



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

**Office of Healthcare Inspections**

**Report No. 17-01208-07**

## **Healthcare Inspection**

# **Patient Death Following Failure to Attempt Resuscitation, VA Ann Arbor Healthcare System Ann Arbor, Michigan**

**November 7, 2017**

**Washington, DC 20420**

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

**To Report Suspected Wrongdoing in VA Programs and Operations:  
Telephone: 1-800-488-8244  
Web site: [www.va.gov/oig](http://www.va.gov/oig)**

# Table of Contents

	<b>Page</b>
<b>Executive Summary</b> .....	i
<b>Purpose</b> .....	1
<b>Background</b> .....	1
<b>Scope and Methodology</b> .....	5
<b>Case Summary</b> .....	7
<b>Inspection Results</b> .....	7
Issue 1: Mistaken Identification of Patient as Do Not Attempt Resuscitation .....	7
Issue 2: Other Care Concerns .....	14
Issue 3: System Review/Response to the Event .....	17
<b>Conclusions</b> .....	19
<b>Recommendations</b> .....	20
<b>Appendixes</b>	
A. Prior Office of Inspector General Reports.....	21
B. Veterans Integrated Service Network Director Comments .....	22
C. System Director Comments.....	26
D. Office of Inspector General Contact and Staff Acknowledgments .....	27
E. Report Distribution.....	28

## Executive Summary

The VA Office of Inspector General (OIG) conducted a healthcare inspection to evaluate the circumstances that led to the failure to resuscitate a patient with a full-code resuscitation status, who arrested and died at the VA Ann Arbor Healthcare System (system), Ann Arbor, MI.

We found that a registered nurse caring for the patient incorrectly informed staff members that the patient had a Do Not Attempt Resuscitation (DNAR) order. This wrong status was relayed to additional staff responding to a Nurse Led Rapid Response Team. All relied on the nurse's representation and no one independently verified that the patient's status actually was DNAR. Resuscitation was not initiated and the patient died. It should be noted that, based on the totality of the facts and circumstances, it is not clear whether resuscitation efforts would have been successful if employed at the time.

Although system policy stated all staff caring for patients must be aware of resuscitation status, the system had inadequate environmental and/or automated safety measures in place to achieve this expectation, such as wristbands or signs, which led to a flawed person-dependent process. This event was particularly disturbing as about a year prior to this event, system leaders identified a vulnerability in the process of confirming resuscitation status, especially during situations when a patient's medical status was deteriorating. Although system managers assessed the concern, they failed to identify a solution due to difficulties in balancing patient safety and privacy concerns and took no actions to decrease this risk. Confusion of a patient's resuscitation status is not isolated and is not unique to VA. However, the system did not have a standardized process to ensure proper communication of resuscitation status within or between disciplines. This led to inaccurate reporting of resuscitation status.

We further found the system's Cardiopulmonary Resuscitation and DNAR policies were not consistent in identifying the staff responsible for determining a patient's resuscitation status prior to initiating resuscitative efforts. We also identified that DNAR orders were not linked to the Clinical Warnings, Allergies, and Directives tab in patients' electronic health records as required by local policy, which made it more difficult to verify a patient's resuscitation status.

We identified a misperception among physician staff that all patients on medical/surgical unit 6S, sometimes referred to as the telemetry unit, were being monitored via telemetry (continuous monitoring of heart rate and rhythm from a remote location), regardless of whether a telemetry order had been entered. This confusion may be the result of inconsistent adherence to system policy requiring a telemetry order when a patient is admitted to 6S and may have caused physicians to assume that their patients were being continuously monitored when they were not.

We identified that the electronic health record documentation did not comply with requirements for resident supervision, medical decision-making, and resident physician to attending physician discussion of care during an emergency situation. Due to lack of

documentation, it is not clear that the same information was provided to all of the caregivers involved in the medical decision-making process.

We reviewed system managers' response to the case and found Veterans Health Administration requirements for review were met. The system took prompt action to prevent a reoccurrence of this event. Every shift the charge nurse verifies each patient's code status in the electronic health record with the patient's primary nurse and keeps a patient roster at the nursing station for ready access by providers responding to a Nurse Led Rapid Response Team or Code. However, we identified documentation and resident supervision issues.

We recommended that the Veterans Integrated Service Network Director:

- Ensures that the System Director requires staff to immediately verify resuscitation status without delaying resuscitative efforts.
- Ensures that the System Director requires that System managers update the Cardiopulmonary Resuscitation and Do Not Attempt Resuscitation policies to align with one another and include specific processes and responsibilities for determining resuscitation status, including at the time of a Nurse Led Rapid Response.
- Ensures that the System Director requires that system managers educate staff on telemetry policy, align clinical practice with policy, educate staff on this policy and practice, and monitor compliance.
- Ensures that the System Director requires that System managers obtain an independent external review of this patient's medical care.
- Ensures the System Director consider taking appropriate administrative action for all involved clinicians, including consideration of the reporting requirements to applicable state licensing board(s).
- Ensures that the System Director requires that System managers review electronic health record documentation of resident supervision, medical decision-making, and resident physician to attending physician discussion of care during an emergency situation and monitor compliance.

## Comments

The Veterans Integrated Service Network and System Directors concurred with our recommendations and provided an acceptable action plan. (See Appendixes B and C, pages 22–26 for the Directors' comments.) We will follow up on the planned actions until they are completed.



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

## Purpose

The VA Office of Inspector General (OIG) conducted a healthcare inspection to evaluate the circumstances that led to the failure to resuscitate a patient with a full-code resuscitation status, who arrested and died at the VA Ann Arbor Healthcare System (system), Ann Arbor, MI.

## Background

The system is a 149-bed (109 acute and 40 Community Living Center) tertiary care facility that offers a variety of primary and secondary levels of inpatient and surgical services. The system also provides outpatient and consultative care in medicine, surgery, and mental health (MH), and oversees outpatient clinics in Flint and Jackson, MI, as well as Toledo, OH.

The system has active medical school affiliations with the University of Michigan Medical School and the University of Toledo College of Medicine. More than 1400 people receive training at the system every year in multiple areas, including dentistry, dental hygiene, pharmacy, social work, psychology, and physical therapy. Overall, the system has 112 affiliations with colleges and universities.

### Advance Care Planning and Resuscitation Status Designation

The Veterans Health Administration (VHA) defines procedures for healthcare staff to support advance care planning for patients.

*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. Advance care planning may, but does not necessarily, result in a written advance directive document.<sup>1</sup>*

The Joint Commission (JC)<sup>2</sup> requires hospitals to have written policies on advance directives,<sup>3</sup> forgoing or withdrawing life-sustaining treatment, and withholding resuscitative services (interventions to revive a person who has lost consciousness).<sup>4</sup>

A patient's "resuscitation status" describes the procedures that can be performed on a patient if cardiopulmonary arrest occurs. The patient expresses his or her preferences for actions to be taken in such situations during advance care planning. Clinicians carry

---

<sup>1</sup> VHA Handbook 1004.02, *Advance Care Planning and Management of Advance Directives*, December 24, 2013.

<sup>2</sup> The Joint Commission is an independent not-for-profit organization that accredits and certifies healthcare organizations and programs in the US.

<sup>3</sup> An advance directive is a written statement by an individual who has decision-making capacity regarding preferences about future healthcare decisions in the event that the individual becomes unable to make those decisions.

<sup>4</sup> Joint Commission, Standard RI.01.05.01 EP 1. <https://e-dition.jcrinc.com/MainContent.aspx>. Accessed January 27, 2017.

out the patient's preferences in the event of a medical emergency depending on the patient's resuscitation status. The resuscitation statuses are:

- Do Not Resuscitate (DNR)/Do Not Attempt Resuscitation (DNAR) – Patients do not receive cardiopulmonary resuscitation (CPR), defibrillation,<sup>5</sup> and/or medications, but may be intubated.<sup>6</sup> **NOTE:** *The terms DNR, DNAR, No-CPR, and No Code are synonymous. DNAR/DNR orders are distinct from advance directives.*<sup>7</sup> *For the purposes of this report, the acronym DNAR will be used.*
- Do Not Intubate (DNI) – Patients do not receive intubation, but chest compressions, defibrillation, and/or medications may be used.

The system's DNAR policy states that a patient's:

*...attending physician<sup>8</sup> is responsible for affirming the propriety of a DNAR order. Medical decisions regarding the patient's diagnosis and prognosis underlying DNAR status should be reached in consultation with the medical treatment team, which may include resident physicians, nursing staff, social workers, pastoral care staff, or other consultants (e.g., oncologists, cardiologists, etc.). In those situations where there may be some doubt concerning the propriety of a DNAR order or controversy regarding the patient's diagnosis or prognosis, a consultation with the Ethics Committee may be obtained in accordance with the Ethics Committee Policy.<sup>9</sup>*

A patient is considered “full-code” if he/she has not designated a DNAR preference. For “full-code” patients, clinicians provide emergency measures such as CPR, defibrillation, and medications in an attempt to resuscitate the patient.

### **Nurse Led Rapid Response Team and Code Responses**

The system uses a Nurse Led Rapid Response Team (NRRT) “to provide early and aggressive intervention and management of patients with early signs of clinical deterioration and risk for cardiopulmonary arrest.”<sup>10</sup> The NRRT is activated by staff through the paging system with the unit and room number of the incident communicated in the page message.<sup>11</sup> Members of the NRRT include designated Intensive Care Unit (ICU) nurses and a respiratory therapist.

The system uses the term *Code 1* for medical emergencies such as cardiopulmonary arrest. “A Code 1 will be initiated for any individual perceived to be in a life-threatening

---

<sup>5</sup> Defibrillation is the administration of electrical shock during a cardiac cycle to restart the heart.

<sup>6</sup> Intubation is an emergency procedure where a flexible plastic tube is placed through the mouth or nose into the windpipe to help with breathing.

<sup>7</sup> VHA Handbook 1004.02, *Advance Care Planning and Management of Advance Directives*, December 24, 2013.

<sup>8</sup> The attending physician is a physician who has completed residency training, practices medicine, and supervises residents (physicians in training).

<sup>9</sup> System Policy Memorandum 11-23, *Do Not Attempt Resuscitation (DNAR) Orders*, April 23, 2013.

<sup>10</sup> System Guideline for Nurse-led Rapid Response Team (NRRT), January 2014.

<sup>11</sup> *Ibid.*

situation.”<sup>12</sup> The responding clinical team typically consists of the senior medical resident, assigned medicine interns, respiratory therapist, patient care supervisor, anesthesiologist, assigned ICU nurse, lead clerk, assigned Emergency Department nurse, and the police.<sup>13</sup>

In order to provide patients with support but not resuscitation, clinical staff are instructed to call an NRRT rather than a Code 1 when a patient with a DNAR resuscitation status goes into cardiopulmonary arrest.<sup>14</sup>

## Cardiopulmonary Resuscitation

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’s 2015 guideline recommends trained rescuers begin immediate chest compressions followed by rescue breathing for adults suffering from sudden cardiopulmonary arrest.<sup>15</sup>

## Patient Identification

ECRI Institute<sup>16</sup> defines patient identification as “the process of correctly matching a patient to appropriately intended interventions and communicating information about the patient’s identity accurately and reliably throughout the continuum of care.”<sup>17</sup> Patient identification errors can occur in any healthcare setting and involve any member of the healthcare team. Identification errors occur because of an array of reasons, one being the human factor.<sup>18</sup>

The ECRI Institute’s Patient Safety Office Deep Dive review on patient identification states:

*Proper patient ID [identification] confirmation at every step of clinical care is vital to patient safety. However, despite the priority placed on addressing this issue by The Joint Commission and others, significant problems persist. Studies have assessed a variety of interventions aimed at reducing patient ID errors across a wide range of clinical contexts. Although the evidence base has significant gaps, we conclude that patient ID errors can be avoided by improving usability of physical, electronic, and assigned patient identifiers;*

---

<sup>12</sup> System Policy Memorandum 11-13, *Cardiopulmonary Resuscitation: Response to Emergency and Non-Emergency Situations*, May 13, 2016.

<sup>13</sup> Ibid.

<sup>14</sup> System Guideline for Nurse-led Rapid Response Team (NRRT).

<sup>15</sup> Kleinman ME, Brennan EE, Goldberger ZD, Swor RA, Terry M, Bobrow BJ, Gazmuri RJ, Travers AH, Rea T. Part 5: adult basic life support and cardiopulmonary resuscitation quality: 2015 American Heart Association Guidelines Update for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. *Circulation*. 2015;132(suppl 2):S414–S435.

<sup>16</sup> ECRI is a non-profit organization that researches approaches to improve patient care.

<sup>17</sup> The ECRI Institute Patient Safety Office Deep Dive Patient Identification: Executive Summary.

<sup>18</sup> Human factors in healthcare refer to the environment, institutional and job elements, as well as the individual human characteristics that influence behavior at work.

[http://antarisconsulting.com/docs/guides/unit\\_a/A7\\_HSG48\\_Reducing\\_Error\\_and\\_Influencing\\_Behaviour.pdf](http://antarisconsulting.com/docs/guides/unit_a/A7_HSG48_Reducing_Error_and_Influencing_Behaviour.pdf). Accessed February 22, 2017.

*using well-designed ID alerts during order entry; and employing technologies and automated algorithms for systems-level safety checks.<sup>19</sup>*

## National Guidance Regarding Resuscitation

Guidance from VHA and external entities, such as JC, is lacking on the standards facilities are required to meet to ensure that a patient's resuscitation status is timely and accurately communicated to staff, especially during medical emergencies. Each facility or system is free to implement its own internal policies.

The VHA Handbook requires that facilities create DNAR protocols that address a number of elements, including redundant safety measures. One of those required safety measures includes flagging or highlighting a medical record in a way to indicate there is a DNAR order.<sup>20</sup> The Handbook also notes:

*Once the order has been entered, it is the responsibility of the attending physician to ensure that the order and its meaning are discussed with appropriate members of the medical center staff, particularly the nursing staff, so that all involved professionals understand the order and its implications.*

As noted earlier, JC requires that facilities' staff document whether or not patients have advance directives<sup>21,22</sup> and that facilities have written policies on forgoing life-sustaining treatment and withholding resuscitative services.<sup>23</sup> JC also requires that all staff involved in a patient's care and treatment be made aware that the patient has an advance directive.<sup>24</sup>

## Resident Supervision

VHA is the nation's largest integrated provider of healthcare education and training for physician residents.<sup>25</sup> VHA resident training programs are accredited through the Accreditation Council for Graduate Medical Education (ACGME).<sup>26</sup> ACGME requires that residents receive appropriate levels of supervision through the physical presence or immediate availability of a supervising physician.<sup>27</sup> The VHA Resident Supervision Handbook<sup>28</sup> requires that attending physicians document resident supervision.<sup>29</sup> The

---

<sup>19</sup> ECRI Institute Patient Safety Office Deep Dive Patient Identification Literature Review: Volume 2 page 31

<sup>20</sup> VHA Handbook 1004.3, *Do Not Resuscitate (DNR) Protocols Within The Department of Veterans Affairs (VA)*, October 24, 2002.

<sup>21</sup> JC's definition of advance directive is documentation allowing a person to give directions about future health care or to designate another person(s) to make health care decisions if the individual loses decision-making capacity. Advance directives may include living wills, durable powers of attorney, DNR orders, right-to-die documents, or similar documents listed in the Patient Self-Determination Act that express the person's preferences.

<sup>22</sup> Joint Commission, RI.01.05.01, <https://e-dition.jcrinc.com/MainContent.aspx>. Accessed February 22, 2017.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> 2014–2020 VA Strategic Plan, <http://www.va.gov/op3/docs/StrategicPlanning/VA2014-2020strategicPlan.PDF>. Accessed March 20, 2017.

<sup>26</sup> ACGME is a non-profit private council that evaluates and accredits U.S. medical residency and internship programs and provides resident supervision guidelines.

<sup>27</sup> ACGME, <http://www.acgme.org/What-We-Do/Overview>. Accessed March 20, 2017.

<sup>28</sup> VHA Handbook 1400.01, *Resident Supervision*, December 19, 2012.

Handbook defines four types of allowable documentation,<sup>30</sup> and describes when each type of documentation should be used.<sup>31</sup> VHA leaders expect residents to have progressive authority and show increasing responsibility for patient care during their rotations at VA medical centers. The progressive nature of the training is important in developing independent physicians.

### **Prior OIG Reviews**

See Appendix A for relevant OIG reports published in the past 3 years.

### **OIG Referral**

OIG's Office of Investigations was notified on December 26, 2016 via email from the local VA Ann Arbor Healthcare System police of the suspicious death of a veteran who was erroneously believed to have a DNAR order and was therefore not resuscitated. The Office of Investigations referred this to OIG's Office of Healthcare Inspections. Due to the egregious nature of the concern, we conducted a review.

## **Scope and Methodology**

We initiated our review on January 3, 2017 and conducted a site visit January 10–12, 2017. We interviewed members of the VA Ann Arbor Healthcare System staff, including administrators, attending physicians, medical residents, nurses, nursing assistants, chiefs of service, and fellows.<sup>32</sup> We reviewed relevant VHA and JC requirements, system policies and procedures, nursing training records, nursing schedules, patient census for 6S where the incident occurred, committee meeting minutes, incident reports, witness statements, and selected articles from medical literature concerning documentation of patient identification and resuscitation status. We reviewed the electronic health record (EHR) of the patient in question and of patients who were present on unit 6S the day of the patient's death.

Prior to this event, system managers had taken administrative actions against the registered nurse (RN) involved in this incident in regards to his involvement in clinical events that occurred in 2012 and 2015. Therefore, we reviewed the care provided to patients involved in these two events. We also reviewed all 115 patient deaths at the system from December 27, 2015 to December 27, 2016. In addition, we reviewed the VA and Department of Defense personnel records of the RN involved in this incident.

---

<sup>29</sup> Ibid.

<sup>30</sup> The four documentation methods include: (1) a separate attending progress note; (2) an attending's addendum to the resident's note; (3) an attending's co-signature of the resident's note, which implies agreement with the content; or (4) resident's use of a specific verbiage in the note, such as, "I have seen and discussed the patient with my supervising physician Dr. X, and Dr. X agrees with my assessment and plan."

<sup>31</sup> Separate attending notes are required for patients seen in the emergency department, operating room, inpatient admissions, intensive care units, and when patients in any location have complex or critical medical conditions.

<sup>32</sup> A fellow is a physician who is undergoing additional medical training after completion of his/her specialty residency training.

Three policies we cite in this report were expired or beyond the recertification date:

1. VHA Handbook, 1400.3, *Do Not Resuscitate (DNR) Protocols within the Department of Veterans Affairs*, October 24, 2002 (revision due date August 2003).
2. VHA Handbook 1100.18, *Reporting and Responding to State Licensing Boards*, December 22, 2005 (expired December 2010).
3. VHA Directive 2008-077, *Quality Management (QM) and Patient Safety Activities That Can Generate Confidential Documents*, November 7, 2008 (expired November 2013).

We considered these policies to be in effect, as they had not been superseded by more recent policy or guidance. In a June 29, 2016 memorandum to supplement policy provided by VHA Directive 6330(1),<sup>33</sup> 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."<sup>34</sup> 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."<sup>35</sup>

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.

---

<sup>33</sup> VHA Directive 6330(1), *Controlled National Policy/Directives Management System*, June 24, 2016.

<sup>34</sup> VA Under Secretary for Health Memorandum. *Validity of VHA Policy Document*, June 29, 2016.

<sup>35</sup> *Ibid.*

## Case Summary

The patient initiated care with his primary care physician (PCP) in late 2011. The patient saw his PCP in fall 2016. At that visit, the patient was noted to have multiple medical conditions, including cancer, diabetes, and unresolved atypical chest pain. Six months prior to this visit with the PCP, the patient had a normal electrocardiogram (EKG)<sup>36</sup> and chest x-ray. These were not discussed with the patient during this visit but are documented in the PCP's progress note. It was also noted that the patient had a family history of coronary artery disease<sup>37</sup> with many family members having heart attacks at a young age.

At the time of the event at issue, the patient initially sought treatment at a non-VA medical facility for new onset right leg numbness and right leg pain with walking. Providers determined that the patient had a blocked artery that was likely the cause of the right leg pain. Surgery to bypass the blockage was recommended. The patient requested transfer and was admitted to the system in late 2016, where he underwent a surgical bypass of the blockage in his artery. His post-operative course was notable for challenges maintaining adequate anticoagulation and, several hours before his death, an episode of chest pain that lasted about 15 minutes. Documentation indicates that the patient's resuscitation status was full-code.

## Inspection Results

### Issue 1: Mistaken Identification of Patient as Do Not Attempt Resuscitation

We found that staff at the system did not provide CPR to a patient with full-code resuscitation status. The patient's primary nurse (RN1) mistakenly identified the patient as having a DNAR order and then communicated that incorrect information to at least one additional healthcare team member who repeated it to subsequent responders. It should be noted that, based on the totality of the facts and circumstances, it is not clear whether resuscitation efforts would have been successful if employed at the time.

OIG synthesized the following information from the patient's EHR, statements from staff on the day of the event, and interviews with staff.

#### *Timeline on Day of Event*

10:00 a.m. to 11:30 a.m.: At approximately 10 a.m., the patient started complaining of chest pain. RN1 notified the resident physician (MD1). An EKG was obtained with abnormal results and labs were ordered. By 11:30 a.m., the patient no longer had chest pain, and a second EKG showed changes from the previous EKG had resolved.

---

<sup>36</sup> An EKG is a paper recording of the heart's electrical activity.

<sup>37</sup> Coronary artery disease is a condition where the blood vessels that supply the heart muscle become partially or totally clogged.

1:00 p.m.: Patient complained of nausea to the Certified Nurse Assistant (CNA). The CNA provided an emesis basin and left the room to alert RN1.

1:20 p.m. to 1:29 p.m.: Patient complained of chest pain to RN1. RN1 paged MD1 regarding the chest pain and an elevated troponin (a lab test to indicate a heart attack). RN1 left the room to obtain the EKG machine. Both RN1 and the CNA returned to the room. In their absence, the patient had vomited and become unresponsive with abnormal breathing. The CNA acquired suction equipment and began to set it up in the room. At this point, it is unclear when each of the staff became aware that the patient had stopped breathing. Once both RN1 and the CNA were cognizant of the lack of respirations, the CNA asked RN1 if a Code 1 should be activated and RN1 said “no” and informed the CNA that the patient’s resuscitation status was DNAR. An NRRT was called for additional help.

1:30 p.m. to 1:35 p.m.: RN1 stepped out of the room to page MD1 with the information that an NRRT had been activated and to request that he/she come to the patient’s bedside. The floor charge nurse came to the patient’s room to assist and was informed by the CNA that the patient’s code status was DNAR. Simultaneously the NRRT team arrived. Upon entering the room, the team was told by the charge nurse and the CNA that the patient’s resuscitation status was DNAR. Immediately after that, MD1 arrived in the room and RN1 returned. MD1 inquired as to what had been done for the patient and was informed by an NRRT member, the CNA, and the charge nurse that the patient’s resuscitation status was DNAR. The House Nurse Supervisor also responded to the NRRT and was informed that the patient’s resuscitation status was DNAR. Since all team members were under the mistaken belief that the patient’s code status was DNAR, no CPR was initiated per protocol. The patient was pronounced dead at 1:35 p.m.

1:35 p.m. to 1:50 p.m.: NRRT staff and MD1 left the unit. The House Nurse Supervisor and RN1 initiated a code debrief<sup>38</sup> including a review of the patient’s EHR. Through this review it was identified that the patient did not have a DNAR order and had a full-code resuscitation status.

## **Causes Contributing to the Event**

JC identified the common causes of sentinel events<sup>39</sup> to be human factors, communication, and leadership. In examining this occurrence, the OIG team identified that all three causes contributed to the event.

---

<sup>38</sup> Code debriefs are a process used to review care during a resuscitation response in order to identify opportunities for learning and improved response in the future.

<sup>39</sup> A Sentinel Event is any unanticipated event in a healthcare setting resulting in death or serious physical or psychological injury to a patient or patients, not related to the natural course of the patient's illness. [https://www.jointcommission.org/assets/1/6/CAMH\\_2012\\_Update2\\_24\\_SE.pdf](https://www.jointcommission.org/assets/1/6/CAMH_2012_Update2_24_SE.pdf). Accessed February 7, 2017.

### *Human Factors*

Research shows that human failures cause 70 to 80 percent of industrial accidents as well as a large percentage of errors and adverse events in health care.<sup>40</sup> Human errors are classified into three categories: skill-based (attention and memory failures), knowledge-based (errors made due to lack of knowledge or experience), and rule-based (misinterpretation or misuse of relevant data or applying the wrong rule).<sup>41</sup>

*Skill-Based (Memory):* On the day of the event, RN1 was assigned three patients, one had a DNAR status and two had a full-code resuscitation status. During an interview with OIG, RN1 reported confusing the resuscitation status of the patients. RN1 stated all assigned patients' resuscitation statuses were noted at the start of the shift. RN1 relied on memory and did not recheck the resuscitation status of the patient during the event. RN1 misidentified the unresponsive patient as the patient having a DNAR order. RN1 communicated the incorrect information to the CNA who then relayed it to the charge nurse. EHR documentation reflects the NRRT team and MD1 both asked for confirmation of DNAR status multiple times but none of the staff present attempted to verify resuscitation status beyond verbal reporting. RN1, the charge nurse, and the CNA reported that the patient's resuscitation status was DNAR to others based on the original assertion made by RN1 from cognitive recollection.

Studies have shown acute stress can be highly detrimental to memory function. RN1 had multiple patients with varying acuity and complexity, and relied on memory to recall vital information. The system had no environmental cues or formalized processes in place for RN1, or other staff, to identify the correct information and avoid a memory-based error.

*Knowledge-Based Errors:* These errors occur when the understanding of a given situation is fundamentally incomplete or flawed. Through interviews with staff present during the event, we learned that none of the staff had reason to doubt the accuracy of the information provided by RN1 and therefore did not question it. Staff also reported that they had never had this experience in the past nor heard of it occurring elsewhere; therefore, it is reasonable to infer they did not consider the possibility that the information passed on to them was incorrect.

In interviews, team members reported that they believed they were responding correctly and honoring the patient's resuscitation preference; however, their knowledge of the patient's resuscitation status was incorrect and based on the input of others around them. As a team, and as individuals, they "didn't know what they didn't know." Throughout the course of the event, they were all unaware that the misidentification of the patient's code status had occurred.

---

<sup>40</sup> 2016 *Managed Healthcare Executive*, "Preventing Human Errors in Healthcare," <http://managedhealthcareexecutive.modernmedicine.com/managed-healthcare-executive/news/preventing-human-errors-healthcare>. Accessed March 23, 2017.

<sup>41</sup> The Joint Commission, *The Source*, April, Vol 13, Issue 4 "Human Factor Analysis in Patient Safety Systems" [http://www.jointcommission.org/assets/1/6/HumanFactorsThe\\_Source.pdf](http://www.jointcommission.org/assets/1/6/HumanFactorsThe_Source.pdf). Accessed February 22, 2017.

### *Communication and Leadership*

JC requires the facility to have a policy on advance directives, forgoing or withdrawing life-sustaining treatment, and withholding resuscitative services.<sup>42</sup> VHA requires facility staff to ask patients if they have an advance directive during each inpatient admission and specifically notes that DNAR orders are not considered advance directives.<sup>43</sup> There is no guidance regarding methods, other than the EHR, to implement effective communication of these choices to and between frontline staff. Facilities must independently establish a process to provide ready access to the information frontline staff are required to know in code situations and train staff how to effectively communicate the information.

The system DNAR policy<sup>44</sup> addressed how to place the order in the EHR and the expectation that “once the order has been entered, it is the responsibility of all staff involved in the care of the patient to ensure that the order and its meaning are understood.” The policy did not specify the location of the order in the EHR, discuss how staff without access to the EHR should attain the information, or establish a standardized process to ensure effective communication of resuscitation status between/among frontline staff. The policy was also silent on alternative methods for communicating resuscitation status such as environmental cues (wristbands, signs) and/or automated safety measures.

We found that staff involved in the patient’s care during the event were unaware of the patient’s actual resuscitation status. According to staff, in interviews with OIG, they depended on RN1 to identify the correct resuscitation status of the patient. While recognizing they should always know their patients’ code status, physicians at the system stated the nurse assigned to the patient should also know the resuscitation status of the patient and convey it to them accurately as a back-up measure. In practice, the system had a person dependent process, without visual cues or automated safety measures.

The policy clearly outlined the expectation that staff be aware of the DNAR order. In interviews, we learned that a key nursing assistant responding to this NRRT did not have the means to access the patient’s resuscitation status in the EHR. Leadership has an obligation to provide the tools to meet the expectations placed on staff. The process as written in policy and described by staff at the time of the event did not support compliance with the existing policy.

We asked staff how team members generally determined a patient’s resuscitation status and communicated the information to one another. Their answers varied and included: looking the order up in the EHR orders tab, checking a patient’s “Ticket to Ride,”<sup>45</sup> and

---

<sup>42</sup> Joint Commission RI.01.05.

<sup>43</sup> VHA Handbook 1004.02, *Advance Care Planning and Management of Advance Directives*, December 24, 2013.

<sup>44</sup> System Policy Memorandum 11-23.

<sup>45</sup> The system’s “Ticket to Ride” is a paper filled out by an RN to provide need to know information about a patient during transport from one location in the medical center to another.

sharing resuscitation status verbally during the change of shift report. Nursing staff added that resuscitation status is not consistently reported at shift changes and tends to be shared more often when a patient is DNAR rather than full-code resuscitation. Resident physicians stated if the patient's resuscitation status was DNAR, they would usually communicate that information to the oncoming resident at the end of their shift, or the oncoming resident would ask the nurse for the patient's resuscitation status. One resident stated that resuscitation status was not discussed unless it changed throughout the admission. Attending physicians reported that they communicated code status through an order in the EHR. OIG's interviews indicated that the practice and methods of communicating resuscitation status were not standardized at the system.

We found that the system policies *Do Not Attempt Resuscitation (DNAR) Orders*,<sup>46</sup> and *Cardiopulmonary Resuscitation Response to Emergency and Non-Emergency Situations*,<sup>47</sup> were not consistent in reference to verifying DNAR status prior to resuscitation.

System policy, *Do Not Attempt Resuscitation (DNAR) Orders*, gives guidance to clinical staff for writing and implementing DNAR orders. The policy states, "The code team members will determine the patient's DNAR status before resuscitative efforts are begun." System policy, *Cardiopulmonary Resuscitation Response to Emergency and Non-Emergency Situations*, addresses policy and procedures for staff responding to a Code 1 and non-emergency events.<sup>48</sup> This policy includes details regarding the responsibilities of each team member; however, the task of verifying resuscitation status is absent. The CPR Response policy fails to identify the responsibility for staff to verify resuscitation status prior to initiating CPR that is mandated in the DNAR policy.

We also found that system managers did not implement elements required by the system's DNAR policy, which states, "The DNAR order should be entered in the Computerized Patient Record System (CPRS) and will be linked to the postings [Crises, Warnings, Allergies, and Directives (CWAD) tab<sup>49</sup>] so that it is available and can be noted by all caregivers."<sup>50</sup> During onsite interviews we were told DNAR orders are not linked to the posting tab in the patient's EHR. This was verified through a CPRS DNAR order process demonstration. Information Technology support and staffing issues were identified as reasons DNAR status was not linked to the postings tab.

At the time of this event, VHA Handbook 1400.3 was in place and did not require the DNAR order or progress note be linked to the posting tab.<sup>51</sup> On January 11, 2017, VHA published an updated Handbook which replaced VHA Handbook 1400.3. The new

---

<sup>46</sup> System Policy Memorandum 11-23, *Do Not Attempt Resuscitation (DNAR) Orders*, April 23, 2013.

<sup>47</sup> System Policy Memorandum 11-13, *Cardiopulmonary Resuscitation: Response to Emergency and Non-Emergency Situations*, May 13, 2016.

<sup>48</sup> Ibid.

<sup>49</sup> This is also known as the Crises, Warnings, Allergies, and Directives or postings tab in CPRS. A posting can be viewed by clicking the posting button from any tab or selecting a specific posting from the cover sheet tab.

<sup>50</sup> System Policy Memorandum 11-23.

<sup>51</sup> VHA Handbook 1400.3, *Do Not Resuscitate (DNR) Protocols Within The Department Of Veterans Affairs (VA)*, October 24, 2002.

Handbook requires that DNAR orders be in a Life-Sustaining Treatment Order Set, default to the top of the Orders tab, and be visible to all personnel with access to CPRS. It further requires that DNAR information be in life-sustaining treatment progress notes and linked to the CWAD on the CPRS cover sheet.<sup>52</sup>

### **Difficulty Addressing Known Vulnerability**

Hospital staff confusion of a patient's resuscitation status is well documented in the national literature, and is not unique to VA.<sup>53</sup> Cases have occurred across the country where inadequate resuscitation discussions with patients deprived them of the opportunity to make informed decisions, and where CPR has been performed on patients whose preference was to avoid CPR.

During the course of our interview process, we identified that during a code debrief approximately a year prior to this event, system leaders became aware of a vulnerability in confirming resuscitation status, particularly during situations when a patient's medical status was deteriorating. We learned that an interdisciplinary group at the facility attempted to resolve this concern. Some of the options the group explored to improve confirmation of resuscitation status included: patient wristbands, attaching resuscitation status to the bed management system (BMS), and environmental cues such as posting signs in the patient's immediate vicinity. However, no modification to practices was made and the vulnerability was not resolved.

#### *Patient Identification Wristband System*

The system uses the Biopoint patient identification software system to generate patient wristbands. The Biopoint system has the capability to list clinical warnings such as fall risk, allergies, and resuscitation status (DNR, DNI, and DNR/DNI). These warnings communicate important clinical information and are a readily recognizable source of information at the point of care. When we asked staff their understanding of why the system did not show the resuscitation status on patient wristbands, the patient safety manager and a front line clinical employee reported concern that wristbands may not be updated when status changed resulting in incorrect resuscitation status on the wristband. In addition, some staff stated 2013 guidance from the VHA National Center for Patient Safety (NCPS)<sup>54</sup> discouraged the practice due to the private content being visible on wristbands. NCPS guidance<sup>55</sup> does not prohibit the use of wristbands to identify resuscitation status. Rather they emphasize that logistical and ethical challenges related to privacy and confidentiality, timeliness, and accuracy be taken into account when using wristbands. NCPS also recommends ethics consultants be

---

<sup>52</sup> VHA Handbook 1400.03, *Life-Sustaining Treatment Decisions: Eliciting, Documenting and Honoring Patients' Values, Goals and Preferences*, January 11, 2017.

<sup>53</sup> August 2015, *Journal of Hospital Medicine*, "Making Progress with Code Status Documentation" and the February 2011, *Journal of General Internal Medicine* "Hospital Do-Not-Resuscitate Orders: Why They Have Failed and How to Fix Them."

<sup>54</sup> VHA National Center for Patient Safety leads efforts to develop and maintain a culture of safety throughout the VHA.

<sup>55</sup> NCPS Guidance: Patient Safety Factors Related to Patient Wristbands Currently Used in VHA Inpatient Care.

included when making the decision to use wristbands to convey DNAR status. During interviews, staff raised concerns regarding the DNAR status being visible on wristbands in relation to violations of privacy, as well as concern that staff knowledge of a patient's DNAR status has the potential to decrease the quality of care provided to the patient.

The interdisciplinary group also looked at the option of color-coded wristbands to indicate DNAR status. However, the group was concerned with the lack of color standardization among VHA facilities and community hospitals using color-coded wristbands to communicate DNAR status. As an example within VHA, the color blue identified DNAR preference at one hospital but meant fall risk at another. This inconsistency creates an increased risk for error when patients are transferred between facilities. In addition, VHA staff may also provide care at community hospitals that may or may not use wristbands and may also have different color code indications. The system's group concluded the lack of standardization created a high risk for error.

#### *Attaching Do Not Attempt Resuscitation Order to Bed Management System*

The system's interdisciplinary group reviewed whether to use BMS<sup>56</sup> to communicate the DNAR status of a patient. Initially the group understood that DNAR could be displayed within the BMS; however, the system was not designed to support this function. The ability to attach the resuscitation status through BMS was reportedly occurring at some VHA facilities where they had developed ways to bypass the system by creating icons. Several risks were identified with this process including the icon linking to a bed, not the patient assigned to the bed. The group was concerned that the status could remain linked to the bed after the patient with a DNAR order is discharged or moved to another bed. In addition, the frontline caregiver would still need to access the computer to ascertain the information. In December 2016, VHA provided specific instructions that the BMS was not to be used as a source for resuscitation status.

#### *Updated Guidance From VHA*

At the time of the event, VHA's handbook related to DNAR<sup>57</sup> had been in place since October 2002, and did not provide specific guidance to staff on how they should verify and communicate the resuscitation status of their patients. Several employees told us that a member of the system's interdisciplinary group had contacted the VHA program office responsible for the handbook to inquire about updates. VA Central Office (VACO) staff informed the staff member that updates would be forthcoming. System staff were unable to provide specifics regarding which team member called or who was contacted at VACO. The group said the update would provide clearer guidance to address the vulnerability identified. The group determined it would be reasonable to wait for the new

---

<sup>56</sup> The Bed Management System is a web-based program used within VHA to track inpatient movement, bed status, and bed availability throughout the system.

<sup>57</sup> Handbook 1400.3, *Do Not Resuscitate (DNR) Protocols Within The Department Of Veterans Affairs (VA)*, October 24, 2002.

guidance before implementing any changes. In January 2017, the updated Handbook<sup>58</sup> was published and did not include additional information regarding confirmation of resuscitation status or communicating a DNAR order to frontline staff.

The interdisciplinary group assigned to address communication of DNAR status did not identify a long-term solution due to difficulties in balancing patient safety and privacy concerns. An interim solution was not in place prior to the patient death discussed in this report.

## **Issue 2: Other Care Concerns**

### **Telemetry**

The patient was admitted to 6S, the system's unit that houses telemetry central monitoring. Admission criteria allowed for the admission of patients to the unit who did not require telemetry monitoring. According to system policy, "a patient admitted to 6S will be placed on telemetry monitor unless an order is written not to be placed on telemetry." The policy also stated physicians are expected to write a full set of admission orders, to include the need for telemetry, within 2 hours of admission.<sup>59</sup> Although the policy did not provide guidance on whether to continue monitoring in the absence of telemetry orders, interviews with nursing staff revealed that when a patient arrived to the unit without telemetry orders they placed the patient on telemetry monitoring and called the provider to request that orders be entered. If the provider did not enter an order for telemetry into the EHR, the nurses removed the telemetry monitoring.

A review of the patient's EHR indicates that at the time he was initially admitted to the unit he was placed on telemetry monitoring. There were no telemetry orders entered in the EHR and the patient was taken off telemetry monitoring within a few hours of admission. Two days later, the patient had surgery and spent the night in the ICU. He returned to 6S approximately 24 hours later. The transfer orders did not include telemetry monitoring. A nurse paged MD1 to communicate the lack of telemetry orders. The nursing note in the EHR stated MD1 indicated patient is "no telemetry status;" although MD1 entered no orders or note into the EHR. The patient's telemetry monitoring was discontinued based on MD1's verbal order. System policy was not followed in regards to telemetry orders for this patient. No orders regarding telemetry were entered into the EHR during his admission to 6S.

To determine if the lack of telemetry orders was a single incident or larger system issue, we reviewed the EHRs of all the patients that were on 6S the day of the patient's death for telemetry monitoring orders. Of the 20 patients, 19 EHRs had orders regarding telemetry status. The patient discussed in this report was the only one lacking an active start or stop telemetry order in the EHR.

---

<sup>58</sup> Handbook 1400.03, *Life-Sustaining Treatment Decisions: Eliciting, Documenting and Honoring Patients' Values, Goals and Preferences*, January 11, 2017.

<sup>59</sup> System Policy Memorandum 11-14, *Telemetry Unit*, April 10, 2015.

On the morning of his death, the patient developed chest pain and had an abnormal EKG. MD1 was paged and came to the bedside to evaluate the patient. MD1 reviewed the EKG, assessed the patient, and told both RN1 and the patient that the patient may be having a cardiac event. According to system policy,<sup>60</sup> patients suspected of having Acute Coronary Syndrome (ACS)<sup>61</sup> should be admitted to 6S.<sup>62</sup> In this case, the patient was already on that unit but was not being monitored by telemetry. Nursing staff stated that it is within their scope to initiate telemetry monitoring when medically indicated, prior to requesting telemetry orders from a provider. There is no documentation in the EHR that RN1 or MD1 recognized the lack of telemetry monitoring, or the need to utilize telemetry monitoring after the onset of chest pain. The code status of patients on telemetry monitoring is documented by the central monitoring nurse on 6S. Had this patient been on telemetry monitoring at the time he arrested, the central monitoring nurse may have had an opportunity to report the patient's full-code status to responders in time to successfully resuscitate the patient.

We received varying and conflicting answers about unit-specific practices for telemetry monitoring. Residents and attending physicians believed that because the patient was admitted to 6S, which has telemetry central monitoring, the patient would automatically have telemetry monitoring. Staff referred to 6S as the "tele" unit, even though not all patients on 6S were placed on telemetry monitoring. The system policy, *Telemetry Unit*, by its own terms applied to the care of patients admitted to 6S, not only to patients on the Telemetry Unit. Nursing leaders and frontline nursing staff described 6S as having telemetry monitoring capabilities but indicated that the unit was not exclusively used for telemetry patients. The organization's references to 6S in its *Telemetry Unit* policy and staff commonly referring to 6S as the telemetry unit may have contributed to staff confusion that all patients admitted to 6S are placed on telemetry monitoring.

### **Clinical Practice Issue**

Prior to this event, system managers had taken administrative actions against RN1 in regards to his involvement in clinical events that occurred in 2012 and 2015, but did not restrict him from direct patient care responsibilities. Including the incident described in this report, RN1 was involved in three events over a 4-year period that involved significant monitoring deficiencies in high-risk patients. We did not identify a similar pattern of conduct with the three events. As a result of this latest incident, RN1 no longer provides direct patient care. System managers told us that they had not reported RN1 to any state licensing boards, despite VHA policy that requires that facility managers report healthcare professionals to applicable state licensing boards for significant deficiencies in clinical practice.<sup>63</sup>

---

<sup>60</sup> System Policy Memorandum 11-14.

<sup>61</sup> Acute Coronary Syndrome is an umbrella term used to describe situations where blood supply to the heart is suddenly blocked.

<sup>62</sup> System Policy Memorandum 11-14.

## Resident Physician Supervision Documentation

We identified that the EHR documentation did not comply with requirements for resident supervision, medical decision-making, and resident physician to attending physician discussion of care during an emergency situation. The EHR for the patient discussed in this report did not include adequate documentation for the management of a patient with new onset ACS.

VHA Handbook 1400.01<sup>64</sup> states the EHR must clearly demonstrate the involvement of the supervising (attending) physician. The supervising physician must enter documentation of supervision within the resident progress note or other appropriate entries<sup>65</sup> in the EHR.

The Handbook also gives detailed guidance for documenting resident physician supervision during emergency situations.<sup>66</sup> This includes, "...any supervising practitioner must be contacted and apprised of the situation as soon as possible. The resident must document the nature of that discussion in the patient's record."

A general surgery resident admitted the patient to the system and entered an inpatient vascular surgery note in the EHR. The document appears to serve as the admission history and physical as there is no admission and history note on the day of admission. The attending physician co-signed this initial note 2 1/2 days after the general surgery resident signed the note. During interviews, we learned that at the time of admission, the senior fellow in vascular surgery was the supervising physician and examined the patient on that day. The admission note by the general surgery resident does not document a discussion with a supervising physician. There is no addendum to the general surgery resident's note nor is there any independent progress note by the attending physician or another supervising physician within 24 hours following admission. As a stand-alone document, the EHR for the day of admission has the appearance of an unsupervised general surgery intern rendering the care for this patient being prepared for vascular surgery.

Resident physicians told us that during the post-operative course of treatment, they discussed aspects of the patient's care and medical decision-making with supervising physicians. However, we did not find such documentation in the EHR.

We concluded that EHR documentation did not comply with requirements for resident supervision, medical decision-making, and resident physician to attending physician discussion of care during an emergency situation. The lack of timely documentation is

---

<sup>64</sup> VHA Handbook 1400.01.

<sup>65</sup> Examples of appropriate entries are defined as procedure reports, consultations, and discharge summaries.

<sup>66</sup> VHA Handbook 1400.01 defines an "emergency" as a situation where immediate (i.e., without delay) care is necessary to preserve the life of or to prevent serious harm to the health of a patient. In such situations, any resident, assisted by medical facility personnel, is (consistent with the informed consent provisions of VHA Handbook 1004.01) permitted to do everything possible to save the life of a patient or to save a patient from serious harm. The appropriate supervising practitioner must be contacted and apprised of the situation as soon as possible. The resident must document the nature of that discussion in the patient's record.

particularly apparent during the day of the patient's death. Through our interviews, we learned that communication did occur between residents and supervising physicians regarding the patient. However, due to lack of documentation it is not clear that the same information was provided to all of the caregivers involved in the medical decision-making process or that there was a consensus of opinion regarding the patient's course of treatment.

### **Issue 3: System Review/Response to the Event**

At the conclusion of our inspection and evaluation, we interviewed system leaders and assessed their response to the patient's unexpected death in order to ensure they met VHA requirements, took prompt action to avoid a repeat occurrence, and reviewed the patient's case with a focus on identifying aspects of the care that could be improved in the future. The following items were reported:

*Immediate System Level Process Change.* Two days after the misidentification of the patient's DNAR status, mechanisms were established to improve staff awareness of resuscitation status for each patient and reduce the likelihood of a similar event from occurring. The updated process requires that at the start of each shift, a patient roster is printed and the charge nurse identifies each patient's resuscitation status. The assigned RN and charge nurse, viewing the EHR order together, then verify the resuscitation status by initialing the patient roster. Each patient roster has the time/date and signature of the charge nurse. The Nurse Supervisor reviews the completion of the resuscitation verification process each shift. The roster containing each patient's resuscitation status is maintained at the nursing station for ready access to providers responding to an NRRT or code. The stated intent of this process is to ensure that multiple staff are aware of each patient's resuscitation status and any discrepancy at the time of a patient's decline will be recognized and re-verified in the patient's EHR. In interviews onsite, nursing staff and leadership reported that nurses had received education regarding the new process for verification of resuscitation status.

*Issue Reporting.* VHA requires<sup>67</sup> reporting of all significant clinical incidents that have the potential to negatively impact care to veterans. The reporting process includes completion of an Issue Brief<sup>68</sup> that is communicated to leaders at the system, regional, and national level. We found system leaders provided this information, as required, immediately upon learning of the incident. Following submission of the Issue Brief, VACO staff instructed system managers to complete a mock code and to identify a process for two-person verification of resuscitation status. System managers reported

---

<sup>67</sup> VHA Handbook 1004.08, *Disclosure of Adverse Events to Patients*, October 2 2012.

<sup>68</sup> An Issue Brief provides fact based information to leaders within the organization regarding a situation/event or issue. Examples of events that may trigger an issue brief include homicide on VA property, all veteran suicides/attempts, and internal or external disasters affecting a VA site of care.

no further follow-up with the Veterans Integrated Service Network (VISN) leaders<sup>69</sup> or VACO regarding this incident.

*System Managers.* We reviewed system managers' response to the case and found VHA requirements for review were met. However, review by the OIG physician identified the following issues:

- Lack of documentation of supervising physician involvement on the day of admission.
- Lack of preoperative medical consultation.
- Lack of direct supervision of a surgical intern.
- Lack of EHR documentation of a cardiology consult and/or note, therefore no cardiology note was written.
- Lack of documentation of a discussion regarding a blood transfusion.
- Lack of documentation of the treatment team's consideration of a drop in the patient's blood levels.

*Institutional Disclosure.* VHA requires the disclosure of adverse events<sup>70</sup> that occur during the course of clinical care to patients or their representatives. The system staff completed an institutional disclosure in 2016.

*Additional Actions.* In follow-up discussions with OIG, system leaders outlined actions implemented to date to prevent misidentification of patients' resuscitation status. The process where the charge nurse and primary nurse verify the resuscitation status of each patient at the beginning of each shift remained in place. Criteria to initiate an NRRT have been updated and include chest pain.

Additionally, system leaders reported the following action items as pending.

- Admitting providers will enter an order to delineate code status and the order will always appear at the top of the orders tab.
- Providers will incorporate patient resuscitation status in their daily progress notes.
- Members of the NRRT will independently verify resuscitation status and also verify it with the primary care team.<sup>71</sup>
- System managers will create a system hand-off policy and tool that will include minimum requirements (including code/resuscitation status) for all disciplines.

---

<sup>69</sup> A VISN is a regional office that oversees multiple VHA facilities. In a recent reorganization, VISN 10 replaced VISN 11.

<sup>70</sup> Adverse events are untoward incidents, diagnostic or therapeutic misadventures, injuries, or other occurrences of harm or potential harm directly associated with care or services provided within the jurisdiction of a VA healthcare facility.

<sup>71</sup> The system defined primary care team as the patient's provider and primary RN.

- System managers will ensure the newly developed hand-off tool is available in the EHR, allowing automatic population of the most recent resuscitation order. System managers will create a system NRRT policy to expand actions team members can take when responding to an NRRT.
- System managers will define indications for when onsite support for surgical providers during off-tours<sup>72</sup> is needed. Support may include consulting medicine service for surgical patients with medical complications.
- System managers will provide education to all staff about process changes concerning resuscitation status.

## Conclusions

We found that an RN caring for the patient relayed incorrect resuscitation status to staff members, who in turn relayed the wrong status to additional staff responding to an NRRT call/summons. Resuscitation was not initiated and the patient died. Based on the totality of the facts and circumstances, it is not clear whether resuscitation efforts would have been successful if employed at the time. Although system policy stated all staff caring for a patient need to be aware of the patient's resuscitation status, inadequate safety measures were in place to achieve this expectation, which led to a person dependent process.

The system did not have a standardized process to ensure accurate communication of resuscitation status within or between disciplines. This led to inaccurate reporting of resuscitation status.

We found the system's CPR and DNAR policies were not consistent in determining the staff responsible for identifying a patient's resuscitation status prior to initiating resuscitative efforts. We also identified that DNAR orders were not linked to the CWAD tab in patients' EHRs, as required by local policy, which made it more difficult to verify resuscitation status.

Prior to this event, system leaders identified vulnerability in the process of confirming resuscitation status, particularly during situations when a patient's medical status was deteriorating. Although system managers assessed the concern, they failed to identify a solution due to difficulties in balancing patient safety and privacy concerns, and no actions were taken to decrease this risk.

We identified a misperception among physician staff that all patients admitted to 6S were on telemetry monitoring, regardless of whether a physician entered a written order to continue monitoring. The organization's references to 6S in its *Telemetry Unit* policy and staff commonly referring to 6S as the telemetry unit may have contributed to staff confusion that all patients admitted to 6S have telemetry monitoring.

---

<sup>72</sup> An off tour is considered weekends, evenings, and holidays.

We identified that EHR documentation did not comply with requirements for resident supervision, medical decision-making, and resident physician to attending physician discussion of care during an emergency situation. Due to lack of documentation, it is not clear that the same information was provided to all of the caregivers involved in the medical decision-making process.

We reviewed system managers' response to the patient's death and found VHA requirements for review of this event were met. However, we identified documentation and resident supervision issues.

We made six recommendations.

## **Recommendations**

1. We recommended that the Veterans Integrated Service Network Director ensures that the System Director requires staff to immediately verify resuscitation status without delaying resuscitative efforts.
2. We recommended that the Veterans Integrated Service Network Director ensures that the System Director requires that System managers update the Cardiopulmonary Resuscitation and Do Not Attempt Resuscitation policies to align with one another and include specific processes and responsibilities for determining resuscitation status, including at the time of a Nurse Led Rapid Response.
3. We recommended that the Veterans Integrated Service Network Director ensures that the System Director requires that System managers educate staff on telemetry policy, align clinical practice with policy, educate staff on this policy and practice, and monitor compliance.
4. We recommended that the Veterans Integrated Service Network Director ensures that the System Director requires that System managers obtain an independent external review of this patient's medical care.
5. We recommended that the Veterans Integrated Service Network Director ensures that the System Director consider taking appropriate administrative action for all involved clinicians, including consideration of the reporting requirements to applicable state licensing board(s).
6. We recommended that the Veterans Integrated Service Network Director ensures that the System Director requires that System managers review electronic health record documentation of resident supervision, medical decision-making, and resident physician to attending physician discussion of care during an emergency situation and monitor compliance.

## Prior OIG Reports May 1, 2014 through May 1, 2017

### VA Ann Arbor Healthcare System Reports

**Combined Assessment Program Review of the VA Ann Arbor Healthcare System, Ann Arbor, Michigan**

2/25/2015 | 14-04226-125

### Topic Related Reports

**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 – 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 – Alleged Nursing Deficiencies Led to Patient's Death, Hampton VA Medical Center, Hampton, Virginia**

11/5/2014 | 13-02527-23

*OIG reports are available on our website at [www.va.gov/oig](http://www.va.gov/oig)*

## VISN Director Comments

**Department of  
Veterans Affairs**

**Memorandum**

**Date:** August 24, 2017

**From:** Director, VA Healthcare System (VISN 10)

**Subj:** Healthcare Inspection— Patient Death Following Failure to Attempt Resuscitation, VA Ann Arbor Healthcare System, Ann Arbor, Michigan

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

1. Please find attached the response to the Healthcare Inspection—Patient Death Following Failure to Attempt Resuscitation, VA Ann Arbor Healthcare System, Ann Arbor, Michigan
2. I concur with the facility's response and appreciate the opportunity to respond to this report



Robert P. McDivitt, FACHE  
VISN Director

## Comments to OIG's Report

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

### OIG Recommendations

**Recommendation 1.** We recommended that the Veterans Integrated Service Network Director ensures that the System Director requires staff to immediately verify resuscitation status without delaying resuscitative efforts.

Concur

Target date for completion: January 8, 2018

System response: In the event of a code the Charge Nurse or Nursing Supervisor will independently verify code status in the electronic health record. The revised code debriefing and review sheet includes the following question: Was the code status verified immediately? Patient Safety will monitor code debriefing and review sheets until at least a 90 percent compliance rate is sustained for 3 consecutive months.

**Recommendation 2.** We recommended that the Veterans Integrated Service Network Director ensures that the System Director requires that System managers update the Cardiopulmonary Resuscitation and Do Not Attempt Resuscitation policies to align with one another and include specific processes and responsibilities for determining resuscitation status, including at the time of a Nurse Led Rapid Response.

Concur

Target date for completion: February 16, 2018

System response: The Nurse-Led Rapid Response Team (NRRT) policy clearly delineates responsibility for independent verification of code status in the electronic health record. Changes to the NRRT policy and process were completed on May 22, 2017.

The Cardiopulmonary Resuscitation and Do Not Attempt Resuscitation policies will be combined into one policy to reduce the possibility of confusion. Revisions to the combined policy will include assignment of responsibilities and alignment of processes for determining resuscitation status in the event of code team activation. Service Chiefs will ensure code team staff are educated regarding the change. Quality Management will monitor Service Chief education until at least a 90 percent compliance rate is achieved.

**Recommendation 3.** We recommended that the Veterans Integrated Service Network Director ensures that the System Director requires that System managers educate staff on telemetry policy, align clinical practice with policy, educate staff on this policy and practice, and monitor compliance.

Concur

Target date for completion: January 8, 2018

System response: The telemetry policy will be retitled "6 South." The clinical practice and processes for ordering telemetry on 6 South will be aligned. The updated policy will require a provider order which clearly communicates whether telemetry monitoring is required or not required upon admission or transfer. Quality Management will monitor provider admission and transfer telemetry orders for patients admitted to 6 South until at least a 90 percent compliance rate is sustained for 3 consecutive months.

All 6 South staff members will be educated about the clinical practice changes. Quality Management will monitor education until at least a 90 percent compliance rate is sustained.

**Recommendation 4.** We recommended that the Veterans Integrated Service Network Director ensures that the System Director requires that System managers obtain an independent external review of this patient's medical care.

Concur

Target date for completion: September 15, 2017

System response: An independent external review of this patient's medical care was completed by a vascular surgeon in Ohio. The external review findings will be evaluated by the Chief of Staff, Associate Chief of Staff for Education, and the Chief of Surgery.

**Recommendation 5.** We recommended that the Veterans Integrated Service Network Director ensures that the System Director consider taking appropriate administrative action for all involved clinicians, including consideration of the reporting requirements to applicable state licensing board(s).

Concur

Target date for completion: September 15, 2017

System response: Appropriate administrative action including reporting requirements to applicable state licensing boards for all involved clinicians will be considered by the System Director, Chief of Staff, Associate Director for Patient Care Services, and Regional Counsel.

**Recommendation 6.** We recommended that the Veterans Integrated Service Network Director ensures that the System Director requires that System managers review electronic health record documentation of resident supervision, medical decision-making, and resident physician to attending physician discussion of care during an emergency situation and monitor compliance.

Concur

Target date for completion: January 8, 2018

System response: Patient Safety will monitor electronic health record documentation for resident supervision, medical decision making, and resident physician to attending physician discussion of care after all code situations per VHA Handbook 1400.01 Resident Supervision. Patient Safety will monitor documentation of physician resident and attending discussions after a code situation until at least a 90 percent compliance rate is sustained for 3 consecutive months.

## System Director Comments

**Department of  
Veterans Affairs**

**Memorandum**

**Date:** August 11, 2017  
**From:** Acting Director, VA Ann Arbor Healthcare System (506/00)  
**Subj:** Healthcare Inspection— Patient Death Following Failure to Attempt Resuscitation, VA Ann Arbor Healthcare System, Ann Arbor, Michigan  
**To:** Director, VA Healthcare System (VISN 10)

We appreciate the opportunity to provide a response to the recommendations made during the Healthcare Inspection—Patient Death Following Failure to Attempt Resuscitation at the VA Ann Arbor Healthcare System. Please find the attached responses to each recommendation.

If there are any questions, please contact Tisha Crowder-Martin, Chief of Quality Management, VA Ann Arbor Healthcare System (VAAAHS) at (734) 845-5793



ANDREW PACYNA, FACHE  
Acting Director, VA Ann Arbor Healthcare System

## OIG Contact and Staff Acknowledgments

---

<b>Contact</b>	For more information about this report, please contact the OIG at (202) 461-4720.
<b>Contributors</b>	Craig Byer, MS, RRA, Team Leader John Bertolino, MD Nicholas DiTondo, BA Carol Lukasewicz, RN, BSN Susan Tostenrude, MS Andrew Waghorn, JD Julie Watrous, RN, MS

---

## Report Distribution

### VA Distribution

Office of the Secretary  
Veterans Health Administration  
Assistant Secretaries  
General Counsel  
Director, VA Healthcare System (VISN 10)  
Director, VA Ann Arbor Healthcare System (506/00)

### Non-VA Distribution

House Committee on Veterans' Affairs  
House Appropriations Subcommittee on Military Construction, Veterans Affairs, and  
Related Agencies  
House Committee on Oversight and Government Reform  
Senate Committee on Veterans' Affairs  
Senate Appropriations Subcommittee on Military Construction, Veterans Affairs, and  
Related Agencies  
Senate Committee on Homeland Security and Governmental Affairs  
National Veterans Service Organizations  
Government Accountability Office  
Office of Management and Budget  
U.S. Senate: Sherrod Brown, Gary C. Peters, Rob Portman, Debbie Stabenow  
U.S. House of Representatives: Mike Bishop, John Conyers, Jr., Debbie Dingell,  
Daniel Kildee, Robert E. Latta, Brenda Lawrence, Sander Levin, Paul Mitchell,  
John Moolenaar, Dave Trott, Tim Walberg

This report is available on our web site at [www.va.gov](http://www.va.gov).