documentation as the 2022 version.

In an interview with the OIG, MIT A acknowledged Patient A's desaturation alarms and told the OIG of notifying a certified nursing assistant of the patient's alarms. However, when asked by the OIG, neither the certified nursing assistant nor the registered nurse could recall caring for the patient or the events surrounding patient event A.

During an interview, the telemetry nurse manager told the OIG that MIT A had a practice of not completing the communication log and as such, did not complete a communication log for Patient A on the day of the patient's event. Due to MIT A's failure to complete a communication log, there was no documentation by MIT A regarding Patient A's desaturation alarms or notification to the registered nurse of the desaturation alarms.

Upon review of the factfinding documentation, the OIG found a telemetry monitor alarms report from the day of Patient A's death indicating four oxygen desaturation red alarms were generated over a span of six minutes, approximately 25 minutes prior to the patient being found unresponsive. After the first red alarm, MIT A's Vocera call log revealed that MIT A did not place any outgoing calls until one minute before the patient was found unresponsive and pulseless, creating an approximate 19-minute gap from the fourth red alarm to MIT A's outgoing call.

Despite EHR documentation from the attending physician indicating that "nursing" was notified of the patient's desaturation and "came in to find [Patient A] pulseless," the OIG found that the registered nurse did not document the patient's desaturation event or change in condition in the EHR. Further, a non-protected review of the care provided during patient event A noted a "lack of appropriate/complete medical record documentation" by the registered nurse. Additionally, during review of the EHR, the OIG did not find documentation of the code blue event by the registered nurse.

Due to the lack of documentation in the EHR, the OIG could not determine when or how the registered nurse became aware of Patient A's desaturation event. The OIG concluded that MIT A failed to document notification of Patient A's desaturation alarms and the registered nurse did not adhere to VHA policy of documenting a change in Patient A's condition. The OIG would have expected the registered nurse's documentation to include the details of Patient A's desaturation event, which indicated a change in the patient's condition.

Lack of Oxygenation Strip Documentation

When examining patient event A, the OIG found that oxygenation strips were not scanned into the EHR as required by VHA and facility policy.²⁰

VHA policy states the scanning process involves digitizing documents in the patient's EHR to support the care provided to patients.²¹ VHA policy further requires that documents must be scanned in the EHR within five days of medical records staff's receipt of the documents.²²

Facility policy states facility staff are responsible for sending documentation that need scanning in the EHR to scanning staff members and scanning staff members are responsible for scanning patient information in the medical record.²³ The telemetry nurse manager told the OIG that oxygenation strips are reviewed by a registered nurse each shift and scanned into patients' EHRs upon discharge.

In an interview and through email correspondence, the telemetry nurse manager told the OIG that in addition to completing the communication log sheet, MITs are expected to print patients' telemetry oxygenation strips each shift for a registered nurse to review, sign, and place the strips in the patients' paper charts.²⁴ At a patient's discharge, a medical support assistant sends the patient's paper chart, including oxygenation strips, to medical records to be scanned into the EHR.

The OIG found documentation in the EHR that a physician ordered continuous oxygen monitoring for Patient A with instructions to contact the physician if Patient A's oxygen level decreased below 88 percent.²⁵ However, the OIG did not find evidence of any oxygenation strips documenting the monitoring of Patient A's oxygen level in the EHR.

While not available in the EHR, a quality and patient safety service staff member provided three oxygenation strips recorded over a span of five minutes shortly before Patient A died. Based on the oxygenation strips, the OIG found that Patient A had three episodes with oxygen levels below 88 percent. The telemetry nurse manager explained to the OIG the process of scanning oxygenation strips into the EHR is the shared responsibility of the MIT, registered nurse, medical

²⁰ Oxygenation strips document respiratory activity and blood oxygen level (oxygenation) recorded by the telemetry monitoring system that can be printed onto paper strips or saved electronically for insertion into EHRs. VHA Directive 1907.01(1), *VHA Health Information Management and Health Records*, April 5, 2021, amended December 11, 2023; Facility Policy MCP 136-10, *Management of Health Information Management (HIM) Scanning*, June 30, 2021.

²¹ VHA Handbook 1907.07, *Management of Health Records File Room and Scanning*, May 12, 2016.

²² VHA Directive 1907.01(1); VHA Handbook 1907.07.

²³ Facility Policy MCP 136-10.

²⁴ A paper chart is a supplement to EHR charting, used during a patient's hospital stay (or hospitalization), and contains paper copies of pertinent medical records not available in the EHR. At the end of the hospital stay, the paper chart is sent to medical records to be scanned into the EHR.

²⁵ The physician placed the order and the order remained active until after the patient's death.

support assistant, and medical records personnel. The OIG found there was a failure in the scanning process, which resulted in no oxygenation strips relevant to patient event A being available for review in the EHR.

The OIG concluded that facility staff did not follow policy requiring the scanning of oxygenation strips and ultimately, the failure to scan Patient A's oxygenation strips into the EHR resulted in an incomplete patient record, impeding the evaluation of oxygenation monitoring provided to Patient A.

Patient Safety Event B

The patient (Patient B), in their sixties, had a past medical history of cardiac arrest requiring an implantable cardioverter defibrillator (defibrillator).²⁶

During a late summer 2023 hospital admission for infection, Patient B was monitored on telemetry based on cardiac symptoms and medical history. In the early morning of hospitalization day 6, Patient B described to a registered nurse symptoms that may lead to their defibrillator delivering a shock. Several hours later, the registered nurse documented receiving a telemetry strip from an MIT (not MIT A or B) showing ventricular tachycardia that occurred several hours earlier and coincided with the timing of Patient B's reported symptoms. According to the registered nurse, the ventricular tachycardia episode was communicated late to the nursing staff since "alarms noted off earlier in shift."²⁷ The registered nurse documented notifying Patient B's physician of the event and entering a patient safety report via phone.

The same afternoon, a cardiology attending wrote an EHR note commenting on Patient B's episode of symptomatic ventricular tachycardia and recommended increasing Patient B's dose of metoprolol, a cardiac medication. Two days later, Patient B was discharged to home; the discharge summary stated during hospitalization, the patient sustained an episode of ventricular tachycardia noted on telemetry monitoring and upon review of the patient's defibrillator.

Lack of Rhythm Strip Documentation

Upon review of patient event B, the OIG found that relevant rhythm strips were not scanned into the EHR.²⁸ To better understand patient event B, the OIG interviewed the telemetry nurse

²⁶ "An implantable cardioverter defibrillator is a small battery-powered device placed in the chest . . . that detects and stops irregular heartbeats . . . and delivers electric shocks, when needed, to restore a regular heart rhythm," Mayo Clinic, "implantable cardioverter defibrillator," accessed January 23, 2024, <https://www.mayoclinic.org/tests-procedures/implantable-cardioverter-defibrillators/about/pac-20384692>.

²⁷ "Ventricular tachycardia is a heart rhythm problem (arrhythmia) caused by irregular electrical signals in the lower chambers of the heart (ventricles). This condition may also be called V-tach or VT," Mayo Clinic, "ventricular tachycardia," accessed January 9, 2024, <https://www.mayoclinic.org/diseases-conditions/ventricular-tachycardia/symptoms-causes/syc-20355138>.

²⁸ Rhythm strip is defined as heart electrical activity and rate (rhythm) recorded by the telemetry monitoring system that can be printed onto paper strips or saved electronically for insertion into the patient's EHR.

manager and reviewed nursing EHR documentation, email correspondence, and a patient safety report entry.

Facility policy states rhythm strips will be placed in a telemetry binder for the nurse to review and “. . . these strips will then be filed in the patient[s] chart upon discharge.”²⁹

In the EHR, the OIG found that during patient event B, Patient B reported experiencing symptoms of an elevated heart rate. In response, a registered nurse documented informing the patient's physician of the elevated heart rate. The registered nurse further documented that an MIT called to notify the registered nurse that Patient B's monitoring showed the patient had experienced an episode of ventricular tachycardia earlier in the day, but the MIT was unaware of the event at the time of occurrence due to Patient B's alarms being off, which resulted in delayed notification. Further, the registered nurse noted reviewing the patient's rhythm strip, which confirmed the patient experienced ventricular tachycardia, as well as completing a patient safety report for review of patient event B. However, the OIG found no evidence of rhythm strips in the EHR.

In an interview and email correspondence, the telemetry nurse manager told the OIG that MITs are expected to print patients' rhythm strips each shift for a registered nurse to look at and place in the patient's paper chart, which is then scanned into the EHR. Although the OIG found that Patient B's rhythm strips were reviewed by an MIT and the registered nurse the day of patient event B, the OIG could not determine why the patient's rhythm strips were not scanned and recorded in the EHR.

The OIG concluded there was a failure to ensure that rhythm strips were scanned into the patient's EHR, which resulted in no rhythm strips detailing patient event B being available for review in the EHR and impeded the OIG's ability to evaluate and understand patient event B.

2. Leadership Response to Telemetry MIT Alarm Monitoring Concerns

The OIG found that telemetry nursing leaders implemented some process improvements to address identified concerns with telemetry MIT monitoring and took steps to evaluate MIT actions. However, the OIG concluded that telemetry nursing leaders failed to ensure and document MITs adherence to clinical alarm monitoring expectations.

Facility policy states the telemetry nurse manager is responsible for ensuring MITs' adherence to telemetry alarm monitoring expectations such as continuously monitoring patients, confirming alarms are consistent with physician-ordered parameters, and documenting patient monitoring information.³⁰

²⁹ Facility Policy 11-14.

³⁰ Facility Policy, 11-14.

In an interview with the OIG, the assistant chief of inpatient services reported becoming aware of MITs not adhering to alarm monitoring expectations in September 2022.³¹ In response, the assistant chief of inpatient services told the OIG of providing clinical alarm monitoring education to MITs in a staff meeting and reported issuing a letter of expectations. A document review showed the letter of expectations was issued in November 2022 to all MITs outlining roles and responsibilities.³²

Also in an interview, the assistant chief of inpatient services told the OIG the telemetry nurse manager identified that MITs required additional support and oversight and implemented daily huddles and monthly staff meetings.

Through a document review, the OIG learned that 12 days after patient event A, an MIT reported concerns to the telemetry nurse manager that MIT A failed to notify a registered nurse of Patient A's desaturation alarm. The MIT further reported that MIT A had a practice of disabling patients' telemetry desaturation alarms, changing monitor alarm parameters, and placing their (MIT A's) Vocera device on *do not disturb*. In an interview, the telemetry nurse manager reported being notified by another MIT of concerns that a different MIT [MIT B] had turned off the audio of a patient's alarm, which resulted in a notification delay of patient event B.³³ In response to these concerns, the telemetry nurse manager told the OIG of actions including

- informing the acting chief of inpatient services and assistant chief of inpatient services of MIT A's and MIT B's alleged actions,
- initiating non-protected reviews to investigate the alleged actions of MIT A and MIT B, and
- removing MIT A and MIT B from patient care.³⁴

³¹ The assistant chief of inpatient services informed the OIG that assistant chief of inpatient services duties included providing oversight of the telemetry unit, and of having been employed as the telemetry nurse manager from October 2021 through December 2022; and becoming the assistant chief of inpatient services in January 2023. The assistant chief of inpatient services was made aware of these concerns by another telemetry MIT.

³² The assistant chief of inpatient services provided meeting minutes that included telemetry education in September, 2022, and issued the letter of expectations in mid-November 2022.

³³ The notification of the event to the telemetry nurse manager occurred late summer 2023, which was the same day the patient reported experiencing symptoms to nursing staff.

³⁴ Non-protected review refers to facility reviews conducted for reasons other than quality assurance, including administrative investigations (administrative investigation boards and factfindings). A factfinding is an "administrative investigations [*sic*] which VA can utilize and rely upon when taking administrative actions, including disciplinary actions . . ." VA Handbook 0700, *Administrative Investigation Boards and Factfindings*, August 17, 2021; The acting chief of inpatient services was notified of MIT A's alleged actions. The assistant chief of inpatient services was notified of MIT A's and MIT B's alleged actions. The non-protected review for MIT A was initiated on early spring 2023, and MIT A was reassigned to non-patient care duties the following day. Both the initiation of the non-protected review and reassignment of MIT B to non-patient care duties occurred in late summer 2023.

The OIG reviewed the letter the assistant chief of inpatient services provided to MITs and found expectations related to alarm monitoring included

- Vocera devices should not be set on *do not disturb* unless MIT is on official break;
- monitor alarms and alarm audio should not be turned off; and
- monitor alarm parameters should not be changed unless instructed by the registered nurse or physician.

Additionally, the letter informed MITs of the expectation to write a report each shift documenting patient monitoring information.³⁵ Upon review of the telemetry nurse manager's action plans, the OIG found that the telemetry nurse manager identified areas of telemetry MIT concerns and implemented process improvements within the telemetry department.³⁶

When asked if telemetry nurse leaders audited MIT actions to ensure adherence to alarm monitoring expectations, the assistant chief of inpatient services informed the OIG of requesting Vocera device usage reports and completing audits of MITs documenting alarm monitoring information but could not provide results of the Vocera usage reports and audits to the OIG.³⁷ Further, the assistant chief of inpatient services acknowledged the failure to inform the incoming telemetry nurse manager of the need to ensure MITs were compliant with alarm monitoring expectations.

When asked, the telemetry nurse manager informed the OIG an audit of MITs placing the Vocera device on *do not disturb* was not performed until the evaluation of patient event A in spring 2023. Further, the telemetry nurse manager indicated completing audits of MITs alarm monitoring "a few times per month" beginning in March 2023, but the telemetry nurse manager did not maintain a record of the audit results. Due to the telemetry nurse manager's failure to document MIT audit results, the OIG was unable to verify the telemetry nurse manager's completion of MIT audits or determine MITs' compliance with adhering to alarm monitoring expectations.

The OIG acknowledges that telemetry nursing leaders took some steps to address concerns regarding MIT monitoring and set MIT alarm monitoring expectations. The OIG also found that the telemetry nurse manager evaluated and addressed MIT A's and MIT B's actions. However,

³⁵ The letter of expectations indicated at minimum, this monitoring information should include the patient's name, what telemetry monitoring is provided, and any abnormal patient events that occurred during the work shift. The telemetry nurse manager informed the OIG this documentation monitoring is completed on a communication log.

³⁶ The telemetry nurse manager created the telemetry action plan in October 2023. Implemented processes included initiating daily huddles and monthly staff meetings, and "rounding" to the MIT work area. The nurse manager also coordinated staff training and planned the development of an MIT workgroup.

³⁷ A spot check is a quick review to examine compliance with outlined expectations and for the purposes of this report is considered an audit. The assistant chief of inpatient services could not recall the dates the audits were completed or when the Vocera device usage reports were requested.

the OIG concluded that telemetry nursing leaders failed to ensure MITs adherence to alarm monitoring expectations. The OIG is concerned the telemetry nurse manager's lack of documented oversight could hinder the ability to monitor MITs compliance with alarm monitoring expectations.

3. Concerns Regarding Patient Safety Reporting

The OIG identified concerns with patient safety reporting in response to the telemetry-related patient events. Specifically, the OIG found that facility staff did not enter a patient safety report in the Joint Patient Safety Reporting (JPSR) system for patient event A despite the event involving a patient death and, while a patient safety report was entered for patient event B, a facility patient safety manager rejected the event. In addition, the OIG found that quality and patient safety staff did not revisit rejected JPSR events.

Failure to Enter a JPSR Event

JPSR events are the primary notification mechanism for patient safety-related events and the foundation for identifying root causes and contributing factors that help to prevent future events.³⁸ Facility policy requires that when an employee becomes aware of possible failure to give due attention, the employee will report the event to patient safety within 24 hours.³⁹ Per VHA directive, the patient safety manager is responsible for “[v]alidating that immediate actions are taken following a patient safety event that protect other patients from harm and preserve relevant information that assists in fully understanding the event.”⁴⁰

The OIG reviewed a list of telemetry-related patient safety reports from spring through fall 2023, and did not find a patient safety report entered for patient event A. In an interview, the employee who reported the event to the telemetry nurse manager acknowledged knowing about the process for entering JPSR events, but in an email told the OIG of expecting the supervisors “to take whatever actions that were needed including [entering] a patient safety report.” The telemetry nurse manager stated that patient safety staff had previously advised that the person who witnessed the event should enter the JPSR event; however, when asked, the telemetry nurse manager could not remember who provided the guidance. The telemetry nurse manager also shared, with regards to patient event A, “in retrospect it would be good to tell [the MIT] . . . to put in a patient safety report . . .” The telemetry nurse manager also stated not knowing, at the time the event was reported, of the need to notify quality and patient safety.

³⁸ VHA Directive 1050.01, *VHA Quality and Patient Safety Programs*, March 24, 2023.

³⁹ Facility Policy 00Q-78, *Patient Abuse and Neglect*, June 11, 2021. The facility policy defines patient neglect as “to disregard or ignore; to fail to perform a duty or to give due attention or care or lack of proper attention or care.”

⁴⁰ VHA Directive 1050.01.

In separate interviews, one patient safety manager said it was “extremely surprising” that a patient safety report had not been entered for patient event A since it was related to a patient death. The patient safety manager elaborated,

You know we get JPSR [event]s for the most, and this is my own subjective opinion, some very trivial events, right? So, the fact that we had a veteran death that occurred and, as far as I know, we didn't get a JPSR [event], yes, that is surprising.

Another patient safety manager agreed that it was concerning that no JPSR event was entered for patient event A.

The OIG concluded that the failure to enter a JPSR event for patient event A limited the opportunity for quality and patient safety staff to evaluate the event, alert facility leaders, and determine whether further patient safety analysis, such as a root cause analysis, was indicated.

Failure to Revisit Rejected JPSR Events

The OIG also found that quality and patient safety staff automatically rejected JPSR events when a non-protected review was conducted, and that patient safety managers did not typically revisit rejected JPSR events, which inhibited further investigation by patient safety staff.⁴¹

Patient safety managers may reject JPSR events when the event is outside of the patient safety manager's scope of responsibility, such as when it is a criminal act or purposefully unsafe act. Rejected events do not require review for severity and probability of harm but are retained in the JPSR system.⁴² VHA guidance states that while purposefully unsafe acts can be rejected, events should not be rejected if, in the judgment of the patient safety professional, there is a systematic risk to patient safety.⁴³ Facility policy further specifies that patient safety managers are responsible for “investigating patient safety incidents which directly or indirectly result from clinical alarms”⁴⁴

While a JPSR event was entered for patient event B, a patient safety manager rejected the event after nursing leaders initiated a factfinding. In an interview, the patient safety manager told the OIG that when there was a non-protected review, JPSR events were rejected. Further, during interviews, both facility patient safety managers told the OIG that JPSR events were not typically revisited after rejection.

⁴¹ Non-protected review refers to facility reviews conducted for reasons other than quality assurance, including administrative investigations (administrative investigation boards and factfindings).

⁴² VHA National Center for Patient Safety, *JPSR Guidebook*, December 2022.

⁴³ VHA National Center for Patient Safety, *JPSR Guidebook*, December 2022. Updated versions of the guidebook were published in October and December 2023. All three guidebooks contain similar language about rejection of JPSR events.

⁴⁴ Facility Policy 118-38, *Effective Use of Clinical Alarms Systems*, February 11, 2022.

One patient safety manager stated in an interview that the rejection of JPSR events, without a process for patient safety review after completion of non-protected reviews, was a gap that had been identified in quality and patient safety service, and that there was a “need to figure out a way to . . . make sure we have that closed loop communication.” The risk manager also told the OIG that had a JPSR event been entered for patient event A, it would have been rejected “because that’s a conduct type thing, like a purposeful unsafe act.”⁴⁵ The facility chief of quality and patient safety service confirmed during an interview with the OIG that if a patient safety report had been entered for patient event A, it would have been rejected, and also confirmed advising the patient safety managers to reject JPSR events when non-protected reviews are being conducted.

In an interview, the VISN patient safety officer agreed that JPSR events are typically rejected when a non-protected review is being conducted, but told the OIG of the expectation that facility patient safety managers follow up with leaders for the results of non-protected reviews to determine whether systems issues were identified. The VISN patient safety officer further stated that if systems issues were identified in a non-protected review, a patient safety manager could reopen the JPSR event for a patient safety review. When asked by the OIG how this expectation had been communicated to facility patient safety managers, the VISN patient safety officer stated that the information had been discussed informally during monthly VISN patient safety manager calls but was unable to provide documentation of these discussions.

During an interview, a patient safety manager acknowledged the “gap” of not revisiting rejected JPSR events after completion of a non-protected review. Following the OIG site visit, the patient safety manager reported changing the process to revisit rejected JPSR events once non-protected reviews were completed but was unable to provide evidence of this process. In email correspondence to the OIG, the patient safety manager reported requesting “communication” from the risk manager upon completion of non-protected reviews, so patient safety could resume the JPSR event review, but was unable to provide any documentation of this communication.

Ultimately, the OIG concluded that patient safety staff rejected JPSR events when a non-protected review occurred and failed to have a follow-up process to review rejected JPSR events following non-protected reviews. The OIG found that the OIG’s inspection prompted a change to the process, as reported by a patient safety manager; however, patient safety staff did not provide evidence of a process to ensure that upon completion of non-protected reviews, rejected JPSR events are reviewed to identify potential systems issues.

4. Failure to Consider an Institutional Disclosure

The OIG found the risk manager and facility leaders did not consider an institutional disclosure following patient event A. While the failure to enter a JPSR event delayed notification of the

⁴⁵ The risk manager told the OIG that the risk manager supervises the facility patient safety managers.

event to the risk manager and facility leaders, the OIG determined the risk manager and facility leaders had the opportunity to consider an institutional disclosure when notified of the event. The OIG is concerned that facility leaders completed an issue brief for patient event A, but did not consider an institutional disclosure.⁴⁶

An institutional disclosure is a formal process where VA medical facility leaders and clinicians inform a patient or their representative of an adverse event that resulted in, or is expected to result in, death or serious injury.⁴⁷ VHA policy requires institutional disclosure for events that result in death or serious injury.⁴⁸ VHA policy requires the risk manager immediately notify facility leaders about adverse events that may require institutional disclosure.⁴⁹ The Chief of Staff and Associate Director Patient Care Services (ADPCS) are responsible for immediately notifying the Facility Director about significant adverse events, and the Facility Director is ultimately responsible for ensuring that institutional disclosures are performed openly and promptly.⁵⁰

The OIG determined that the delay in desaturation alarm notification could have resulted in serious injury to the patient and possibly contributed to the patient's death, and therefore would have expected that both the risk manager and facility leaders would have considered the need for an institutional disclosure.

In an interview, the risk manager reported learning of patient event A through an issue brief heads-up message four months after the event.⁵¹ Upon review of the issue brief, the OIG found that the issue brief was sent to the risk manager the day after the issue brief heads-up message, which noted that Patient A had "experienced a respiratory event . . . and ultimately expired." Further, the issue brief stated that an MIT "altered the parameters of the oximetry and therefore, alarms did not alert the nursing staff of the change in the [v]eteran's status." In an email to the OIG, a quality and patient safety service staff member told the OIG that the ADPCS provided an update to the issue brief indicating that executive leaders had determined a need for a non-protected review.⁵²

⁴⁶ Issue briefs provide information to VHA leaders about incidents, including deaths, which may impact care. VHA, *Guide to Issue Briefs*, April 6, 2022.

⁴⁷ An adverse event is an occurrence of harm or potential patient harm directly related to the care provided by VA providers. VHA Directive 1004.08, *Disclosure of Adverse Events to Patients*, October 31, 2018.

⁴⁸ VHA Directive 1004.08.

⁴⁹ VHA Directive 1004.08. The directive specifies that the risk manager must immediately notify the Associate Director for Patient Care Services, Chief of Staff, or VA medical facility Director.

⁵⁰ VHA Directive 1004.08.

⁵¹ A "Heads Up Message" provides a brief synopsis of an issue while information is being gathered to submit an issue brief. VHA, *Guide to Issue Briefs*.

⁵² A fact finding had already been initiated at the time of the issue brief. In addition, facility leaders initiated management reviews. For the purposes of this report, management reviews are non-protected reviews conducted for reasons other than quality assurance, which are not factfindings or administrative investigation boards.

In an interview, when asked whether an institutional disclosure was considered for patient event A, the risk manager reported “. . . we are only disclosing things that we definitively know . . .” and that it wasn’t “definitively” clear that MIT A turning off alarms contributed to the patient’s death. When asked what drove the decision to not investigate the case further to determine whether an institutional disclosure was needed, the risk manager stated it was because the intention was to use the outcome of the management reviews to determine whether staff actions directly contributed to the patient’s death or caused severe harm to the patient.

During review of documentation, the OIG learned that the factfinding and the management reviews were complete at the time of the site visit, however, the risk manager reported not having received and reviewed the results. The risk manager confirmed receiving the heads-up message that documented the factfinding had “substantiated that [MIT A] had the alarms off” but told the OIG, “I don’t know that they substantiated that there was harm.” When asked in an interview, the risk manager denied following up to request the results of the management reviews and did not “expect to get the whole factfinding.”

In an interview, the chief of quality and patient safety could not remember a discussion about an institutional disclosure for patient event A but stated “[i]f there was any doubt, we would have done it . . . was there harm, was there not. If there is any gray area, we’re going to err on the side of the [patient] and . . . do an institutional disclosure.” When asked who makes the final determination as to whether an institutional disclosure will be done, the chief of quality and patient safety service told the OIG “[i]n reality it is [the risk manager] . . . [The ADPCS and Chief of Staff] trust [the risk manager] and . . . they want to do right by the [patient].”

However, in interviews, neither the ADPCS nor the Chief of Staff could remember if an institutional disclosure had been discussed for patient event A. The Chief of Staff told the OIG “[a]nytime something like this happens, [the risk manager] will look at whether [the event] meets the criteria for . . . institutional disclosure.”

When asked if an institutional disclosure should have been considered for patient event A, the VISN risk manager opined “. . . I would think that this is one that should be done.” The VISN risk manager stated that while the failure to respond timely to the alarms may not have made a difference in the outcome, “it’s still something you should probably tell the family.”

The OIG determined that, despite patient event A involving a patient’s death, and completing an issue brief, facility leaders failed to consider an institutional disclosure for patient event A. While the risk manager failed to follow up with facility leaders regarding the need to consider an institutional disclosure for Patient A, the ADPCS and Facility Director were aware of the event and had the opportunity to consider an institutional disclosure. While the OIG was unable to determine whether a failure to respond timely to the alarms may have caused or contributed to Patient A’s death, the OIG determined that the event could have resulted in serious injury to the patient and would have expected the risk manager use all available information, including the

factfinding, to review the case and determine whether an institutional disclosure needed to be considered.

5. Lack of Clinical Alarm Governance and Oversight

The OIG found that the ADPCS failed to provide oversight of clinical alarm management.

VHA guidance states “facilities providing cardiac telemetry monitoring should have a Clinical Alarms Committee to address issues related to alarm safety and . . . to determine what the most appropriate alarm parameters . . . should be for each [telemetry] unit.”⁵³ Further, the ADPCS stated that responsibilities of the position included leading the Nurse Executive Council, which provides Clinical Alarms Committee oversight.⁵⁴

In a November 2023 interview, the ADPCS informed the OIG the acting chief of inpatient services and assistant chief of inpatient services reported concerns of MITs turning off alarms in September 2022.⁵⁵ The ADPCS further reported that the patient safety concerns related to telemetry MITs turning off alarms prompted the ADPCS to request nursing leaders to reinstate the Clinical Alarms Committee to monitor telemetry alarm parameters and alarm equipment.⁵⁶ Also in an interview, the ADPCS reported to the OIG the Clinical Alarms Committee charter was approved, committee members had been selected, and the committee had been meeting the “last couple of months.”

Following the interview, the OIG requested documentation regarding the Clinical Alarms Committee and found the committee charter was unsigned by the Facility Director and authored on the day of the November 2023 OIG information request.⁵⁷ Additionally, a quality and patient safety service staff member informed the OIG that the committee “is just now getting underway” and as such, was unable to provide committee minutes.

To better understand the discrepancy between the ADPCS statements and the Clinical Alarms Committee documentation, the OIG requested additional information from the ADPCS and found

- the committee held the first official meeting in October 2023;
- no documented discussion of clinical alarms oversight;

⁵³ *VHA Telemetry Guidebook 2020*.

⁵⁴ The Nurse Executive Council is a council that oversees the quality of care provided by nursing staff.

⁵⁵ The OIG reviewed the telemetry nursing leadership response to the patient safety concern above in Leadership Response to Telemetry MIT Alarm Monitoring Concerns section of the report.

⁵⁶ A quality and patient safety service staff member could not provide the OIG details on when the Clinical Alarms Committee meeting was initially discontinued.

⁵⁷ Requested information included the Clinical Alarms Committee charter and meeting minutes.

- the charter's effective date was different from the effective date on the previously provided draft charter; and
- the charter was not signed by the acting Facility Director until December 2023, 21 days after the ADPCS interview.⁵⁸

Ultimately, the OIG could not determine the reason for the discrepancy between the ADPCS statements and Clinical Alarms Committee documents but found that the Clinical Alarms Committee was not operational until October 2023 and, once operational, did not discuss clinical alarm oversight.

As follow-up, the OIG inquired about any consideration to expedite the development of the Clinical Alarms Committee given that both patient events A and B involved clinical alarms monitoring deficiencies and the ADPCS informed the OIG that while there were discussions to expedite,

The purpose of the clinical alarms committee is to establish the management and effective use of clinical alarms for the purpose of promoting safe patient care, not to provide direct [supervision] or evaluate a specific employee's conduct and/or behaviors and performance.

The OIG concluded that despite the ADPCS reinstating the Clinical Alarms Committee to address patient safety issues, the committee did not become operational until October 2023, approximately 13 months after the ADPCS's request. Further, the ADPCS's failure to expedite the development of the Clinical Alarms Committee was a missed opportunity to accelerate providing alarm oversight for telemetry patients. Given the occurrence of patient events A and B, the OIG is concerned that the lack of ADPCS and Nurse Executive Councils' clinical alarm management and oversight could increase the risk for additional patient safety events.

Conclusion

The OIG found there was limited documentation of information involving patient event A and patient event B in the EHR. Specifically, MIT A failed to document alerting nursing staff of Patient A's desaturation alarms and a registered nurse failed to document the change in Patient A's condition after the patient was found unresponsive and pulseless. Further, Patient A and Patient B's oxygenation and rhythm strips were not scanned into the EHRs, resulted in incomplete medical records, and hindered OIG and facility staff's evaluation of telemetry monitoring for both patient events A and B.

⁵⁸ Follow-up with the ADPCS occurred in December 2023 and January 2024; the ADPCS provided October 2023 Clinical Alarms Committee meeting minutes.

The OIG reviewed telemetry nursing leaders' response to telemetry concerns and determined telemetry nursing leaders implemented processes to improve and address telemetry MIT monitoring concerns but failed to ensure and document MITs' adherence to alarm monitoring expectations. The OIG is concerned the telemetry nurse manager's lack of documented MIT oversight could impede the ability to monitor and evaluate MITs' compliance with alarm monitoring expectations.

In review of patient safety concerns for both patient events A and B, facility staff did not enter a JPSR event for patient event A although the event involved a patient's death and possible failure to give due attention to the patient's desaturation alarms. Further, despite a JPSR event being entered for patient event B, a facility patient safety manager rejected the event, and quality and patient safety staff failed to revisit and review rejected JPSR events for identification of systems issues.

Despite the risk manager and facility leaders being aware that patient event A involved a patient's death and completing an issue brief, the risk manager and facility leaders did not consider an institutional disclosure for Patient A.

Although reinstating the Clinical Alarms Committee to address patient safety issues, the ADPCS did not provide oversight of clinical alarm management. The OIG is concerned that the lack of clinical alarm management oversight could result in an increased risk for the occurrence of patient safety events. The OIG made six recommendations to the Facility Director.

Recommendations 1–6

1. The VA Eastern Colorado Health Care System Director evaluates and ensures that telemetry medical instrument technicians and registered nurses comply with Veterans Health Administration and facility policy requirements for documentation and scanning, specifically related to telemetry oxygenation and rhythm strips and change in patient condition.
2. The VA Eastern Colorado Health Care System Director in conjunction with telemetry nursing leaders, ensures completion of a comprehensive review of the telemetry program and documented oversight of compliance with medical instrument technician monitoring expectations, identifies deficiencies, and takes actions as warranted.
3. The VA Eastern Colorado Health Care System Director promotes and encourages all staff to use the Joint Patient Safety Reporting system to report patient safety events and ensures telemetry staff and managers are trained on the use of the Joint Patient Safety Reporting system.
4. The VA Eastern Colorado Health Care System Director evaluates and ensures quality and patient safety event review processes comply with Veterans Health Administration guidance, specifically regarding rejection and follow-up of patient safety reports.

5. The VA Eastern Colorado Health Care System Director and facility leaders meet all Veterans Health Administration requirements for institutional disclosures for events meeting institutional disclosure criteria.
6. The VA Eastern Colorado Health Care System Director ensures review of facility clinical alarm management and committee processes, identifies deficiencies, and takes actions as warranted.

Appendix A: VISN Director Memorandum

Department of Veterans Affairs Memorandum

Date: June 5, 2024

From: Director, Rocky Mountain Network (10N19)

Subj: Healthcare Inspection—Failures by Telemetry Medical Instrument Technicians and Leaders' Response at the VA Eastern Colorado Health Care System in Aurora

To: Director, Office of Healthcare Inspections (54HL02)
Director, GAO/OIG Accountability Liaison Office (VHA 10OICGOAL Action)

1. We deeply regret any circumstances identified in the Office of Inspector General (OIG) report that may have impacted the care of Veterans and thank the OIG for their comprehensive assessment. I appreciate the opportunity to review and comment on the report, Review of Telemetry Medical Instrument Technician Actions and Leaders' Response at the VA Eastern Colorado Health Care System in Aurora.
2. Based on a thorough review of the report by Veterans Integrated Services Network (VISN) 19 Leadership, I concur with the recommendations and submitted action plans of Eastern Colorado Health Care System.
3. If you have questions or additional information is required, please contact the VISN 19 Quality Management Officer.

(Original signed by:)

Sunaina Kumar-Giebel, MHA

[OIG comment: The OIG received the above memorandum from VHA on July 10, 2024.]

Appendix B: Facility Director Memorandum

Department of Veterans Affairs Memorandum

Date: June 24, 2024

From: Interim Director, Department of Veterans Affairs (VA) Eastern Colorado Health Care System (ECHCS) (554)

Subj: Healthcare Inspection—Failures by Telemetry Medical Instrument Technicians and Leaders' Response at the VA Eastern Colorado Health Care System in Aurora

To: Director, Rocky Mountain Network (10N19)

1. We appreciate the opportunity to work with the Office of Inspector General's Office of Healthcare Inspections as we continuously strive to improve the quality of health care for the Nation's Veterans. VA ECHCS takes the safety of our patients very seriously and is committed to further strengthening our Culture of Safety as part of our High Reliability Journey.
2. We concur with the recommendations and value them to support our continuous process improvement. Responses to Recommendations 1 through 6 are provided on the attached document.
3. If you have any questions, please reach out to the Chief, Quality and Patient Safety Service and [Quality Management] QM Specialist-Investigations.

(Original signed by:)

Amir Farooqi, FACHE

[OIG comment: The OIG received the above memorandum from VHA on July 10, 2024.]

Facility Director Response

Recommendation 1

The VA Eastern Colorado Health Care System Director evaluates and ensures that telemetry medical instrument technicians and registered nurses comply with Veterans Health Administration and facility policy requirements for documentation and scanning, specifically related to telemetry oxygenation and rhythm strips and change in patient condition.

☒ Concur

☐ Nonconcur

Target date for completion: September 30, 2024

Director Comments

Department of Veterans Affairs (VA) Eastern Colorado Health Care System (ECHCS) Nursing Service staff revised local medical center policy (MCP) 118-53 “Telemetry and Pulse Oximetry Monitoring” to ensure the requirements for telemetry documentation, including printing of oxygenation and rhythm strips, are clearly addressed. This policy is currently undergoing final updates and is pending stakeholder concurrence and final quality team review prior to Director signature and dissemination to all VA ECHCS staff. Education will be provided to staff within 30 days of policy signature.

To ensure compliance with requirements, the telemetry medical instrument technicians (MITs) print oxygenation and rhythm strips, as well as any change in condition strips, every shift or when indicated. These strips are interpreted, and the registered nurses (RN) sign off and communicate any change in rhythm to the providers. The MITs, in partnership with the Health Information Management Service (HIMS) Section staff, process the strips and scan them into the electronic health record.

Documentation and reviews of rhythm strip printing will be completed/monitored by the unit manager weekly (started June 1, 2024). The compliance goal is 90%. Documentation and scanning reviews will be completed by the HIMS staff. The reviews will be conducted until the compliance goal is met or exceeded for two consecutive quarters, then quarterly to ensure sustained compliance. Review results will be reported through the Clinical Alarms Committee.

Recommendation 2

The VA Eastern Colorado Health Care System Director in conjunction with telemetry nursing leaders, ensures completion of a comprehensive review of the telemetry program and documented oversight of compliance with medical instrument technician monitoring expectations, identifies deficiencies, and takes actions as warranted.

☒ Concur

☐ Nonconcur

Target date for completion: September 30, 2024

Director Comments

The Chief Nurse for Inpatient Services and Assistant Chief Nurse for Inpatient Services convened a focus group in October 2023 comprised of the Chief Nurse, Assistant Chief Nurse, Nurse Manager, and the MITs. This focus group completed a comprehensive assessment of the current telemetry policy and reviewed MIT compliance to the policy. The focus group developed an action plan to address any identified opportunities. The group revised the Telemetry and Pulse Oximetry Monitoring policy, which was updated and disseminated to all VA ECHCS staff on June 10, 2024.

The Nurse Manager provided practical application education and evaluated the effectiveness of competency using a post-test in October 2023 for the current fiscal year. For ongoing education and training in addition to the above, the nurse educator will provide annual training using the telemetry amplify module tool and evaluate the effectiveness of their competency to ensure the MITs are effectively integrating the learning into their practice beginning in June 2024.

Currently, the Nurse Manager completes weekly reviews of the telemetry report documents and communication logs, as well as reviews baseline rhythm, trends, and changes in patient presentation. The Assistant Chief Nurse for Inpatient Services and Chief Nurse for Inpatient Services oversee the reviews of the MIT staff for compliance with the current telemetry policy and will continue to do so with the updated policy. The Nurse Manager provides feedback to the MITs in real time and in scheduled MIT staff meetings. The Chief Nurse for Inpatient Services began reporting audit results to Nurse Executive Council (NEC) on June 20, 2024.

Recommendation 3

The VA Eastern Colorado Health Care System Director promotes and encourages all staff to use the Joint Patient Safety Reporting system to report patient safety events and ensures telemetry staff and managers are trained on the use of the Joint Patient Safety Reporting system.

☒ Concur

☐ Nonconcur

Target date for completion: June 21, 2024

Director Comments

Patient Safety Managers provide education for all new employees during New Employee Orientation (NEO) regarding the use of the Joint Patient Safety Reporting (JPSR) system. This education includes, but is not limited to, the following:

- How to enter a patient safety report (PSR)
- When to enter a PSR

In addition to NEO, Patient Safety Managers attend both clinical and nonclinical staff huddles and staff meetings, including, but not limited to, the inpatient telemetry team huddle monthly, and at least two other team huddles or staff meetings across the health care system each month to provide ongoing education, reinforce initial education, and answer staff questions regarding the use of the JPSR system. This education is also reinforced during weekly Environment of Care (EOC) rounds and during the Patient Safety Manager Section Chief's Leader Rounding. The JPSR system updates and trends are discussed daily at the organization-wide Tier 3 huddle through VA ECHCS' daily management system (DMS) for enterprise-wide awareness.

On June 13, 2024, the Patient Safety Managers attended the telemetry huddle and reinforced previous education for the telemetry MITs and managers regarding telemetry specific PSRs. They also explored barriers to entering JPSRs with possible solutions. Requesting closure of this recommendation.

OIG Comments

The OIG considers this recommendation open to allow time for the submission of documentation to support closure.

Recommendation 4

The VA Eastern Colorado Health Care System Director evaluates and ensures quality and patient safety event review processes comply with Veterans Health Administration guidance, specifically regarding rejection and follow-up of patient safety reports.

☒ Concur

☐ Nonconcur

Target date for completion: September 30, 2024

Director Comments

Beginning February 1, 2024, per VHA Directive 1050.01(1) "VHA Quality and Patient Safety Programs", Patient Safety Managers began tracking all JPSRs that are rejected for non-protected review (reference VHA Directive 1190). On June 1, 2024, a weekly review was initiated to be completed by the Patient Safety Manager Section Chief. The Patient Safety Managers or

appropriate Quality staff will meet with the service, section, unit, and senior leadership, as applicable, to review and take action on all events being tracked until follow-up action is completed. Identified trends will be tracked and reported through the governance structure oversight group, the Medical Executive Council for non-protected management reviews.

Recommendation 5

The VA Eastern Colorado Health Care System Director and facility leaders meet all Veterans Health Administration requirements for institutional disclosures, for events meeting institutional disclosure criteria.

☒ Concur

☐ Nonconcur

Target date for completion: December 31, 2024

Director Comments

Adverse events identified by or brought to the attention of Risk Management are reviewed in conjunction with VHA Directive 1004.08 "Disclosure of Adverse Events to Patients" to maintain VA ECHCS' Culture of Safety and to promote an ethical health care environment. Real or potential events are discussed with the appropriate Executive Leadership Team (ELT) member and are disclosed to the patient or family representative in a timely manner as applicable in accordance with the directive.

On June 1, 2024, the Risk Manager started tracking adverse events, ensuring proper categorization in accordance with VHA Directive 1004.08 (e.g., clinical disclosure, institutional disclosure, or large-scale disclosure) and communicated to the VA ECHCS ELT using structured Situation-Background-Assessment-Recommendation (SBAR) communication. Trends will be reviewed quarterly and reported to the Medical Executive Council and action taken as necessary if trends indicate the need to intervene.

Recommendation 6

The VA Eastern Colorado Health Care System Director ensures review of facility clinical alarm management and committee processes, identifies deficiencies, and takes actions as warranted.

☒ Concur

☐ Nonconcur

Target date for completion: September 30, 2024

Director Comments

The Clinical Alarms Committee obtained charter approval from the then-Interim Director in late fall 2023. Recognizing gaps in engagement with the existing Clinical Alarms Committee, VA ECHCS assigned new chairs and resumed meetings in May 2024.

The ADPCS has committed to acting as the Executive Sponsor for the committee while the Chief Nurse for Inpatient Services moves into a project manager role for the committee to ensure goals are met. The committee is expected to report progress monthly to the NEC, as well as to provide guidance and support in reaching team goals and ensuring compliance with The Joint Commission (TJC) National Patient Safety Goals (NPSG) chapter standard NPSG.06.01.01.

OIG Contact and Staff Acknowledgments

Contact	For more information about this report, please contact the Office of Inspector General at (202) 461-4720.
----------------	---

Inspection Team	Sami Cave, MA Director Debbie Davis, JD Margaret Fox, MS, RDN Dannette Johnson, DO Meredith Magner-Perlin, MPH Zaire Smith, LCSW
------------------------	---

Other Contributors	Amanda Brown, MSN, RN Limin Clegg, PhD Barbara Mallory-Sampat, JD, MSN Daphney Morris, MSN, RN Natalie Sadow, MBA Robert Wallace, ScD
---------------------------	--

Report Distribution

VA Distribution

Office of the Secretary
Veterans Health Administration
Assistant Secretaries
General Counsel
Director, Rocky Mountain Network (10N19)
Director, VA Eastern Colorado Health Care System (554/00)

Non-VA Distribution

House Committee on Veterans' Affairs
House Appropriations Subcommittee on Military Construction, Veterans Affairs, and
Related Agencies
House Committee on Oversight and Accountability
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
US Senate: Michael F. Bennet, John W. Hickenlooper
US House of Representatives: Lauren Boebert, Yadira Caraveo, Jason Crow, Diana
DeGette, Doug Lamborn, Greg Lopez, Joe Neguse, Brittany Pettersen

OIG reports are available at www.vaoig.gov.