



**Department of Veterans Affairs
Office of Inspector General**

Office of Healthcare Inspections

Report No. 17-01485-128

Healthcare Inspection

Mismanagement of a Resuscitation and Other Concerns Buffalo VA Medical Center Buffalo, New York

March 12, 2018

Washington, DC 20420

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Executive Summary

The VA Office of Inspector General (OIG) conducted a healthcare inspection to evaluate the circumstances of a patient's death involving the alleged mismanagement of the patient's resuscitation (Event) at the Buffalo VA Medical Center (Facility), Buffalo, NY, and actions taken by Facility leaders subsequent to the death.

In January 2017, the Facility Director contacted the OIG Criminal Inspection Division to report the death of a full-code status patient who did not receive immediate life-sustaining treatment after staff determined the patient was unresponsive.¹ The Event occurred in late 2016. The Facility Director reported that a registered nurse (RN 1) did not "call a code" after finding the patient unresponsive because RN 1 did not want to put the patient's body through trauma, such as cracked ribs, which RN 1 feared cardiopulmonary resuscitation (CPR)/chest compressions would have caused.²

We substantiated that RN 1 did not "call a code" after finding the full-code patient unresponsive. We were not able to determine the time of death. RN 1 believed the patient had been dead for 20 minutes and that, because the patient was frail, performing CPR would have crushed his chest.

We determined RN 1 and a respiratory therapist (RT) acted outside their scopes of practice and violated Veterans Health Administration (VHA) and Facility policy when they announced that the patient was dead, which influenced others not to take appropriate action.

We determined an RN tasked to monitor patients' cardiac rhythms (RN 2) and a licensed practical nurse (LPN) failed to activate a Code Blue response and the LPN failed to initiate CPR during the Event.³ We also determined RN 2 improperly abandoned the telemetry desk during the Event, thereby temporarily placing other monitored patients at risk. We reviewed the 11 electronic health records of the remaining patients on the unit the day of the Event and found no quality of care issues that resulted from the telemetry monitoring station being left unattended.

We determined that RN 1 and the RT displayed a lack of collaboration and teamwork during resuscitation efforts after an intern called a Code Blue, and that the staff may benefit from periodic interprofessional simulation-based mock code training to ensure a coordinated and organized effort when responding to Code Blue events.

¹ Generally, full-code treatment includes cardiopulmonary resuscitation, intubation, emergency medications if indicated, and defibrillation.

² "Calling a code" is a term used to summon the "Code Team," a specialized team of providers trained to perform advanced resuscitative efforts.

³ Code Blue is a term used to indicate a hospitalized patient is in cardiopulmonary arrest and requires resuscitation.

We determined that a series of failures relating to the telemetry monitoring of the patient contributed to the delayed response to the patient's cardiac arrest. Specifically:

- RN 2 failed to recognize cardiac rhythm changes that required immediate action.
- RN 2 incorrectly interpreted the patient's lethal cardiac rhythm as a benign, perfusing rhythm.⁴
- The telemetry system recorded the sounding and silencing of multiple red alarms⁵ relating to the patient's cardiac arrest, with no corresponding evidence of actions being taken (such as notifying the patient's assigned nurse or charge nurse to take action).

We also determined that failure to follow Facility policy for documenting changes to a patient's cardiac rhythms impeded the ability to pinpoint changes in the patient's rhythm and the need for a timely response.

RN 1 told us that he/she listened to the patient's lungs prior to his requested "as needed" breathing treatment; however he/she failed to document his/her assessment and the RT failed to assess the patient's respiratory status, as required, before and after administering a scheduled respiratory treatment. While we could not know with certainty if assessing the patient's lung sounds would have prompted staff to act differently, better documentation might have facilitated communication regarding the patient's treatment needs.

We identified administrative concerns related to Facility leaders' response to the Event. Specifically, Facility leaders did not take appropriate timely steps to ensure patient safety when leaders failed to:

- Immediately remove the involved staff from all types of direct patient care duties to ensure patient safety pending an investigation of the cause(s) of staff's failure to call a code
- Conduct a timely Administrative Investigation Board (AIB), a review to identify and effectively correct individual and systemic deficiencies
- Conduct a Root Cause Analysis to identify potential process/system issues related to the Event

In addition, Facility leaders did not submit an Issue Brief to the Veterans Integrated Service Network, and did not pursue notifying the patient's family or personal representative after identifying staff failed to appropriately respond to the patient's cardiac arrest.

⁴ Perfusing rhythms cause the heart muscle to generate effective pump action, which provides circulation of blood to the body.

⁵ A red alarm announces and displays a life-threatening arrhythmia at the monitor station.

During our initial site visit, we recommended that Facility leaders consider whether they had an obligation to disclose the potential lapse in care to the patient's next of kin. During our second site visit, we were advised that the Facility's Performance Manager (PM) called the patient's family and that the family declined to have the discussion. When the PM spoke to the patient's family, he/she advised them that upon reviewing the decedent's record the Facility identified some "opportunities for improvement" and wanted to schedule a meeting with the patient's family, physician, and members of the performance management department. According to the PM's notes of the conversation with the family member, he/she did not inform the family that staff failed to provide timely resuscitation efforts and that the purpose of the requested meeting was to disclose information that may indicate the patient did not receive appropriate care.

At our suggestion, the Facility Director reviewed the PM's report of his/her call with the patient's family. After reviewing, the Facility Director determined that the Chief of Staff should attempt to call the family again in order to convey a clearer message.

We found that Facility staff attempted but failed to preserve all available telemetry data relating to the patient's death. Consequently, Facility leaders lost an opportunity to examine and review important telemetry data related to the Event during its internal review. The Facility did not have a policy and Veterans Health Administration has not provided clear guidance related to preservation of evidence after an adverse event.

We recommended that the VA Office of the General Counsel, pursuant to VA Directive 6311, work in conjunction with the Office of Information Technology, VHA offices, and other interested offices to advise the Under Secretary for Health regarding the refinement (or development) of policies reasonably designed to ensure the preservation of electronically stored information when legally necessary (or desirable for purposes of quality improvement), including, but not limited to electronically stored information that is subject to auto-deletion, such as telemetry data.

We recommended that the Veterans Integrated Service Network Director conduct an evaluation of the Facility's quality management practices (including but not limited to Root Cause Analyses, Issue Briefs, AIBs, and Institutional Disclosures) to ensure that they align with VHA policies and also address the following specific deficiencies in this case: (a) the failure to conduct a Root Cause Analysis, (b) the failure to conduct a timely AIB, (c) the failure to provide an Issue Brief, (d) the failure of the AIB to consider all available evidence, and (e) the failure to make an Institutional Disclosure consistent with VHA policy.

We recommended that the Facility Director:

- Review the care of the patient who is the subject of this report and confer with the Office of Human Resources and the Office of General Counsel to determine the appropriate administrative action to take, if any.
- Ensure that staff conduct interprofessional mock code training throughout the Facility with debriefing and monitor outcomes.

- Conduct an evaluation inclusive of but not limited to unit 9B and the Respiratory Department to determine if there are issues undermining teamwork at the work place, take action to address those issues, and monitor compliance.
- Ensure that staff adhere to the Facility's telemetry policy including, but not limited to, saving rhythm strips when a patient has a change in his/her baseline or a significant arrhythmia, that a competent staff member is always at the telemetry station, and that facility managers monitor compliance.
- Ensure that the Facility's Education Department staff review the adequacy of its annual telemetry monitoring re-certification process including, but not limited to, evaluating whether to institute additional requirements for staff who rarely have practical experience in telemetry monitoring and establishing procedures to ensure that re-tests are conducted and tracked appropriately, and monitor compliance.
- Evaluate the Respiratory Department handoff communications process including the timing of patients' treatments and code status, and modify as appropriate.
- Ensure staff assess patients before and after breathing treatments, document the patient's response in the electronic health record, and monitor compliance.
- Review the content of Facility staff's communication to the patient's family and take corrective action if it is determined that the communication was insufficient to convey that the Facility was disclosing potentially inadequate care.

The Office of the General Counsel, the Veterans Integrated Service Network Director, and the Interim Facility Director concurred with our findings and recommendations and provided acceptable improvement plans. (See Appendixes C, D, and E, pages 35–43, for the full text of the comments.) We consider recommendation 10 closed. We will follow up on the planned actions for recommendations 1 through 9 until they are completed.



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Purpose

The VA Office of Inspector General (OIG) conducted a healthcare inspection to evaluate the circumstances of a patient's death involving the alleged mismanagement of the patient's resuscitation (Event) at the Buffalo VA Medical Center (Facility), Buffalo, NY, and actions taken by Facility leaders subsequent to the death.

Background

The Facility, one of two healthcare facilities within VA Western New York Healthcare System, is part of Veterans Integrated Service Network (VISN) 2. It is a 154-bed Facility that provides medical, surgical, mental health, and long-term care services through a range of inpatient and outpatient programs. The Facility is the main VA referral hospital for cardiac surgery, cardiology, and comprehensive cancer care for central and western New York and northern Pennsylvania. It is academically affiliated with the State University of New York at Buffalo and 66 additional universities and professional schools.

The Facility's Unit 9B is a mixed medical and surgical unit consisting of 12 private rooms. All rooms are equipped for cardiac telemetry monitoring (discussed below) and have installed Code Blue (a term used to indicate a patient is in cardiopulmonary arrest) and staff assistance buttons.⁶ Patients admitted on Unit 9B include those requiring medical and surgical care, cardiac telemetry monitoring, mechanical ventilation, and bedside dialysis. The unit staff consists of a mix of registered nurses (RNs) and licensed practical nurses (LPNs), ward clerks, and telemetry monitoring staff who are either LPNs or RNs. The LPN or RN assigned to the telemetry station is responsible for notifying nurses providing direct patient care of changes in the patient's rhythm according to Facility telemetry policy.

Implantable Pacemaker

Implantable pacemakers are inserted under a patient's skin to help manage abnormal heart rhythms (arrhythmias). The pacemaker transmits electrical pulses to one or more heart chambers to stimulate contraction. This transmission of an electrical pulse is called "firing." The term "capture" is used to describe contraction of the heart's ventricles in response to the pacemaker's firing. Patients with advanced heart disease may experience life-threatening cardiac episodes if the heart's capture does not result in a contraction sufficient to create pump action and blood circulation.

⁶ A code or Code Blue are terms used to indicate a hospitalized patient is in cardiopulmonary arrest and requires resuscitation.

Perfusing Versus Non-Perfusing Rhythms

The heart generates rhythms that can be classified into two types. Perfusing rhythms cause the heart muscle to generate effective pump action which provides adequate circulation for the body. Patients with perfusing rhythms have a pulse. Premature ventricular complexes (PVCs) are heart beats where the heart's ventricles contract prematurely, but the patient still has a pulse. This manifests on an electrocardiogram (ECG) as an early beat, but ordinarily does not negatively impact a patient's clinical prognosis.

Non-perfusing rhythms, in contrast, do not provide adequate circulation to the body. Often the patient has a weak or absent pulse. Ventricular tachycardia⁷ (VTach), asystole,⁸ and pulseless electrical activity (PEA) are some non-perfusing rhythms. PEA, in particular, may be difficult to diagnose without examining the patient because it generates electrical activity on the ECG even though the heart is not actually contracting.⁹ Clinically, patients in PEA have no pulse despite having electrical activity on telemetry.

Some non-perfusing rhythms, like VTach, can be treated by delivering an electrical shock (defibrillation). Nonshockable rhythms, like PEA and asystole, may be caused by a variety of disorders (for example, medication overdose, severe dehydration/blood loss) and are best managed by treating the underlying cause and performing effective cardiopulmonary resuscitation (CPR) (discussed below).

Cardiac Telemetry Monitoring and Alarms

Physicians may order telemetry monitoring for hospitalized patients to monitor their heart rhythms. Telemetry monitoring provides a continuous ECG reading of the heart's electrical activity through external electrodes placed on the patient's body. The electrodes transmit segments of ECG data to a remote surveillance device. The device continuously analyzes patients' electrical heart rhythms and displays the output on a computer (telemetry station). Nurses at the telemetry station can print out paper copies of the rhythm strips showing the patient's ECG waveform. On Unit 9B, the telemetry station is located at the centralized nurses' station.

Potentially lethal, non-perfusing cardiac rhythms are pre-programmed to trigger a "red alarm," which is a loud and continuous alarm that sounds at the telemetry monitoring station. Patient alarms can be temporarily silenced by the operator at the monitoring station. If the alarm condition remains present, a silenced alarm will resume in 3 minutes or less depending on the severity of the alarm. A red alarm indicates the need to immediately check on a patient's status and vital signs. According to Facility

⁷ Ventricular tachycardia is a potentially fatal heart rhythm where the ventricle contracts rapidly.

⁸ Asystole is characterized by an absence of electrical activity and therefore no heartbeat; it is commonly known as "flatline" and can lead to death if not treated and reversed immediately.

⁹ Management of Cardiac Rhythm Disturbances | Tintinalli's Emergency Medicine Manual, 8e | Access Emergency Medicine | McGraw-Hill Medical.

policy, telemetry staff must immediately contact the nurse assigned to the patient (bedside nurse) to respond to red alarms. Based on an assessment of the patient, the bedside nurse may initiate either a Code Blue or call for the Rapid Response team¹⁰ and notify the patient's physician.¹¹

To be deemed competent to monitor telemetry at the Facility, an RN must be Advance Cardiac Life Support (ACLS)¹² certified and an LPN must be Basic Cardiac Life Support (BLS)¹³ certified. In addition, all staff who monitor telemetry patients (RNs and LPNs) must complete a 2-day course on cardiac rhythm interpretation, be oriented to the unit and telemetry monitoring equipment, and pass an annual cardiac rhythm recognition test.

An LPN is typically assigned to the telemetry station on Unit 9B. The assigned telemetry nurse is expected to be continuously present at the telemetry station in order to constantly monitor patients' cardiac rhythms. A similarly trained nurse must be available to relieve the telemetry nurse for meals or other breaks. On the day of events subject to this review, an RN (RN 2) was assigned to function as the telemetry nurse (telemetry monitor designee).

CPR

CPR is a procedure to support and maintain breathing and circulation for a person who has stopped breathing (respiratory arrest) and/or whose heart has stopped (cardiac arrest). The American Heart Association (AHA)¹⁴ recommends immediate chest compressions for adults suffering from sudden cardiopulmonary arrest using chest compression-airway-breathing as the sequence of steps to take when initiating CPR.¹⁵ The AHA further suggests that when multiple providers are available (such as in a hospital setting), these three tasks can be performed concurrently.¹⁶

¹⁰ While a Code Blue is activated for a patient in cardiopulmonary arrest, a call for the Rapid Response team is made for patients who experience a significant clinical change or decompensation. At the Facility, staff members call the Facility telephone operator who announces the Code Blue or Rapid Response emergency over the public address system and via an electronic paging system to Code Blue/Rapid Response team members. On the telemetry unit, a Code Blue button is located on a wall in each patient's room.

¹¹ VA Western New York Healthcare System Center Memorandum No. 11-77, *Telemetry Monitoring Policy*, March 17, 2014.

¹² ACLS is a protocol for the resuscitation of a pulseless patient that includes CPR as well as medication management and heart rhythm assessment that is not covered in the basic course. VA ACLS certified staff must renew the certification every 2 years.

¹³ BLS is a course that teaches first responder basic steps for treatment of a patient who is without a pulse or not breathing. Basic skills generally include CPR with the goal of providing short-term care while waiting for transfer of the patient to a higher level of care. VA BLS certified staff must renew the certification every 2 years.

¹⁴ American Heart Association Guidelines Update for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care (2015), Part 1: Executive Summary.

¹⁵ Cardiopulmonary arrest is the loss of airway, breathing, or circulation necessary to maintain life.

¹⁶ JM Field, et al. 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science. *Circulation*, 2010; 122:S640–656.

Effective chest compressions must be performed fast and deep enough to generate some circulation.¹⁷ Complications of chest compressions include broken ribs, punctured lungs, and bleeding into the chest/heart. Studies have shown that elderly patients who need CPR are less likely to survive to discharge from the hospital and have worse outcomes.¹⁸

Code Status

Code status describes a patient's preferences regarding procedures to be performed if cardiopulmonary arrest occurs.¹⁹ Clinicians carry out the patient's preferences in the event of a medical emergency depending on the patient's code status. A patient's code status is considered "full-code" unless a Do Not Attempt Resuscitation (DNR) order is documented in the patient's electronic health record (EHR).^{20,21} Generally, full-code treatment includes CPR, intubation, emergency medications if indicated, and defibrillation.

When a patient is admitted to the Facility, a wristband is created and placed on the patient's wrist. The wristband is used to alert staff of specific patient information such as allergies and code status. At the Facility, a patient with a DNR order has the letters 'DNR' written on the wristband. A patient who has a full-code order does not have any lettering about code status on his/her wristband.

Code Blue at the Facility

The Facility uses the term Code Blue for medical emergencies such as cardiopulmonary arrest. Initial treatment of a full-code status patient in cardiopulmonary arrest is the responsibility of the first CPR-trained employee identifying the medical emergency. The employee who identifies the emergency is to call for assistance, initiate a Code Blue, and begin CPR.²²

On Unit 9B, staff members activate a Code Blue or Rapid Response by calling the Facility telephone operator. The operator then announces a Code Blue or Rapid Response over the public address system and via an electronic paging system, which

¹⁷ Effective chest compressions consist of 100-120 times per minute to the depth of 2 to 2.4 inches, American Heart Association CPR 2015 Guidelines: quick action, more teamwork key to saving more lives.

¹⁸ Murphy DJ, Murray AM, Robinson BE, Campion EW. Outcomes of Cardiopulmonary Resuscitation in the Elderly. *Ann Internal Med.* 1989; 111:199-205. Doi: 10.7326/0003-4819-111-3-199.

¹⁹ Advance care planning is a process for identifying and communicating an individual's values and preferences regarding future health care for use at a time when that person is no longer capable of making health care decisions.

²⁰ VA Western New York Healthcare System Center Memorandum No. 11-18, *Cardiopulmonary Resuscitation Management*, September 1, 2016.

²¹ A DNR order is an order that establishes that CPR shall not be attempted for a patient in cardiopulmonary arrest. Patients with a DNR order should still receive clinically appropriate emergency interventions short of CPR (for example medications, fluids, oxygen, manual removal of an airway obstruction or the Heimlich maneuver) unless otherwise specified in the EHR.

²² VA Western New York Healthcare System Center Memorandum No. 11-18, *Cardiopulmonary Resuscitation Management*, September 1, 2016.

alerts a designated Code Team to immediately respond. The staff can also alert the operator to activate the Code Team by pushing a Code Blue button located on a wall in each patient's room

Facility policy identifies specific members of its Code Team.²³ The policy states that a respiratory therapist (RT) responds to all Code Blue announcements on a 24 hour a day basis to provide airway management; however, we were informed that at the Facility, airway management is usually provided by a trained physician. Other Code Team members include resident physicians, nurses, and administrators (such as the nursing supervisor).

Prior Reports

A search of prior facility healthcare inspections reports from the past 3 years did not identify relevant reports. See Appendix B for other relevant OIG reports published in the past 5 years.

Allegations

On January 20, 2017, the Facility Director contacted the OIG Criminal Inspection Division²⁴ to report the late 2016 death of a full-code status patient who did not receive immediate life-sustaining treatment after staff determined the patient was unresponsive.²⁵ The Facility Director reported that an RN (RN 1) did not "call a code" after finding the patient unresponsive because RN 1 believed that the patient was dead and did not want to put the patient's body through trauma, such as cracked ribs, which he/she feared CPR/chest compressions would have caused.²⁶

Scope and Methodology

We initiated our review on February 13, 2017 and conducted site visits at the Facility February 28 through March 2 and March 20 through March 22. While on the site visit, we conducted an unannounced inspection of the unit where the death occurred (Unit 9B) and reviewed the functions of the telemetry equipment.

We reviewed electronically generated reports from Unit 9B's telemetry system alarm logs obtained from the manufacturer and the Facility operator Code Blue and Rapid

²³ VA Western New York Healthcare System Center Memorandum No. 11-18, *Cardiopulmonary Resuscitation Management*, September 1, 2016.

²⁴ As of June 2017, the Assistant United States Attorney declined prosecution.

²⁵ The Facility Director did not immediately report the event as the Facility Performance Manager informed the Facility Director that the failure to initiate CPR was a conduct issue. Based on this information, the Facility Director pursued actions through Human Resources and initiated an Administrative Investigation Board. Despite taking these internal actions, the Facility Director subsequently had concerns and contacted Regional Counsel. Regional Counsel suggested contacting OIG.

²⁶ The term "call a code" refers to requesting an emergency response for a patient experiencing a medical emergency.

Response activation telephone logs. We reviewed the EHR of the patient in question²⁷ and of patients on the unit the day of the patient's death to determine whether staff appropriately responded to potential medical emergencies involving those patients.

We reviewed VHA and Facility policies and procedures, Joint Commission standards, Administrative Investigation Board (AIB) documents, Facility committee meeting minutes, nurse training records, nursing schedules, and other relevant documents.

We interviewed the following VHA personnel onsite: Facility Director; Chief of Staff; Nurse Executive; Chief of Pulmonary; Chief of Medicine; Chief of Police; Chief of Education and staff; Chief of Performance Management; VISN 2 Quality Management Officer; staff Cardiologist; Patient Safety Managers; Risk Managers; Bio-Medical Engineering manager and staff; inpatient medical/surgical and Intensive Care Unit (ICU) residents and interns, nurse managers and nurses; Respiratory Therapy manager and staff; and a Human Resources representative. We also interviewed, via teleconference, representatives of the manufacturer of the telemetry equipment discussed in this review.

Two VHA policies cited in this report were beyond their recertification dates.

- VHA Directive 2011-016, *Pronouncement of Death and Request for Autopsy By a Registered Nurse, Advanced Practice Nurse or Physician Assistant in VA Community Living Center*, March 16, 2011 (recertification due date, March 31, 2016).
- VHA Handbook 1050.01, *VHA National Patient Safety Improvement Handbook*, March 4, 2011 (recertification due date, March 2016).

We considered these policies to be in effect as the policies had not been superseded by more recent policy or guidance. In a June 29, 2016, memorandum to supplement policy provided by VHA Directive 6330(3),²⁸ the VA Under Secretary for Health (USH) mandated the "...continued use of and adherence to VHA policy documents beyond their recertification date until the policy is rescinded, recertified, or superseded by a more recent policy or guidance."²⁹ The USH also tasked the Principal Deputy Under Secretary for Health and Deputy Under Secretaries for Health with ensuring "...the timely rescission or recertification of policy documents over which their program offices have primary responsibility."³⁰

We **substantiate** allegations when the facts and findings support that the alleged events or actions took place. We **do not substantiate** allegations when the facts show the allegations are unfounded. We **cannot substantiate** allegations when there is no conclusive evidence to either sustain or refute the allegation.

²⁷ See Case Summary.

²⁸ VHA Directive 6330(3), *Controlled National Policy/Directives Management System*, June 24, 2016.

²⁹ VA Under Secretary for Health Memorandum. *Validity of VHA Policy Document*, June 29, 2016.

³⁰ Ibid.

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

Case Summary and Summary of Events³¹

The patient was aged 90 or older. His medical history included chronic obstructive pulmonary disease, heart failure, and hearing loss. He had an internally implanted pacemaker³² and used hearing aids.

On a day in late 2016 (Day 1), the patient presented to the Facility Emergency Department complaining of abdominal pain, anorexia, and nausea. He was admitted to Unit 9B with an order for telemetry monitoring and diagnoses of urinary tract infection and acute kidney injury secondary to dehydration. The admitting physician ordered antibiotics, hydration, and breathing treatments (scheduled every 6 hours and “as needed” every 4 hours). During the admission process, a physician and an RN documented that the patient’s code status was full-code. The RN verified the patient’s wristband as full-code.

On Day 2, the patient’s nausea and dehydration improved. However, at 11:04:16 a.m., he experienced an episode of seven heartbeats of VTach.³³ A red alarm sounded at 11:04:17 a.m., which was silenced at 11:04:24 a.m.³⁴ The patient’s nurse documented the event and noted the patient’s vital signs were stable and that he had no symptoms associated with the 7-beat run of VTach.³⁵ The RN also notified the physician, who entered no new orders and advised the RN to continue monitoring the patient. Aside from the VTach episode, staff documented that the patient’s heart rhythm was consistent with that of a pacemaker.³⁶

On Day 3, the patient’s kidney function returned to baseline and he was no longer dehydrated. At 5:50 p.m., an RT withheld the patient’s scheduled breathing treatment for an undocumented and unknown reason. At 6:11 p.m., the nurse assigned to provide the patient’s care (RN 1) entered a shift summary note.³⁷ RN 1 documented the following in the patient’s EHR:

[p]atient appears more HOH [hard of hearing] today than yesterday. patient is alert and oriented, patient requested this shift something for

³¹ The following case summary and summary of events use a combination of medical record documentation, telemetry alarm logs, and consistent staff testimony and interview responses.

³² The patient’s pacemaker was also a cardioverter-defibrillator, which had both pacing and defibrillator functionality.

³³ VTach is a potentially fatal heart rhythm where the ventricle contracts rapidly. The heart is unable to pump blood effectively, leading to poor circulation. Treatment depends on the cause and the patient’s symptoms.

³⁴ OIG inspectors obtained this information from a generated report of the telemetry system’s memory. Silencing the alarm stops the audible sound; however, the visual display of the rhythm remains.

³⁵ Symptoms associated with VTach often include dizziness, chest pain, shortness of breath, and confusion.

³⁶ A tracing of his heart rhythm from this timeframe showed a dual paced rate and a bundle branch block rhythm.

³⁷ The note was completed and signed at 11:08 p.m., after the patient’s death.

*sleep, but yesterday every time I entered the room he appeared sleeping. respirations easy, lungs diminished...*³⁸

At 9:20 p.m., RN 1 administered a breathing treatment via a hand-held nebulizer at the patient's request.³⁹ RN 1 did not document why the patient requested the breathing treatment, nor did RN 1 document listening to his breath sounds immediately before or after the treatment. RN 1 told us that, shortly after providing the treatment, he/she returned to the patient's room to retrieve the hand-held nebulizer. RN 1 told us that he/she believed the patient was sleeping and retrieved the hand-held device without attempting to wake him.

At 9:54 p.m., the RT removed medication from an automated dispensing machine in preparation for the patient's next respiratory treatment (scheduled for every 6 hours). After entering the patient's room; however, the RT did not administer the treatment because he/she could not wake the patient.

The RT left the room and approached the nurses' station where he/she found RN 1, RN 2 (the telemetry monitor designee), and an LPN. The RT told the staff that he/she could not wake the patient. The staff told him/her that he/she needed to yell into the patient's ear because he was not wearing his hearing aids. The RT returned to the patient's room.

At 9:59:13 p.m., the RT scanned the patient's armband and then placed a nebulizer mask on the patient's face to administer the treatment.

At 9:59:49 p.m., the patient experienced a VTach rhythm and a red alarm sounded. The alarm was silenced at 9:59:53 p.m.

The following description of events, obtained through OIG interviews, reports of contact documentation, and AIB testimony, occurred between 9:59:13 p.m. and 10:08 p.m.; however, precise electronic time stamps are not available. We were not able to determine the exact time of the patient's death.

After placing the nebulizer mask and starting the breathing treatment, the RT returned to the nurse's station and told the staff again that he/she could not wake the patient. Upon hearing this, RN 1, RN 2, and the LPN all went to the patient's room with the RT. The RT determined that the patient was not breathing. RN 1 and RN 2 both reportedly performed a sternal rub;⁴⁰ however, the patient did not respond. RN 1 also reportedly felt for a radial pulse, but did not detect one.

³⁸ Per Medline Plus Medical Encyclopedia, diminished lung sounds may indicate reduced airflow to part of the lungs.

³⁹ The nebulizer works by aerosolizing a medicated liquid; it takes about 5-10 minutes to finish.

⁴⁰ A sternal rub is a technique where the clinician places his/her knuckles on the patient's sternum and applies strong pressure to elicit a response. Typically, conscious patients will exhibit some movement or verbal response while unconscious patients will have no response.

After determining that the patient was in cardiac arrest, the following occurred: the RT removed the nebulizer mask from the patient, secured it to the wall, exited the room, and proceeded to care for his/her next patient; RN 2 returned to the telemetry monitor; the LPN resumed caring for other patients; and RN 1 returned to the nurses' station and called the medical intern (Intern 1)⁴¹ on duty. None of the staff activated a Code Blue or initiated CPR.

Intern 1, who was located one floor below, told RN 1 on the phone that he/she was coming to see the patient immediately. After Intern 1 and another intern (Intern 2) arrived at the patient's room and determined the patient was pulseless and not breathing, Intern 2 began chest compressions.

The following events were obtained using time stamped information.

- At 10:09 p.m., Intern 1 pressed the Code Blue button on the wall.
- At 10:10 p.m., an operator broadcasted the code on the announcement system.
- At 10:15 p.m., members of the Code Team arrived at the patient's bedside.

The Code Team arrived and noted that the patient was pulseless. Efforts to resuscitate the patient were not successful. The ICU resident, who led the Code Team, pronounced the patient dead at 10:28 p.m. That evening, at the request of the nursing supervisor, RN 1, RN 2, the RT, and the LPN completed reports of contact to recount the Event.

The next day, the Unit 9B manager completed and submitted a patient incident report describing the Event. A Patient Safety Manager (PSM), who is supervised by the Performance Manager (PM), reviewed the incident report the same day.

The day after the Event, the PM:

- Advised the PSM that the Event did not require a root cause analysis (RCA). The PM's reasoning was that the Event was an employee conduct issue, not a system issue, and that conduct issues did not require RCAs.⁴²
- Alerted the Facility Director of the Event.
- Advised the Facility Director to discuss the Event with Human Resources (HR) for possible personnel actions regarding staff's failure to call a code in a timely manner.⁴³

⁴¹ An intern is a physician in the first year of residency.

⁴² An RCA is a process for identifying the basic or contributing causal factors that underlie variations in performance associated with adverse events or close calls. See Issue 4 for detailed analysis.

⁴³ The PM told us that he/she did not recommend that the Director convene an AIB immediately after the Event because he/she concluded that the Event was explained by individual conduct.

On January 11, 2017, after receiving the results of the HR investigation, the Facility Director became concerned that he lacked full information of the Event⁴⁴ and chartered an AIB in order to gather more information. He also contacted Regional Counsel who recommended notifying the OIG.⁴⁵ The AIB was completed on February 9, 2017.⁴⁶

Inspection Results

Issue 1: Failure to Initiate Timely Resuscitation Efforts

We substantiated that RN 1 did not “call a code” after finding the full-code patient unresponsive. We determined that RN 1 believed the patient had been dead for 20 minutes and that, because the patient was frail, performing CPR would have crushed his chest.

We determined RN 1 and the RT acted outside their scopes of practice and violated VHA⁴⁷ and Facility policy⁴⁸ when they determined the patient was dead and decided not to perform CPR or initiate a Code Blue. We also determined that RN 2 and the LPN failed to activate a Code Blue response and the LPN failed to initiate CPR.⁴⁹ Additionally, we determined RN 2 improperly abandoned the telemetry station during the Event, thereby temporarily placing other monitored patients on the unit at risk.

The Facility’s CPR policy requires that initial treatment of a patient in cardiac arrest will be the responsibility of the first CPR-trained employee who will call for assistance, initiate a Code Blue, and begin CPR unless a DNR order is present in the patient’s EHR.⁵⁰

⁴⁴ Staff told us that HR contacted the managers of staff involved in the Event, collected evidence, received policies and procedures, and reviewed staff competencies and functional statements. HR staff told us that facility management collected all the statements from the involved individuals and conducted the investigation.

⁴⁵ VA Directive 0700, *Administrative Investigations*, March 25, 2002. An AIB is a standard VA procedure used to collect and analyze evidence, ascertain facts, and document complete and accurate information regarding matters of interest to VA.

⁴⁶ The AIB concluded, “...there was a failure to follow policies and procedures to provide needed care to a patient and to perform duties as a care provider to rescue a patient. However, based on the evidence from the testimony heard, the AIB believes there was no intent by the staff to not rescue the patient. [RN 1] believed it was too late to call a code, while the other staff present were unaware of the patient’s code status, and did not take the initiative to call the Code Blue or initiate CPR themselves. The AIB determined that there are opportunities for improvement in; accountability of staff to immediately respond to a patient concern, communication between staff, and additional education for telemetry monitoring.”

⁴⁷ VHA Directive 2011-016, *Pronouncement Of Death And Request for Autopsy By A Registered Nurse, Advanced Practice Nurse Or Physician Assistant In VA Community Living Center*, March 16, 2011. This VHA Directive expired on March 31, 2016 and has not yet been updated.

⁴⁸ VA Western New York Healthcare System Center Memorandum NO. 11-30, *Definition And Determination Of Death*, November 1, 2016.

⁴⁹ VA Western New York Healthcare System Center Memorandum No. 11-18, *Cardiopulmonary Resuscitation Management*, September 1, 2016.

⁵⁰ Ibid.

RN 1

RN 1 had worked at the Facility for more than 13 years. RN 1 told us that he/she was aware that the patient's resuscitation status was full-code. RN 1 was also aware of the in-room Code Blue button and the Facility policy for calling a code for an unresponsive patient. RN 1's competency file was up to date, including ACLS certification.

RN 1 stated that he/she was not concerned the first time the RT approached the nursing station because RN 1 was familiar with the patient's hearing impairment and had observed him sleeping within the last half hour. RN 1 stated the RT did not convey a sense of urgency when he/she reported that he/she was having difficulty waking the patient. The RT's testimony corroborated the lack of urgency observed by RN 1.

RN 1 told us that when he/she discovered that the patient was pulseless and not breathing, the RT remarked that the patient had been "gone" for 20 minutes. Prior to the Code Team arriving, this statement was corroborated by both interns; however, the RT denied the statement both to us and the AIB.

RN 1 stated that the RT's statement affected his/her decision-making, which led him/her to not call a code. RN 1 stated he/she had never "coded" a patient who had been "gone" for 20 minutes. RN 1 also stated that the patient was "frail" and that he/she did not want to break his ribs, which could have occurred during chest compressions.

During our interview, RN 1 stated:

I think -- I think if [the] respiratory therapist knew that something was wrong, [he/she] should have called the code, and by all means after we got in the room [he/she] never ever should have said that he's been gone 20 minutes. Otherwise I would have -- we would have called the code because at that point, we wouldn't have known. We wouldn't have -- there wouldn't have been [a] response to how long he's been gone.

[The RT] planted that seed of doubt, you know. It's just like sometimes a person could be gone for an hour, but you don't know it. So when you go in there, you're going to call a code because you don't know. But if a person tells you that a person has been gone for 20 minutes, [he/she] planted that seed, and it just -- it threw me. I was just total disbelief that [the RT] did not convey that anything was wrong, and now you're telling me he's been gone for 20 minutes.

During our interview, Intern 1 described the conversation when RN 1 called:

[RN 1] said: "the patient...is dead, basically...well the patient is not breathing, the respiratory therapist went in and found that the patient was...not breathing, and I had seen the patient 20 minutes ago."

I said, "are you sure?"

[RN 1] said, "yes."

I said, "Didn't you call a code?"

[RN 1] said, "Did I have to call the code?"

I said, "well this patient is full-code... so essentially you had to call the code."

[RN 1] said, “are you sure? But he’s been dead for 20 minutes.”

Although RN 1 spoke to Intern 1 after determining the patient was without a pulse, RN 1 did not call a Code Blue, which was inconsistent with the patient’s wish for a full code. Intern 1 and 2 initiated the code after arriving and assessing the patient. RN 1 did not prepare the room or patient for CPR management prior to the interns’ arrival.⁵¹

RT

The RT had over 20 years of experience and served as a Code Team member. The RT’s BLS certification and competency file were up to date. The RT was the first CPR-trained employee on scene but did not identify the patient’s cardiac arrest. In a report of contact completed soon after the event, the RT wrote that the patient had a faint, thready pulse at 9:55 p.m. The RT told us that the patient’s pulse was unchanged the second time he/she went into his room and could not wake him.

We determined that if the patient was unarousable with a weak, thready pulse, the RT should have called for help with staff assistance or pushed the Code Blue button in the patient’s room. The RT told us that he/she understood a Code Blue could be cancelled if staff determined that the patient did not need the care.⁵² Instead, the RT left the patient, walked down the hall for help without awakening the patient, and failed to convey a sense of urgency to the staff at the nurse’s station.

The RT stated that, after learning the patient had no pulse, RN 1 said, “Oh my God, he’s gone,” and walked out of the room. The RT was not familiar with the patient prior to the events of this report and denied awareness that the patient was a full-code status at the time of the event. The RT believed that RN 1 was responsible to alert others if the patient was a full-code as RN 1 had 4-5 patients and the RT had 35-40 patients. The RT relied on RN 1, as the nurse assigned to the patient, to call a Code Blue.

RN 1 and the RT Scopes of Practice

We determined that RN 1 and the RT acted outside their scopes of practice when they announced that the patient was dead. VHA Directive 2011-016 states that only medical doctors can pronounce patient death while the patient is under the care of the VA.⁵³ Although the RT did not specifically pronounce the patient’s death, the RT’s use of the euphemism “gone” alluded to the patient’s death. RN 1 told Intern 1 that the patient had died.

⁵¹ The Buffalo Medical Center’s Review of Cardiac Arrests Quality Assurance Report indicates that CPR Management includes the following duties: code cart at bedside, CPR board placed chest compressions, Zoll pads placed, and initiation of ACLS.

⁵² The Facility CPR policy has procedures in place for canceling a Code Blue.

⁵³ VHA Directive 2011-016. An exception to this rule is when the patient is a resident of the Community Living Center, which is a VA managed nursing home.

LPN

The LPN had worked at the Facility for more than 5 years. The LPN's competency file was up to date including certification for BLS. VA Handbook 5005/3⁵⁴ states that an LPN works under the supervision of an RN. The LPN reportedly observed the Event from the doorway as the staff initially determined the patient was in cardiac arrest. The LPN told us he/she asked RN 1 what the patient's code status was and that RN 1 responded by saying, "It doesn't matter, he's already gone."

RN 2

RN 2 had over 25 years of nursing experience, had worked for the VA for 9 years, and had worked on Unit 9B for 1.5 years. RN 2's competency file was up to date including certification for ACLS. On the day of the Event, RN 2 was assigned as the telemetry monitor designee and stated that he/she was aware the patient had a full-code status. RN 2 stated that after the RT came to the nurse's station the second time, "*nobody's getting up... so I got up, went down to see what the problem was... I didn't have to do it. I'm on light duty.*" Upon going to the patient's room and performing a sternal rub without any patient response, RN 2 stated he/she was on "light duty" and could not perform CPR. However, RN 2's condition would not have precluded him/her from pushing the Code Blue button in the patient's room.

Although RN 2 stated that he/she went back to the nurse's station and called the operator for a "Rapid Response,"⁵⁵ that action is not supported by other testimony and the operator log did not contain documentation of a Rapid Response call for Unit 9B at the time of the Event. In this situation where the patient was pulseless and not breathing, we determined a Code Blue initiated from the bedside would have been more appropriate than a Rapid Response call to the operator.

We also determined RN 2 improperly abandoned the telemetry station, thereby temporarily placing other monitored patients at risk. We reviewed the 11 EHRs of the remaining patients on the unit the day of the Event and found no quality of care issues that resulted from RN 2 leaving the telemetry monitoring station unattended. Facility policy states that "when the Telemetry Designee must leave the monitoring system, there will be another competent staff member assigned to cover the monitors." RN 2 should not have left the telemetry station until another qualified staff person was

⁵⁴ VA Handbook 5005/3, *Staffing*, April 10, 2003.

⁵⁵ In cases where a patient has experienced a significant clinical change or decompensation, staff can call the operator to activate a Rapid Response. The goal of the Rapid Response is to prevent further deterioration to cardiopulmonary arrest. The process is similar to activating a Code Blue, with the exception that the operator announces the need for a Rapid Response over the public address system. The Rapid Response Team comprises the same staff as the Code Team.

available or instructed to take over the telemetry monitoring duties especially when other staff members were available to check on the patient.⁵⁶

Lack of Teamwork

A lack of collaboration and teamwork contributed to the delay in calling a Code Blue and initiating CPR for the patient. Good communication and mutual support are integral components of teamwork.⁵⁷ The Joint Commission has determined that the “safety and quality of patient care is dependent on teamwork, communication, and a collaborative work environment.”⁵⁸ The Institute of Medicine Report *To Err is Human* noted that as many as 98,000 patients may die annually from medical errors, which include errors in communication.⁵⁹

Staff involved in the code response told us that RN 1 and the RT argued during the resuscitation. Even after Intern 1 pushed the Code Blue button and started CPR with Intern 2, RN 1 and the RT did not assist in the interns’ attempt to resuscitate the patient. When the Code Team arrived, the team observed that the patient did not have a backboard, defibrillation pads, or suction set up. Additionally, the RT was not providing breathing assistance to the patient. The reports by staff in the room of arguments between the RT and RN 1 were corroborated by both interns.

One staff member who was present during the code recounted the argument and stated, “I remember [the supervisor] telling the two [individuals] [RN 1 and the RT] something to the effect of maybe knocking it off or something like that.”

Once Intern 1 initiated the Code Blue, staff should have worked together to prepare the patient for the Code Team arrival. Preparation includes optimizing the quality of CPR by placing a backboard under the patient, assisting the patient’s breathing, setting up suction, and connecting the patient to the defibrillator. The Facility’s CPR policy states that a defibrillator “will immediately be placed on the patient and the [defibrillator] analyze button depressed prior to the [code] team arriving.”⁶⁰

The Facility ICU supervisor told us that ICU staff were made aware of opportunities to improve the Rapid Response process following review of Rapid Response records and patient transfers to the ICU that staff believed should have occurred sooner. As a result, the ICU staff developed an educational tool called Roll Your “Rs.” The tool

⁵⁶ VA Western New York Healthcare System Center Memorandum No. 11-77, *Telemetry Monitoring Policy*, March 17, 2014.

⁵⁷ Agency for Health Research and Quality. TeamSTEPPS® 2.0. <https://www.ahrq.gov/teamstepps/instructor/essentials/pocketguide.html>. Accessed May 4, 2017

⁵⁸ Sentinel Event Alert. Behaviors that Undermine a Culture of Safety. https://www.jointcommission.org/assets/1/18/SEA_40.PDF. Accessed May 7, 2017

⁵⁹ <http://www.nationalacademies.org/hmd/~media/Files/Report%20Files/1999/To-Err-is-Human/To%20Err%20is%20Human%201999%20%20report%20brief.pdf>. Accessed May 7, 2017.

⁶⁰ VA Western New York Healthcare System Cardiopulmonary Resuscitation Management, Center Memorandum No. 11-18, September 1, 2016.

provided information about when to call an RRT (Rapid Response Team), how to call an RRT, and what staff should look for to determine if an RRT is needed. Although staff had received training prior to the Event regarding role clarifications during emergencies, the Unit 9B staff did not prepare well for the arrival of the Code Team. The Roll Your “Rs” educational tool addressed process issues, but did not address the underlying problems with poor individual judgement, inadequate communication, and lack of teamwork among the staff.

The AHA guideline recognizes that the 2-year renewal cycle for ACLS is suboptimal because of the interim loss of critical, but rarely used cognitive, behavioral, and psychomotor skills. The guideline recommends periodic ACLS training that includes the use of high-fidelity simulation manikins (for those programs that have the resources) and education on teamwork.⁶¹ Some health care facilities conduct periodic mock codes using manikins to simulate patients in cardiopulmonary arrest to refresh ACLS skills and teach interprofessional collaboration.

The Chief of Education informed us that the Facility had two high-fidelity manikins but did not have the space to accommodate their use. We interviewed staff and reviewed evidence of mock codes conducted in calendar year 2016 on units 10C, 9A, 9C, and in the admissions/pharmacy waiting area. The Facility had not conducted a mock code on Unit 9B during that time period. We determined that staff may benefit from periodic interprofessional simulation-based mock code training to ensure a coordinated and organized effort when responding to Code Blue events.⁶²

Issue 2: Failure to Recognize, Respond to, and Appropriately Document Cardiac Rhythm Changes

A series of failures relating to the telemetry monitoring of the patient contributed to the delayed response to the patient’s cardiac arrest. With a red (critical) alarm, the telemetry system would automatically print a strip of the patient’s rhythm. RN 2 failed to recognize cardiac rhythm changes that required immediate action. The patient’s EHR showed that RN 2 incorrectly interpreted the patient’s lethal rhythm as a benign, perfusing rhythm. The telemetry system recorded the sounding and silencing of multiple red alarms which should have automatically printed a copy of the patient’s rhythm relating to the patient’s cardiac arrest. There was no corresponding evidence of actions being taken (such as notifying the patient’s assigned nurse or calling a Code Blue or a Rapid Response). The failure to follow Facility policy for documenting changes to a patient’s cardiac rhythms impeded the ability to pinpoint changes in the patient’s rhythm and the need for a timely response.

⁶¹ High-fidelity manikins are computerized and simulate real-life scenarios.

<https://www.americannursetoday.com/high-fidelity-patient-simulations-a-classroom-learning-tool/> Accessed May 10, 2017.

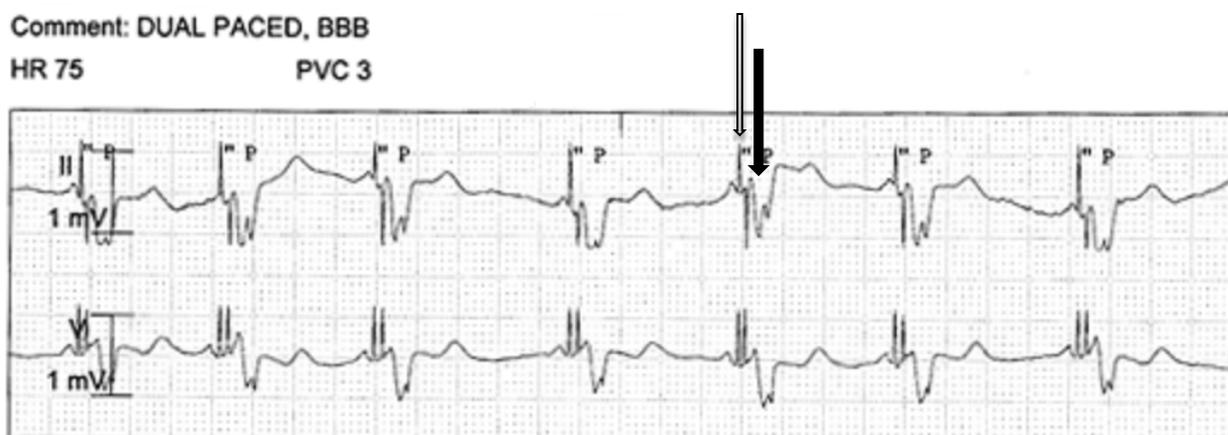
⁶² Roll Your “R”s: Improving Patient Outcomes During An Emergency. Received March 3, 2017.

The Patient's Telemetry Data

An example of the patient's baseline heart rhythm was recorded in his EHR at 4:46 p.m. on the evening of his death. (See Figure 1) The rhythm strip showed a normal, two-lead pacemaker firing (see thin arrow pointing to the 2 sharp spikes in Figure 1) followed by appropriate capture of the signal in the heart (see thick arrow pointing to the wide valley in Figure 1). The EKG shows the depolarization of the chambers of the heart as represented by a waveform referred to as a QRS Complex (thick arrow).⁶³

No later than 10:02 p.m., the patient's heart rhythm underwent a significant change.⁶⁴ As shown in Figure 2, the QRS Complex had widened significantly.

Figure 1: A Rhythm Strip Showing the Patient's Baseline Rhythm.



Source: Patient's EHR

Thin arrow points to pacemaker firing. Thick arrow points to capture.

⁶³ The Q wave is downward deflection, the R is the immediately following upward deflection, and the S wave is any downward deflection after the R wave.

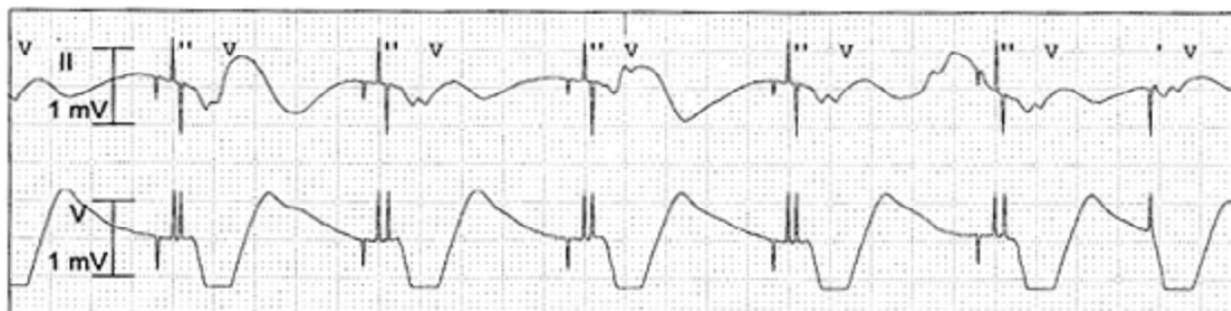
⁶⁴ Lost telemetry data prevents us from being able to determine the precise moment before 10:02 pm when the patient's heart rhythm changed. Alarm logs show that the patient was experiencing a potentially lethal cardiac episode as early as 9:59 pm, but rhythm strips from this time were not preserved.

Figure 2: Patient's Last Preserved Rhythm Strip

Comment: D-PACED W/PVC

HR 66

PVC 27



Source: Patient's EHR

Incorrect Rhythm Interpretation by RN 2

During the patient's cardiac arrest, RN 2 incorrectly interpreted the patient's rhythm as a benign, perfusing rhythm when in fact it was a lethal non-perfusing PEA rhythm. In isolation the PEA rhythm of Figure 2 could be considered ambiguous. However, when Figure 2 is compared with the patient's baseline rhythm (Figure 1), a significant change is readily apparent.⁶⁵ Thus, even though RN 2 incorrectly identified the patient's rhythm, RN 2 should have been able to appreciate that it reflected a significant change from his baseline, which would require a physical assessment of the patient by RN 1.

We identified two factors that may be relevant to RN 2's ability to correctly interpret the rhythm strip: (1) RN 2 had infrequent experience performing telemetry monitoring duties because telemetry duties are typically assigned to LPNs, not RNs; and (2) the Facility's process to determine competency may not have been rigorous enough to identify problem areas. RN 2 initially failed the Facility's annual 20-question telemetry competency exam. The failed test was provided to RN 2's manager for follow-up, and RN 2 was required to re-take it.⁶⁶ Although the Chief of Education and nurse educator stated that it is the practice to administer a different version for re-tests, this does not appear to have occurred in this instance because RN 2's passing test appears to be identical to the test taken by all test-takers.

Silencing Alarms Without Taking Action

Facility policy requires nurses to respond immediately "by direct patient assessment" to all red alarms generated by a telemetry system. A Code Blue should be called for

⁶⁵ During our interview, we asked RN 2 to interpret the rhythm strip (Figure 2). RN 2 reviewed the rhythm strip and provided the same incorrect interpretation.

⁶⁶ The unit manager told us that assignment sheets are maintained for 3 months; therefore, we were not able to review the sheets and determine the frequency of telemetry monitoring by RN2. A copy of the failed test was unavailable for our review.

patients found unresponsive with a potentially lethal alarm (for example, VTach or asystole).

The telemetry alarm log recorded multiple red alarms for VTach and asystole starting at 9:59 p.m. until Intern 1 called a Code Blue at 10:09 p.m. (See Appendix A). Although RN 2 and the LPN told us that they did not hear any alarms ringing during this period, the alarm log showed that four red alarms were silenced.⁶⁷ The telemetry station is located in a dedicated corner in the rear of the nurses' station. The telemetry monitor designee assigned duties include but are not limited to monitoring patient rhythms and attending to alarms. Another qualified staff member must be available to relieve the telemetry monitor designee for meals and breaks. RN 2 told us that he/she started his/her shift at 7:30 p.m. and had not yet been relieved for break before the 9:59 p.m. to 10:28 p.m. events. The only time RN 2 left the telemetry desk occurred when he/she accompanied the other nurses to the patient's room after the RT's second report that the patient was not responding.

Although the patient's alarm log recorded many alarms, RN 1 reported hearing one alarm during this time frame relating to the subject patient and stated that he/she "looked over" at the telemetry monitor prior to the RT coming to the nurse's station. Nothing in the record reflects action taken by RN 1 or RN 2 in response to the alarm. After the Event, the telemetry equipment manufacturer reviewed system logs and concluded that alarms sounded and that the equipment operated as designed.

Staff missed an opportunity to intervene if the patient⁶⁸ had a VTach rhythm at 9:59 p.m. The telemetry nurse should have notified the assigned nurse and the patient should have been evaluated. Studies have shown better patient outcomes with shockable rhythms (like VTach) than non-shockable rhythms (like asystole to which the patient later progressed), leading the AHA guideline to recommend early defibrillation for cardiac arrest patients, if indicated.⁶⁹ The manufacturer's analysis of log data confirmed that the patient did not enter asystole until 10:04 p.m.; 9 minutes after the RT stated that he/she first found the patient to be unresponsive.

Failure to Save Rhythm Strips

Telemetry staff must save rhythm strips when the patient is admitted, every 6 hours,⁷⁰ with any significant change from a patient's baseline (cardiac rhythm on admission) or the observation of abnormal rhythms.

⁶⁷ Based on our interviews, RN 2 reported that he/she had not been on break yet.

⁶⁸ We could not confirm the rhythm with the red alarms during this period because RN 2 did not scan a copy of the rhythm in the EHR. Machine artifact, patient movement, and improper electrode placement can frequently lead to false telemetry alarms.

⁶⁹ The patient's pacemaker had both pacing and defibrillator functionality. Without evaluating the patient, staff could not have determined if the device had been triggered to defibrillate.

⁷⁰ VA Western New York Healthcare System Center Memorandum No. 11-77, *Telemetry Monitoring Policy*, March 17, 2014.

Notwithstanding this policy, during our physical inspection of the unit, the nurses on duty told us that it was their practice to save rhythm strips on the timed 6-hour intervals, but that it was not their practice to save rhythm strips reflecting changes to a patient's baseline. This variation from the Facility's telemetry policy was also evidenced by the fact that no rhythm strips were preserved in connection with the patient's red alarms. In addition, although the EHR contained a copy of the PEA rhythm observed shortly before the patient was pronounced dead, it did not appear that this rhythm strip was saved in response to a perceived change in baseline rhythm but rather, as part of the scheduled 6 hour scanning, which coincided with the patient's cardiac arrest.

Issue 3: Failure to Assess the Patient and Document Treatment

RN 1 told us that he/she listened to the patient's lungs prior to his requested "as needed" breathing treatment; however, he/she failed to document his/her assessment. The RT failed to assess the patient's respiratory status (lung and breath sounds) as required before and after administering a respiratory treatment.

Facility policy required that RTs "[perform] patient assessment[s] before and after therapy is given" and indicated that RTs are responsible for "measuring...[the patient's] response to [breathing treatments]".⁷¹ RN 1 signed a Functional Statement⁷² that stated he/she would evaluate and document the patient's response to interventions. We determined that the respiratory assessment, at a minimum, should include listening to breath sounds before and after therapy to determine treatment effectiveness. RN 1 told us that he/she listened to the patient's breath sounds but did not document his/her assessment. The RT told us that he/she typically listens to a patient's lung sounds before and after a breathing treatment but was not required to document his/her findings. The Facility policy states that the RT is responsible for documenting "the outcome of the therapy in the electronic medical record."

RN 1 started a nursing note at 6:11 p.m., which was signed at 11:08 p.m. RN 1 documented that the patient's lungs were "diminished" and respirations were "easy" but did not document when he/she performed this assessment.

The patient requested and received an "as needed" respiratory treatment at 9:20 p.m., which RN 1 noted in the EHR, and a scheduled treatment by the RT about 20 minutes later, without clear documentation of the patient's respiratory status.⁷³ Respiratory treatments have the potential to cause rapid heartbeats and abnormal heart rhythms, which can be particularly dangerous in elderly patients with heart disease. Although,

⁷¹ VA Western New York Healthcare System Center memorandum No. 111-12, *Ordering of Routine Respiratory Therapy*, February 26, 2014.

⁷² A functional statement is an official statement of duties and responsibilities that management assigns to a position. They are required of all VHA employees who are not independent licensed practitioners (such as doctors and dentists).

⁷³ In some instances, patients who have severe respiratory difficulties may require multiple breathing treatments in succession. However, multiple successive treatments are best performed under the direct supervision of a physician with frequent patient reassessments.

respiratory treatments can be given in succession if needed, the EHR did not have documentation indicating that this patient needed two treatments so close together.

See Table for a summary of inspection results for Issues 1, 2, and 3 in regards to the four involved Facility staff (RN 1, RN 2, the RT, and the LPN).

Table: Summary of Patient Care Findings (Issues 1-3)

	Acted within scope of authority in determining patient's death	Initiated a Code Blue	Initiated CPR	Recognized cardiac rhythm changes and provided continuous telemetry monitoring	Assessed and documented breathing before initiating respiratory treatment
Criteria	VHA Directive 2011-016	Facility CPR Policy	Facility CPR Policy	Facility Telemetry Policy	Facility Respiratory Therapy Policy; RN Functional Statement
RN 1	No	No	No	N/A	No***
RN 2	N/A	No	N/A*	No	N/A
RT**	No	No	No	N/A	No
LPN	N/A	No	No	N/A	N/A

*N/A=not applicable *Could not perform due to a light duty status. **First CPR-trained employee on scene.*

****RN1 assessed lungs and did not document assessment.*

Red: Failed to follow policy.

Source: OIG analysis

Issue 4: Inadequate Facility Event Response

We identified administrative concerns related to Facility leaders' response to the Event. Specifically, Facility leaders did not take timely steps to ensure patient safety by failing to:

- Remove the involved staff immediately from all types of direct patient care duties to ensure patient safety pending an investigation of the cause(s) of staff members' failure to call a code
- Conduct an RCA to identify potential process/system issues related to the Event after AIB completion
- Conduct a timely AIB

In addition, Facility leaders did not submit an Issue Brief (IB) to the VISN,⁷⁴ and did not pursue notifying the patient's family or personal representative after identifying staff failed to appropriately respond to the patient's cardiac arrest. Neither VHA nor the Facility had a policy on preserving evidence after an adverse event;⁷⁵ consequently, Facility leaders lost an opportunity to examine and review important telemetry data related to the Event during the internal review.

Failure to Address Potential Patient Safety Risk

Direct Patient Care Assignments. The workday following the Event, RN 1 was reassigned to a different area and RN 2 was released to work in a previously selected position. At the time of our first onsite review on February 28, 2017, RN 1, RN 2, the LPN, and the RT were all in direct patient care positions.⁷⁶ During the onsite visit, at our recommendation and because the Facility leaders had not completed an investigation sufficient to identify the cause of staff's failure to appropriately respond to the patient's cardiac arrest, Facility leaders removed RN 1, RN 2, and the RT from direct patient care until our review was completed.

Lack of RCA. VHA requires that sentinel events have an immediate investigation and response using the RCA process or an administrative action, if the case was an intentionally unsafe act. A sentinel event defined by The Joint Commission is one that involves patient death, permanent harm, severe temporary harm, and intervention required to sustain life.⁷⁷ VHA policy also requires that patient incidents with an actual or potential SAC score of three not related to falls, medications, or missing patients, have an RCA completed.⁷⁸

According to VHA, adverse or sentinel events signal the need for immediate investigation and response which may result in the initiation of a(n):

- RCA, a review intended to focus on systems and processes versus individuals⁷⁹
- AIB, a review to identify and effectively correct individual and systemic deficiencies, such as in the case of an intentionally unsafe act^{80,81}

⁷⁴ An IB is a tool used by Facility Leaders to inform senior leaders of the factual circumstances surrounding unusual incidents, deaths, or other concerns that impact patient care. IBs provide a short neutral summary of what is known about an issue, problem or event.

⁷⁵ VHA Handbook 1004.08. *Disclosure of Adverse Events to Patients*, Corrected Copy, October 2, 2012. Adverse events are untoward incidents, therapeutic misadventures, iatrogenic injuries, or other adverse occurrences directly associated with care or services provided within the jurisdiction of a medical center, outpatient clinic, or other VHA facility.

⁷⁶ At the time of our site visit, RN 1 was working in employee health (including giving flu shots). RN 2 was caring for patients in the behavioral health unit. The RT and LPN remained in their original positions.

⁷⁷ http://www.jointcommission.org/Sentinel_Event_Policy_and_Procedures/default.aspx. Accessed May 9, 2017.

⁷⁸ VA National Center for Patient Safety RCA Step-By-Step Guide REV.02.26.2015

https://www.patientsafety.va.gov/docs/joe/rca_step_by_step_guide_2_15.pdf, May 8, 2017.

⁷⁹ VHA Handbook 1050.01, *VHA National Patient Safety Improvement Handbook*, March 4, 2011. This Handbook was due for recertification in March 2016 but has not yet been recertified.

- Disciplinary or other corrective action taken whenever an employee's performance of duty or professional competence is determined to be unsatisfactory or when an employee's professional or personal conduct is not satisfactory, prompt, and appropriate.^{82,83}

Lack of Timely AIB. When conducted in a timely manner, AIBs are one of VA's tools to ensure timely, systematic, and objective analysis of sometimes contradictory evidence regarding adverse events.⁸⁴ Although the Facility Director alerted HR staff of the adverse patient event and staff's actions were reviewed for disciplinary action, Facility leaders did not conduct an AIB until almost 3 months after the incident.

In this instance, the Facility Director acted appropriately in convening the AIB, but the sufficiency of the AIB was compromised by lack of timeliness and incomplete evidence gathering. The delay in convening an AIB is directly attributable to the decision by the PM to treat this episode as one of individualized conduct that could be addressed exclusively by HR. The PM's decision was made within a day of the Event and was based on the information provided by the Reports of Contact and a summary review of the patient's EHR.

The evidence considered by the AIB was incomplete due to the automatic deletion of telemetry data and a failure to take testimony from witnesses whose conduct was not at issue, but were available to refute or corroborate the conflicting accounts presented by RN 1, RN 2, the RT, and the LPN. For example, no testimony was sought from Intern 1, Intern 2, or other members of the Code Team, who provided information to us that reconciled some of the conflicting accounts.

The scope of the AIB report generally excluded consideration of potential systemic deficiencies related to the Event and instead focused primarily on the individual conduct of RN 1, RN 2, the RT, and the LPN. Consequently, after the AIB was completed, the PSM and an RCA team should have reviewed the AIB for identified system issues and if no system issues were identified, recommended to the Director the need for an RCA. The purpose of the RCA would be to identify system issues not discovered during the AIB process.

Failure to Submit an IB

VISN 2⁸⁵ requires that VISN facilities prepare and submit an IB to inform VISN staff of certain circumstances (triggers). Among the triggers, VISN 2 requires an IB in cases of employee-related incidences and for sensitive topics that might trigger media attention,

⁸⁰ VA Directive 0700, *Administrative Investigations*, March 25, 2002.

⁸¹ VA Handbook 0700, *Administrative Investigations*, July 31, 2002.

⁸² VA Handbook 5021/5, *Employee Management Relations*, August 28, 2007.

⁸³ VHA Handbook 1050.01, *VHA National Patient Safety Improvement Handbook*, March 4, 2011.

⁸⁴ *Ibid.*

⁸⁵ VISN 2 Guide to VHA Issue Briefs, November 22, 2016.

such as patient deaths. Additionally, the VISN requires an IB on an internal (such as an OIG visit) or external oversight regulatory review.

The VISN 2 Quality Management Officer was not informed of the Event prior to receiving notice that we would be reviewing the Event. We determined Facility leaders missed at least two opportunities that would have triggered an IB submittal: Facility leaders should have submitted IBs to VISN 2 concerning the Event upon (1) learning that Facility staff failed to call a code on a full-code status patient, and (2) learning of our onsite visit to conduct a review of the Event.

Disclosure

VHA facilities must disclose occurrences of adverse events related to patients' clinical care. Disclosure is warranted for "[a]dverse events that cause death or disability, lead to prolonged hospitalization, require life-sustaining intervention or intervention to prevent impairment or damage (or that are reasonably expected to result in death or serious and/or permanent disability), or that are sentinel events."⁸⁶

VHA recognizes three types of disclosure: clinical, institutional, and large-scale. Appropriate disclosure may include any or all types. Institutional disclosure of adverse events, (sometimes referred to as "administrative disclosure") is a formal process by which Facility leader(s) together with clinicians and others, as appropriate, inform the patient or the patient's personal representative that an adverse event has occurred during the patient's care that resulted in, or is reasonably expected to result in, death or serious injury, and provide specific information about the patient's rights and recourse.⁸⁷

Here it was immediately known by the PM that the patient's death occurred under circumstances where a nurse decided not to initiate resuscitation protocols despite knowing that the patient had a full code status. In our interview with the PM, he/she stated that an institutional disclosure was not appropriate until a determination had been made by the Facility leaders whether or not staff had truly failed to rescue the patient. The PM's conclusion is inconsistent with VHA policy, which mandates some form of disclosure where it is undisputed that an adverse event occurred and a patient died unexpectedly, even if the Facility has not yet reached its own determination as to causation.⁸⁸

During our initial site visit, we recommended that Facility leaders consider whether they had an obligation to disclose the potential lapse in care to the patient's next of kin. Subsequently we were advised that the PM called the patient's family and that the family declined to have the discussion. When the PM spoke to the patient's family,

⁸⁶ VHA Handbook 1004.08. *Disclosure of Adverse Events to Patients*, Corrected Copy, October 2, 2012.

⁸⁷ Ibid.

⁸⁸ VHA Handbook 1004.08. "In some cases, it may be apparent that an adverse event has occurred, but its cause is not clear. In those situations, the Veteran and/or the Veteran's personal representative needs to be told what has occurred and what is known about the problem. They need to be informed as to whether the problem is being investigated and if additional information will be provided to them once a review is completed."

he/she advised them that upon reviewing the decedent's record, Facility leaders identified some "opportunities for improvement" and wanted to schedule a meeting with the patient's family, physician, and members of the performance management department. According to the PM's notes of the conversation with the family member, the PM did not inform the family that staff failed to provide timely resuscitation efforts and that the purpose of the requested meeting was to disclose information that may indicate the patient did not receive appropriate care.

At our suggestion, the Facility Director reviewed the PM's report of his/her call with the patient's family. After reviewing the report, the Facility Director determined that the Chief of Staff should attempt to call the family again in order to convey a clearer message.

Lost Opportunity for Saving Telemetry Data

The duty to preserve evidence arises in various circumstances, including whenever a party has notice that evidence "that may be relevant to pending or reasonably anticipated litigation."⁸⁹ In addition, VHA recognizes the importance of examining and learning from adverse events through the use of RCAs, the effectiveness of which necessarily depends upon the availability of information relevant to the adverse event.⁹⁰

Facility staff failed to permanently preserve all available telemetry data relating to the patient's death. When a patient is discharged from telemetry, the nurse is presented with two options: "Discharge and Remove Data" or "Save Data with Discharge."⁹¹ The data saved by selecting the second option contains all patient heart rate and rhythm information collected during the hospital stay; this "saved" data is not permanently saved but is automatically deleted on a first-in-first-out basis after a minimum of 96 hours. In this instance, the manufacturer's analysis revealed that the "saved" data remained available for 10 days after the Event.

After the patient died, RN 2 selected the "Save Data With Discharge" option, which temporarily preserved the patient's telemetry data. On the morning after the patient's death, the Facility's Biomedical Engineering (Biomed) staff called the manufacturer for assistance in retrieving the patient's data. A record of the call provided by the manufacturer reflects that the parties to the call concluded that data were irretrievable if it had not been saved. The manufacturer told us that a field service engineer could be dispatched to provide assistance for free, but the Facility's Biomed staff decided to attempt retrieval of the data relying on the telephone assistance of the manufacturer.

⁸⁹ VA Directive 6311, VA E-Discovery, June 15, 2012.

⁹⁰ VHA Handbook 1050.01, *VHA National Patient Safety Improvement Handbook*, March 4, 2011.

⁹¹ The Facility recently upgraded their telemetry system so now it automatically saves the data.

The Facility's Biomed staff attempted retrieval of the data from the telemetry system and sent it to the manufacturer for processing. Approximately 3 weeks later, the manufacturer determined that the data had not been collected properly by the Facility's Biomed staff. Approximately 5 weeks later, a Field Service Engineer was at the Facility for an unrelated reason and was able to retrieve some data at the request of the Facility's Biomed staff. The alarm log data were available but most of the patient heart rate and rhythm information was no longer retrievable.

This was a lost opportunity to preserve evidence. The manufacturer's analysis confirmed that the actual rhythm strips with EKG waveforms showing every heartbeat experienced by the patient could have been retrieved for up to 10 days following the patient's death. These records were no longer available due to the passage of time.

The earliest EKG waveform data available show that the patient had a PEA rhythm at least 19 seconds earlier than the rhythm shown in Figure 2. This strip was preserved by a nurse on the Code Team during the Event.⁹² Alarm log data analyzed by the manufacturer show that the telemetry alarm system read the patient's rhythm as VTach approximately 3 minutes earlier at 9:59 p.m. The associated waveform data are no longer available due to the passage of time and the Facility's failure to preserve it, so there is no way to confirm the patient was actually in VTach.

The Facility's telemetry policy⁹³ did not include criteria for when telemetry data should be permanently saved. The PM stated that he/she typically requests sequestration of equipment associated with adverse events; however, the Facility does not have a policy governing evidence preservation in cases of adverse events nor did we find clear guidance from VHA on this issue. We determined that lack of technical expertise for the retrieval of telemetry data for discharged patients caused the Facility staff to lose an important opportunity to preserve evidence.

Conclusions

In January 2017, the Facility Director contacted the OIG Criminal Inspection Division to report that RN 1 did not call a Code Blue after finding a patient unresponsive because RN 1 did not wish to inflict trauma on the patient's body.

We substantiated that RN 1 did not call a Code Blue because of concerns about causing trauma to the patient's body; however, we also found that other staff failed to advocate for the patient. RN 1 and the RT acted outside their scopes of practice in determining that the patient was already dead when VHA policy stated that only physicians could pronounce death. Their poor judgement led to a cascade of inactions,

⁹² The Code Blue Committee used the report and rhythm strip to review the quality of care the patient received.

⁹³ VA Western New York Healthcare System Center Memorandum No. 11-77, *Telemetry Monitoring Policy*, March 17, 2014.

including not initiating a Code Blue call, not starting CPR, and leading subordinate staff (LPN) to not take action. The interpersonal conflict and lack of teamwork between the staff continued when Intern 1 initiated a Code Blue. The interns received no assistance in CPR or preparing the patient for the Code Team arrival. RN 1 and the RT did not stop arguing during the resuscitation until ordered to do so by the nursing supervisor.

The rhythm strip showed that the pacemaker fired appropriately, the patient's heart captured the signal, but only generated a non-perfusing rhythm. RN 2 incorrectly interpreted the patient's rhythm and failed to recognize the rhythm changes that required immediate action. According to the manufacturer, the telemetry equipment was operating as designed. According to the alarm log provided by the manufacturer, alarms were sounding and silenced four times between 9:59 p.m. and 10:08 p.m. As the assigned telemetry monitor designee during the time frame at issue, it appears that RN 2 silenced multiple telemetry red alarms and did not notify RN 1, the patient's bedside nurse, of a potential problem.

RN 2 left the telemetry station unattended, leaving other monitored patients at risk. We reviewed the EHRs of the remaining 11 patients on the unit the day of the Event and found no quality of care issues that resulted from the telemetry monitoring station being left unattended. RN 2 did not appreciate the severity of the patient's condition after finding the patient unresponsive; instead of using the in-room button to call a Code Blue, RN 2 opted to leave the patient's bedside to call a Rapid Response. Although the Facility policy stated that staff should preserve rhythm strips showing significant changes in the patient's rhythm, unit staff told us that they did not adhere to this policy.

We also determined that RN 1 and the RT did not assess the patient before and after his breathing treatments. The patient had two breathing treatments within 20 minutes which could have increased his risk of abnormal heart rhythms. Staff should have evaluated whether the patient needed the second breathing treatment. We are concerned that having two doses of medications so close together may have increased the patient's risk of heart problems. Improved communication between staff may have prompted staff to more closely evaluate the patient's need for the second, scheduled medication.

We determined that the Facility Performance Management staff did not conduct a VISN IB, RCA, or institutional disclosure as required by VHA directives. Shortly after the patient's death, the PM determined that the adverse event was a result of staff conduct rather than system issues. Consequently, the PM directed the PSM to not conduct an RCA. The PM also contacted the patient's family to discuss "opportunities for improvement" instead of informing them that Facility leaders needed to disclose an adverse event. Facility staff lost an important opportunity to save telemetry data; the facility and VHA lacked clear guidance on evidence preservation after an adverse event.

In summary, we concluded that multiple staff failed to advocate for the patient and the lack of teamwork jeopardized the quality of the patient's care. Facility performance management practices did not align with VHA directives on this adverse event.

Recommendations

1. We recommended that the VA Office of the General Counsel, pursuant to VA Directive 6311, work in conjunction with the Office of Information Technology, Veterans Health Administration offices, and other interested offices to advise the Under Secretary for Health regarding the refinement (or development) of policies reasonably designed to ensure the preservation of electronically stored information when legally necessary (or desirable for purposes of quality improvement), including, but not limited to electronically stored information that is subject to auto-deletion, such as telemetry data.
2. We recommended that the Veterans Integrated Service Network Director conduct an evaluation of the Facility's quality management practices (including but not limited to Root Cause Analyses, Issue Briefs, Administrative Investigation Boards, and Institutional Disclosures) to ensure that they align with Veterans Health Administration policies and also address the following specific deficiencies in this case: (a) the failure to conduct a Root Cause Analysis, (b) the failure to conduct a timely Administrative Investigation Board, (c) the failure to provide an Issue Brief, (d) the failure of the Administrative Investigation Board to consider all available evidence, and (e) the failure to make an Institutional Disclosure consistent with Veterans Health Administration Policy.
3. We recommended that the Facility Director review the care of the patient who is the subject of this report and confer with the Office of Human Resources and the Office of General Counsel to determine the appropriate administrative action to take, if any.
4. We recommended that the Facility Director ensure that staff conduct interprofessional mock code training throughout the Facility with debriefing and monitor outcomes.
5. We recommended that the Facility Director conduct an evaluation inclusive of, but not limited to, unit 9B and the Respiratory Department to determine if there are issues undermining teamwork at the work place, take action to address those issues, and monitor compliance.
6. We recommended that the Facility Director ensure that staff adhere to the Facility's telemetry policy including, but not limited to, saving rhythm strips when a patient has a change in his/her baseline or a significant arrhythmia, that a competent staff member is always at the telemetry station, and that facility managers monitor compliance.
7. We recommended that the Facility Director ensure that the Facility's Education Department staff review the adequacy of its annual telemetry monitoring re-certification process including, but not limited to, evaluating whether to institute additional requirements for staff who rarely have practical experience in telemetry monitoring and establishing procedures to ensure that re-tests are conducted and tracked appropriately and monitor compliance.

- 8.** We recommended that the Facility Director evaluate the Respiratory Department handoff communications process including the timing of patients' treatments and code status and modify as appropriate.
- 9.** We recommended that the Facility Director ensure staff assess patients before and after breathing treatments, document the patient's response in the electronic health record, and monitor compliance.
- 10.** We recommended that the Facility Director review the content of Facility staff's communication to the patient's family and take corrective action if it is determined that the communication was insufficient to convey that the Facility was disclosing potentially inadequate care.

Telemetry System Alarm Log

Time	Alarm Log Entry
21:59:49.546	TEL30 Alarm *** V-TACH
21:59:49.843	TEL30 Red Alarm Sound -arrhy*
21:59:53.109	Silenced TEL30 *** V-TACH
21:59:53.156	TEL30 Red Alarm Sound -arrhy
22:04:13.562	TEL30 Alarm *** ASYSTOLE
22:04:13.718	TEL30 Red Alarm Sound -arrhy
22:04:28.625	TEL30 Red Alarm Sound -arrhy
22:04:34.500	TEL30 Red Alarm Sound -arrhy
22:04:44.453	TEL30 Red Alarm Sound -arrhy
22:04:53.125	Silenced TEL30 *** ASYSTOLE
22:04:53.156	TEL30 Red Alarm Sound -arrhy
22:05:01.437	TEL30 Alarm *** ASYSTOLE
22:05:02.359	TEL30 Red Alarm Sound -arrhy
22:05:05.125	Silenced TEL30 *** ASYSTOLE
22:05:05.156	TEL30 Red Alarm Sound -arrhy
22:05:13.437	TEL30 Alarm *** ASYSTOLE
22:05:14.359	TEL30 Red Alarm Sound -arrhy
22:05:23.375	TEL30 Red Alarm Sound -arrhy
22:05:24.343	TEL30 Red Alarm Sound -arrhy
22:05:33.343	TEL30 Red Alarm Sound -arrhy
22:05:36.515	TEL30 Red Alarm Sound -arrhy
22:05:46.437	TEL30 Red Alarm Sound -arrhy
22:06:52.500	TEL30 Red Alarm Sound -arrhy
22:08:10.015	Silenced TEL30 *** ASYSTOLE
22:08:10.156	TEL30 Red Alarm Sound -arrhy
22:10:23.453	TEL30 Alarm *** ASYSTOLE
22:10:23.984	TEL30 Red Alarm Sound -arrhy

Source: data from equipment manufacturer

*arrhy denotes arrhythmia (abnormal rhythm)

Prior OIG Reports

System Reports

In the past 5 years, OIG completed the following reviews of the system:

Combined Assessment Program Review of the VA Western New York Healthcare System, Buffalo, New York

1/28/2016 | 15-04698-99

Review of Community Based Outpatient Clinics and Other Outpatient Clinics of VA Western New York Healthcare System, Buffalo, New York

1/28/2016 | 15-05155-89

Inspection of VA Regional Office Buffalo, New York

11/10/2014 | 14-02577-07

Audit of Post-9/11 G.I. Bill Monthly Housing Allowance and Book Stipend Payments

7/11/2014 | 13-01452-214

Healthcare Inspection – Quality of Care Concerns, Hospice/Palliative Care Program, VA Western New York Healthcare System, Buffalo, New York

6/9/2014 | 13-04195-180

Combined Assessment Program Review of the VA Western New York Healthcare System, Buffalo, New York

7/15/2013 | 13-00897-242

Healthcare Inspection – Inappropriate Use of Insulin Pens, VA Western New York Healthcare System, Buffalo, New York

5/9/2013 | 13-01320-200

Audit of VHA's Beneficiary Travel Program

2/6/2013 | 11-00336-292

Healthcare Inspection - Alleged Quality of Care and Staffing Issues VA Western New York Healthcare System, Buffalo, New York

2/16/2012 | 11-02637-90

Topic Related Reports

OIG has conducted recent relevant reports involving Code Blue response concerns, telemetry monitoring issues, and failure to conduct an RCA.

Healthcare Inspection – Environment of Care and Safety Concerns in Operating Room Areas, Edward Hines Jr. VA Hospital, Hines, Illinois

1/19/2016 | 14-05173-92

Healthcare Inspection – Delay in Emergency Airway Management and Concerns about Support for Nurses, VA Northern California Health Care System, Mather, CA

7/28/2015 | 15-00533-440

Healthcare Inspection – Quality of Care Issues, West Palm Beach VA Medical Center, West Palm Beach, Florida

12/18/2014 | 14-02887-64

Healthcare Inspection – Out of Operating Room Airway Management Concerns, W.G. (Bill) Hefner VA Medical Center, Salisbury, North Carolina

9/30/2014 | 13-04005-296

Healthcare Inspection – Alleged Mismanagement in the Cardiac Catheterization Laboratory, VA Maryland Health Care System, Baltimore, Maryland

7/15/2014 | 13-02892-217

Healthcare Inspection – Patient Care Deficiencies and Mental Health Therapy Availability, Overton Brooks VA Medical Center, Shreveport, Louisiana

1/7/2016 | 14-05075-447

Healthcare Inspection – Quality of Care Issues, Sheridan VA Healthcare System, Sheridan, Wyoming

7/14/2015 | 14-00903-422

Healthcare Inspection – Patient Telemetry Monitoring Concerns, Michael E. DeBakey VA Medical Center, Houston, Texas

3/31/2015 | 14-03927-197

Healthcare Inspection – Staffing and Patient Care Issues, West Palm Beach VA Medical Center, West Palm Beach, Florida

2/12/2015 | 14-01708-123

Healthcare Inspection – Alleged Insufficient Staffing and Consult Management Issues, Carl Vinson VA Medical Center, Dublin, Georgia

1/7/2015 | 14-04702-60

Healthcare Inspection – Inadequate Staffing and Poor Patient Flow in the Emergency Department, VA Maryland Health Care System, Baltimore, Maryland

9/18/2013 | 12-03887-319

Healthcare Inspection - Review of Circumstances Leading to a Pause in Providing Inpatient Care, VA Northern Indiana Healthcare System, Fort Wayne, Indiana

8/2/2013 | 13-00670-265

Healthcare Inspection - Alleged Inappropriate Surveillance James A. Haley Veterans' Hospital Tampa, Florida

4/11/2013 | 12-03939-175

Healthcare Inspection – Alleged Patient Safety, Medication Management, and Environment of Care Deficiencies in the Intensive Care Unit, Hampton VA Medical Center, Hampton, VA

9/17/2012 | 12-02516-280

Evaluation of the Quality, Safety, and Value Program in Veterans Health Administration Facilities Fiscal Year 2016

3/31/2017 | 16-03743-193

Healthcare Inspection – Review of Complaints Regarding Mental Health Services Clinical and Administrative Processes, VA St. Louis Health Care System, St. Louis, Missouri

12/13/2016 | 14-03434-102

Healthcare Inspection – Administrative Response to Deaths and Quality of Care Irregularities, VA North Texas Health Care System, Dallas, Texas

8/26/2016 | 14-02725-316

Healthcare Inspection – Medication Management Concerns, South Texas Veterans Health Care System, San Antonio, Texas

6/15/2015 | 15-00425-380

Healthcare Inspection – Administrative and Quality of Care Concerns, Martinsburg VA Medical Center, Martinsburg, West Virginia

5/21/2015 | 13-04212-346

Healthcare Inspection - Medication Management Issues in a High Risk Patient, Tuscaloosa VAMC, Tuscaloosa, Alabama

6/25/2014 | 13-02665-197

Healthcare Inspection – Follow-Up of Mental Health Inpatient Unit and Outpatient Contract Programs, Atlanta VA Medical Center, Decatur, Georgia

6/19/2014 | 12-03869-187

Healthcare Inspection – Emergency Department Patient Deaths' Memphis VAMC, Memphis, Tennessee

10/23/2013 | 13-00505-348

Healthcare Inspection – Quality of Care Issues, Erie VA Medical Center, Erie, PA, and VA Pittsburgh Healthcare System, Pittsburgh, PA

9/25/2013 | 13-01855-336

Healthcare Inspection - Alleged Inadequate Oversight at a Contracted Homeless Program, VA New Jersey Health Care System, East Orange, New Jersey

7/16/2013 | 12-01344-243

Healthcare Inspection - Mismanagement of Inpatient Mental Health Care, Atlanta VA Medical Center, Decatur, Georgia

4/17/2013 | 12-03869-179

Healthcare Inspection – Alleged Patient Safety Deficiencies in the Community Living Center, Canandaigua VA Medical Center, Canandaigua, New York

12/21/2012 | 12-03543-73

OIG reports are available on our website at www.va.gov/oig

Office of the General Counsel Comments

**Department of
Veterans Affairs**

Memorandum

Date: February 13, 2018
From: Office of the General Counsel
Subj: Healthcare Inspection—Mismanagement of a Resuscitation and Other Concerns, Buffalo VA Medical Center, Buffalo, New York
To: Assistant Inspector General for Healthcare Inspections (54)

1. I have reviewed and concur with Recommendation 1 in the subject OIG report.
2. The Office of the General Counsel will, as it becomes aware of new legal requirements or capabilities for storing information, engage with the relevant offices to make a recommendation to the Under Secretary for Health.



James M. Byrne

Comments to OIG's Report

The following Office of the General Counsel comments are submitted in response to the recommendation in the OIG report:

OIG Recommendation

Recommendation 1. We recommended that the VA Office of the General Counsel, pursuant to VA Directive 6311, work in conjunction with the Office of Information Technology, Veterans Health Administration offices, and other interested offices to advise the Under Secretary for Health regarding the refinement (or development) of policies reasonably designed to ensure the preservation of electronically stored information when legally necessary (or desirable for purposes of quality improvement), including, but not limited to electronically stored information that is subject to auto-deletion, such as telemetry data.

Concur

Target date for completion: Ongoing

Office of the General Counsel response: The Office of the General Counsel will, as it becomes aware of new legal requirements or capabilities for storing information, engage with the relevant offices to make a recommendation to the Under Secretary for Health.

VISN Director Comments

**Department of
Veterans Affairs**

Memorandum

Date: November 21, 2017

From: Director, New York/New Jersey VA Health Care Network (10N2)

Subj: Healthcare Inspection—Mismanagement of a Resuscitation and Other Concerns, Buffalo VA Medical Center, Buffalo, New York

To: Director, (Regional Office) Office of Healthcare Inspections (54SD)
Director, Management Review Service (VHA 10E1D MRS Action)

1. Thank you for the opportunity to review the draft report of the Veterans Affairs Western New York Healthcare System inspection.
2. I have reviewed the draft report and concur with the recommendations.
3. I concur with the VAMC's established corrective action plans with planned completion dates, as detailed in the attached report. If additional information is needed please contact Pam Wright, VISN2 QMO, at 718-741-4143.



Joan E. McInerney, MD, MBA, MA, FACEP
Network Director, VISN 2

Comments to OIG's Report

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

OIG Recommendation

Recommendation 2. We recommended that the Veterans Integrated Service Network Director conduct an evaluation of the Facility's quality management practices (including but not limited to Root Cause Analyses, Issue Briefs, Administrative Investigation Boards, and Institutional Disclosures) to ensure that they align with Veteran Health Administration policies and also address the following specific deficiencies in this case: (a) the failure to conduct a Root Cause Analysis, (b) the failure to conduct a timely Administrative Investigation Board, (c) the failure to provide an Issue Brief, (d) the failure of the Administrative Investigation Board to consider all available evidence, and (e) the failure to make an Institutional Disclosure consistent with Veterans Health Administration Policy.

Concur

Target date for completion: March 1, 2018

Facility response: A comprehensive review of the facility's quality management practices is being conducted by Veterans Integrated Service Network Quality Management and Patient Safety Leadership. The review will include evaluation of the Facility Root Cause Analyses, Issue Briefs, Administrative Investigation Boards, and Institutional Disclosures processes to ensure alignment with Veteran Health Administration policies. Review results will be reported to the Veterans Integrated Service Network Quality, Safety and Value Committee with any identified needed improvements followed until closure.

Interim Facility Director Comments

**Department of
Veterans Affairs**

Memorandum

Date: November 3, 2017

From: Interim Facility Director, Buffalo VA Medical Center (528/00)

Subj: Healthcare Inspection— Mismanagement of a Resuscitation and Other Concerns, Buffalo VA Medical Center, Buffalo, New York

To: Director, New York/New Jersey VA Health Care Network (10N2)

1. Thank you for the opportunity to review the draft of the Veterans Affairs Western New York Healthcare System inspection.
2. I have reviewed the draft report and concur with the recommendations.
3. Corrective action plans have been established with planned completion dates, as detailed in the attached report. If additional information is needed please contact my office at (716) 862-8529.



Paul S. Crews, MPH, FACHE
Interim Healthcare System Director
VA Western New York Healthcare System

Comments to OIG's Report

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

OIG Recommendations

Recommendation 3. We recommended that the Facility Director review the care of the patient who is the subject of this report and confer with the Office of Human Resources and the Office of General Counsel to determine the appropriate administrative action to take, if any.

Concur

Target date for completion: March 30, 2018

Facility response: The Facility Director consulted with the Office of Human Resources and Veterans Affairs Office of General Counsel regarding the staff members involved in the care of the patient who is the subject of the report.

Appropriate action is underway.

Recommendation 4. We recommended that the Facility Director ensure that staff conduct interprofessional mock code training throughout the Facility with debriefing and monitor outcomes.

Concur

Target date for completion: March 1, 2018

Facility response: Mock code drills will occur throughout the facility including acute care units.

Result debriefings with participating unit staff will occur following each mock code.

The facility Cardio Resuscitation Committee and Executive Committee of the Medical Staff will monitor mock code drills until at least a 90 percent compliance rate is sustained for three consecutive months.

Recommendation 5. We recommended that the Facility Director conduct an evaluation inclusive of, but not limited to, unit 9B and the Respiratory Department to determine if there are issues undermining teamwork at the work place, take action to address those issues, and monitor compliance.

Concur

Target date for completion: May 1, 2018

Facility response: Upon facility review, it was determined appropriate that an outside organization conduct team training for inpatient unit 9B and the respiratory department.

The Veterans Health Administration National Center for Organizational Development (NCOD) will conduct a consultation on engaged and effective teams and Action Focused Consult with inpatient unit 9B and the respiratory department.

The Action Focused Consult includes staff training, action plan development, and tracking completion of the action plan. The action plan will be presented to the facility Local Leadership Council and monitored by the Quality Committee until closure.

Recommendation 6. We recommended that the Facility Director ensure that staff adhere to the Facility's telemetry policy including, but not limited to, saving rhythm strips when a patient has a change in his/her baseline or a significant arrhythmia, that a competent staff member is always at the telemetry station, and that facility managers monitor compliance.

Concur

Target date for completion: March 1, 2018

Facility response: The facility telemetry monitoring policy was revised and now requires the saving of rhythm strips when a patient has a change in his/her baseline or a significant arrhythmia.

The facility nurse Education Department and Clinical Nurse Experts, who are Master's prepared Registered Nurses, will conduct monthly telemetry tracers to monitor and ensure policy compliance.

The facility Executive Committee of the Nursing Staff will monitor compliance of adherence to the telemetry policy inclusive of saving rhythm strips until at least a 90 percent compliance rate is sustained for three consecutive months.

Recommendation 7. We recommended that the Facility Director ensure that the Facility's Education Department staff review the adequacy of its annual telemetry monitoring re-certification process, including, but not limited to, evaluating whether to institute additional requirements for staff who rarely have practical experience in telemetry monitoring and establishing procedures to ensure that re-tests are conducted and tracked and monitor compliance.

Concur

Target date for completion: March 1, 2018

Facility response: The facility telemetry monitoring competency recertification process was revised.

Additional just-in-time telemetry monitoring refresher training was created to augment staff knowledge based on need or experience level.

The facility Nursing Education Department and Clinical Nurse Experts, who are Master's prepared Registered Nurses, will conduct monthly telemetry tracers to evaluate staff with telemetry monitoring assignments.

The facility Executive Committee of Nurse Staff will monitor telemetry competency recertification and just in time telemetry monitoring refresher training until at least a 90 percent compliance rate is sustained for three consecutive months.

Recommendation 8. We recommended that the Facility Director evaluate the Respiratory Department handoff communications process including the timing of patients' treatments and code status and modify as appropriate

Concur

Target date for completion: March 1, 2018

Facility response: The facility has implemented a Respiratory Department handoff tool using a Situation, Background, Assessment, Recommendation (SBAR) communication model that includes the timing of patients' treatments and code status.

A policy on the hand off tool is in place.

Training of all respiratory department staff on hand off communication tool will be completed within in 30 days. Individual staff compliance will be followed by medical chart audits and monitored by the Executive Committee of the Medical Staff until at least a 90 percent compliance rate is sustained for three consecutive months.

Recommendation 9. We recommended that the Facility Director ensure staff assess patients before and after breathing treatments, document the patient's response in the electronic health record, and monitor compliance.

Concur

Target date for completion: March 1, 2018

Facility response: The facility has revised its policy related to administration of breathing treatments within an inpatient setting.

Staff have been educated on the revised policy.

Individual staff compliance will be followed by medical chart audits and monitored by the Executive Committee of the Medical Staff until at least a 90 percent compliance rate is sustained for three consecutive months.

Recommendation 10. We recommended that the Facility Director review the content of the Facility staff's communication to the patient's family and take corrective action if it is determined that the communication was insufficient to convey that the Facility was disclosing potentially inadequate care.

Concur

Target date for completion: Completed

Facility response: The facility obtained consultation from VA Office of General Counsel who concurred that additional disclosure to the patient's family is appropriate.

VAWNYHS conducted disclosure on November 3, 2017, in accordance with VHA Handbook 1004.08 Disclosure of Adverse Events to Patients.

OIG Contact and Staff Acknowledgments

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