DEPARTMENT OF VETERANS AFFAIRS

OFFICE OF INSPECTOR GENERAL

Office of Healthcare Inspections

Quality and Coordination of a Patient's Care at the VA Eastern Colorado Health Care System

Denver, Colorado

HEALTHCARE INSPECTION | REPORT #18-01455-108 | APRIL 11, 2019

The mission of the Office of Inspector General is to serve veterans and the public by conducting effective oversight of the programs and operations of the Department of Veterans Affairs through independent audits, inspections, reviews, and investigations.

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

Report suspected wrongdoing in VA programs and operations to the VA OIG Hotline:

www.va.gov/oig/hotline

1-800-488-8244

Executive Summary

The VA Office of Inspector General (OIG) conducted a healthcare inspection in response to allegations of a lack of quality and coordination of care for a patient at the VA Eastern Colorado Health Care System (facility), Denver, Colorado.

The complainant alleged facility providers

1. At the time of the patient's most recent hospital admission[1]
   - Did not complete a thorough evaluation,
   - Did not appropriately treat the patient's condition,
   - Discharged the patient without a discussion with the family of the patient's medical condition and options for care, and
   - Did not communicate care options to mitigate the patient's suffering.
2. Prior to the patient's most recent hospital admission
   - Knew the patient had chronic illnesses and multiple wounds and failed to appropriately coordinate care.

The patient died three days after discharge. The allegations did not include concerns specific to the patient's death. Although an autopsy was not completed, the primary care provider completed the death certificate and listed the cause of death as cellulitis due to diabetic foot ulcer from type 2 diabetes mellitus.[2]

The OIG substantiated that facility providers, at the time of the patient's most recent hospital admission, failed to complete a thorough evaluation, including a full clinical history with medication reconciliation. The providers' evaluations were incomplete, may have contributed to the patient's declining health, and likely hindered the provision of additional needed treatment.

The elderly patient had multiple medical problems including chronic kidney disease requiring hemodialysis, diabetes, chronic leg wounds, high cholesterol, high blood pressure, chronic lymphoid leukemia, obesity, and required long-term supplemental oxygen. The patient's most recent hospital admission was for cellulitis. System providers failed to appropriately treat the patient's underlying condition. Given the patient's elevated white blood cell counts, the OIG

[1] The patient's hospital admission was under observational status, which means that the patient was admitted to an observation bed on one of the inpatient units where patients can be kept for up to 47 hours and 59 minutes for extended monitoring, evaluation, and treatment.

[2] Cellulitis is a diffuse and especially subcutaneous inflammation of connective tissue. Merriam-Webster Dictionary. https://www.merriam-webster.com/dictionary/cellulitis. (The website was accessed on May 9, 2018.)

would have expected the providers to identify and remove the source of infection. However, the treatment plan for cellulitis was acceptable, and it is likely the patient had an appropriate level of medication at the time of death to control a Methicillin-sensitive *Staphylococcus aureus* bacteremia infection. Given these circumstances and the high rate of sudden cardiac death in dialysis patients, the OIG was unable to determine whether the facility providers' failures contributed to the patient's death.

The OIG was unable to determine whether facility providers discharged the patient without a discussion with the family of the patient's medical condition. The OIG identified conflicting reports regarding family healthcare discussions at the time of discharge. However, the patient was competent and included in discussions about care; including family members in the discussions was not required.

Reports about family involvement in discussions that involved the patient's medical condition were inconsistent. The family left the hospital without receiving all the patient's discharge care options. Further, a comprehensive discharge plan addressing the patient's chronic medical conditions that should have included wound care clinic and podiatry clinic appointments was not documented prior to the patient's discharge.

The OIG substantiated that facility providers did not communicate care options to mitigate the patient's suffering. System providers did not communicate the possibilities for Geriatrics and Extended Care services, such as palliative care or a geriatric evaluation. The OIG also determined that facility providers did not ensure podiatry clinic, wound care clinic, physical therapy, and occupational therapy appointments were made and communicated to the patient and family.

Podiatry clinic medical support assistants did not consistently follow facility policy for the number of times to call a patient before sending a letter when attempting to schedule appointments.

Although wound care clinic staff treated the patient for multiple wounds over five visits, wound care clinic consults were not performed as required by facility policy.

The outpatient care was fragmented the last four months of the patient's life. The coordination of care expected for a geriatric patient who had chronic illnesses, multiple wounds, and was "at risk" for foot ulcers was lacking. Deficiencies in the patient's care coordination included a lack of primary care provider follow-up on neurological recommendations for the patient's leg and foot pain; delay in scheduling an orthotics team evaluation; delay in scheduling a podiatry appointment; delay in placement of a home health care consult; and delay in exploring alternative care options as the patient's spouse became overwhelmed with the care. Overall, no single provider coordinated the patient's complex outpatient care needs. The OIG team concluded that the deficiencies in the patient's care coordination likely contributed to the patient's worsening wounds.

A podiatry attending physician did not document resident supervision in accordance with the facility policy of resident supervision explicit to consult services.

There were deviations in the quality and coordination of care noted in the detailed review of the patient's care. As providers across multiple services were involved in the care of this patient, several of the OIG recommendations applied facility-wide.

The OIG made eight recommendations related to the clinical history taking and medication reconciliation processes, education of providers, communicating options of care for geriatric patients, transitions in care, discharge planning, podiatry clinic scheduling practices, wound care clinic practice, and resident supervision.

Comments

The Veterans Integrated Service Network and Facility Directors concurred in principle with recommendations 1–4, concurred with recommendations 5–8, and provided an acceptable action plan. (See Appendixes A and B, pages 20–27 for the Directors' comments.) The OIG will follow up on the planned actions until they are completed.

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

Contents

Abbreviations

EHR	electronic health record
GEC	geriatrics and extended care
IV	intravenous
MSA	medical support assistant
MSSA	methicillin-sensitive *Staphylococcus aureus*
OIG	Office of Inspector General
PACT	Patient Aligned Care Team
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network
WBC	white blood cell
WCC	wound care clinic

Introduction

Purpose

The VA Office of Inspector General (OIG) conducted a healthcare inspection in response to allegations of a lack of quality and coordination of care for a patient at the VA Eastern Colorado Health Care System (facility), Denver, Colorado.

Background

The facility is a complexity level 1A facility located in Denver, Colorado, and is part of Veterans Integrated Service Network (VISN) 19.[3] The catchment area covers over 44,000 square miles in eastern Colorado and surrounding states. The facility is comprised of a medical center with eight community based outpatient clinics, two community living centers, and one telehealth clinic. The facility is affiliated with the medical, pharmacy, and nursing schools of the University of Colorado Health Sciences Center. In fiscal year 2017, the facility served 94,742 patients and had 228 operating beds, including 129 inpatient beds, 59 domiciliary beds, and 40 community living center beds.

Type II Diabetes Mellitus

Type II diabetes mellitus (diabetes) is the most common form of diabetes.[4] It is caused by insulin resistance that can eventually result in the pancreas not producing enough insulin and causing high blood sugar.

[3] VHA Office of Productivity, Efficiency & Staffing, http://opes.vssc.med.va.gov/FacilityComplexityLevels/Pages/default.aspx. (The website was accessed on March 15, 2018.) Since 1989, the VHA Facility Complexity Model has categorized medical facilities by complexity level based on patient population, clinical services offered, educational and research missions, and administrative complexity. Complexity Levels include 1a, 1b, 1c, 2, or 3. Level 1a facilities are the most administratively complex. Level 3 facilities are the least complex.

[4] American Diabetes Association, "Type 2 Diabetes," http://www.diabetes.org/diabetes-basics/type-2/?loc=util-header_type2. (The website was accessed on April 16, 2018.)

Diabetic Complications

Over time, high blood sugar can cause organ damage including kidney failure requiring hemodialysis.[5]

People living with diabetes need to pay particular attention to their feet as diabetes can damage nerves in the feet, and cause a loss of feeling called peripheral neuropathy,[6] making it difficult to walk. Due to the loss of sensation, minor cuts, scrapes, and blisters can go unnoticed and when present, peripheral artery disease reduces blood flow and slows healing. Without careful and frequent attention, foot wounds can become infected and worsen to the point of requiring amputation of a foot or leg. People with diabetes are at 4.9 times higher risk for acquiring osteomyelitis (infection in the bone), and persons receiving hemodialysis are also at increased risk.[7]

Infection in a Patient with a Diabetic Foot Ulcer

The *VA/DoD Clinical Practice Guideline for the Management of Type 2 Diabetes Mellitus in Primary Care* recommends referring patients with limb-threatening conditions to the appropriate level of care for evaluation and treatment. Worsening infection and foot ulcerations[8] are two conditions that should prompt a primary care provider to consider a timely referral to a specialist.[9] Podiatry is the specialty service designated to care for patients' infections and wounds below the knee. [10] Although infection is not always clinically apparent, common signs and symptoms include warmth around the ulcer, redness, pus-filled drainage, odor, and

[5] Hemodialysis is a medical procedure to remove wastes or toxins from the blood and adjust fluid and electrolyte imbalances by utilizing rates at which substances diffuse through a semi-permeable membrane: the process of removing blood from an artery (as of a kidney patient), purifying it by dialysis, adding vital substances, and returning it to a vein, also called *hemodialysis*. *Merriam-Webster Medical Dictionary*.https://www.merriam-webster.com/dictionary/dialysis#medicalDictionary. (The website was accessed on April 4, 2018.)

[6] Peripheral neuropathy is damage to the peripheral nervous system, the network of nerves transmitting information from your brain and spinal cord to the rest of your body; most commonly in the legs and feet. Johns Hopkins Medicine Health Library. https://www.hopkinsmedicine.org/healthlibrary/conditions/adult/nervous_system_disorders/peripheral_neuropathy_134,51. (The website was accessed on April 18, 2018.)

[7] Edited by John E. Bennett, Raphael Dolin, Martin J. Blaser. *Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases. 8th ed.* (Philadelphia: Elsevier/Saunders, 2015), 2237–2271.

[8] An ulcer is a break in skin or mucous membrane with a loss of surface tissues, disintegration and necrosis of epithelial tissue, and often pus. *Merriam-Webster Dictionary*. https://www.merriam-webster.com/dictionary/ulcer. (The website was accessed on April 4, 2018.)

[9] VA/DoD Clinical Practice Guideline for the Management of Type 2 Diabetes Mellitus in Primary Care, April 2017, pg. 47.

[10] Podiatry is the medical care and treatment of the human foot. *Merriam-Webster Dictionary*. https://www.merriam-webster.com/dictionary/podiatry. (The website was accessed on April 5, 2018.)

involvement of bone.[11] Pain, fever, and increased white blood cell count may or may not be present.[12] Sudden loss of blood sugar control often indicates a severe infection.[13] Severe infections may lead to limb-threatening conditions including gas gangrene and ascending cellulitis.[14]

End Stage Renal Disease

End-stage renal disease, also called end-stage kidney disease, is an advanced stage of chronic kidney disease whereby the kidneys lose their filtering capabilities, and dangerous levels of fluid, electrolytes, and wastes can build up in the body. With end-stage renal disease, a person may need hemodialysis or a kidney transplant to stay alive. A person may also choose to forgo dialysis or a transplant and opt for a conservative care management approach of the symptoms aiming for the best quality of life possible.[15]

VHA Support to Elderly Patients

VHA recognizes the hospital environment poses substantial risks to elderly patients. Outlined in VHA Directive 1140.11,[16] older adults when hospitalized are more likely to experience unintended and undesirable consequences than younger adults. Disease-specific care plans directed by medical subspecialists can often prove problem-prone for older adults, whose conditions are more complicated due to other chronic diseases, disabilities, and issues of impaired communication, compliance, and self-care. Geriatric and Extended Care (GEC) service and Surgical and Specialty Care program staff need to work closely together to coordinate quality health care, particularly in planning for the end of hospitalization. The need for coordination is also true for outpatient care.[17]

---

[11] Benjamin A. Lipsky, Anthony R. Berendt, H. Gunner Deery, John M. Embil, Warren S. Joseph, Adolf W. Karchmer, Jack L. LeFrock, Daniel P. Lew, Jon T. Mader, Carl Norden, and James S. Tan, "Diagnosis and Treatment of Diabetic Foot Infections," *Clinical Infectious Diseases 39* (September 2004): 895-910.

[12] Lipsky, et al.

[13] VA/DoD Clinical Practice Guideline, 2017.

[14] Gas gangrene is a progressive gangrene marked by impregnation of the dead and dying tissue with gas and caused by one or more toxin-producing clostridia. Merriam-Webster Dictionary. https://www.merriam-webster.com/dictionary/gas%20gangrene. https://www.merriam-webster.com/dictionary/gas%20gangrene. (The website was accessed on May 9, 2018.); Cellulitis is a diffuse and especially subcutaneous inflammation of connective tissue. Merriam-Webster Dictionary. https://www.merriam-webster.com/dictionary/cellulitis. (The website was accessed on May 9, 2018.)

[15] Mayo Clinic, End-stage renal disease. https://www.mayoclinic.org/diseases-conditions/end-stage-renal-disease/symptoms-causes/syc-20354532. (This website accessed July 23, 2018).

[16] VHA Directive 1140.11, *Uniform Geriatrics and Extended Care (GEC) Services in VA Medical Centers and Clinics*, October 11, 2016.

[17] VHA Directive 1140.11.

Patient Aligned Care Team

VHA Handbook 1101.10 (1) states each Patient Aligned Care Team (PACT) staff member is responsible for "[m]anaging communications and facilitating safe transitions of patients between the PACT's site of care and other health care settings, using informal and formal communication methods, as appropriate."[18] The primary care provider is responsible for "offering clinically indicated health care services to patients assigned to the PACT, and providing or arranging for care to which patients consent."[19] The primary care provider is also responsible for "collaborating with PACT staff to develop personal health plans incorporating care management and care coordination appropriate to the patient's needs."[20]

Allegations

The complainant filed allegations with the White House VA Veteran Complaint Hotline on July 12, 2017. The OIG received the hotline on July 17, 2017. The OIG directed questions regarding this inquiry to the VISN and facility. After receiving responses from the facility, the OIG opened a healthcare inspection in February 2018. The complainant alleged that facility providers

1. At the time of the patient's most recent hospital admission[21]
   - Did not complete a thorough evaluation,
   - Did not appropriately treat the patient's condition,
   - Discharged the patient without a discussion with the family[22] of medical condition and options for care, and
   - Did not communicate care options to mitigate the patient's suffering.[23]
2. Prior to the patient's most recent hospital admission[24]

[18] VHA Handbook 1101.10(1), *Patient Aligned Care Team (PACT) Handbook,* February 5, 2014, (Amended May 26, 2017), Page 60, Paragraph 23(g).

[19] VHA Handbook 1101.10(1), Page 60, Paragraph 24(d).

[20] VHA Handbook 1101.10(1), Page 61, Paragraph 24(h).

[21] VHA Directive 1036. The patient was admitted to an acute care inpatient setting for observation. "An [O]bservation patient is one with a medical, surgical or mental health condition showing a significant degree of instability or disability that needs to be monitored, provided with short term treatment and re-assessed while a decision is being made as to whether the patient requires further treatment in an acute care inpatient setting or can be discharged or assigned to care in another setting."

[22] Family is defined by the OIG in the report as the patient's spouse.

[23] To suffer is to endure death, pain, or distress; to sustain loss or damage; to be subject to disability or handicap. *Merriam-Webster Dictionary.* https://www.merriam-webster.com/dictionary/suffer. (The website was accessed on August 21, 2018.)

[24] The patient was admitted to an acute care inpatient setting for observation.

- Knew the patient had chronic illnesses and multiple wounds and failed to appropriately coordinate care.

The patient died three days after discharge. The allegations did not include concerns specific to the patient's death.

During the inspection, the OIG team also reviewed podiatry's resident supervision practices.

Scope and Methodology

The OIG initiated the review in February 2018 and conducted an onsite visit from March 27–29, 2018.

Interviews were conducted from February 22 through May 9, 2018. The OIG team interviewed the complainant, facility's Acting Director, senior leaders, Chief of Podiatry, PACT primary care provider, internal medicine and nephrology attending physicians, nephrology fellow, renal nurse practitioner, residents, PACT social worker, facility wound care clinic (WCC) coordinator, wound and ostomy team nurse, hospital interdisciplinary care coordinator, discharge nurse, and a medical support assistant (MSA) for podiatry who had knowledge about the processes, procedures, care or events related to the patient who died.

The OIG reviewed the patient's VA electronic health record (EHR) from fall 2016 through summer 2017. The OIG team also subpoenaed and reviewed the patient's State of Colorado Certificate of Vital Records and the non-VA hemodialysis records from winter 2016 through summer 2017.

Also reviewed were VHA directives, handbooks, memoranda, guidelines, and requirements; facility policies; standard operating procedures in place at times relevant to the allegations, The Joint Commission standards, and select peer-reviewed journals.

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

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

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

Case Summary

The septuagenarian patient had been followed for medical care at the facility for two decades receiving both primary care and specialty care. The patient had a history of chronic kidney disease requiring hemodialysis, pressure ulcers, chronic leg wounds, diabetes, pulmonary hypertension, high cholesterol, high blood pressure, chronic lymphoid leukemia, obesity hypoventilation syndrome requiring long-term supplemental oxygen, peripheral neuropathy, edema, and obesity.[25] The patient also received care and hemodialysis at a non-VA hemodialysis clinic.

In late fall 2016, the patient presented to primary care with a complaint of chronic left leg pain. On examination, the primary care provider noted bilateral leg edema, decreased pulses, decreased sensation, and no skin lesions of the feet. The primary care provider placed a social work consult to discuss advance directives. In late fall 2016, an examination for peripheral vascular disease was normal.

In winter 2016, a podiatrist saw the patient for a right heel "pre-ulcerative" lesion. The podiatrist rendered treatment and scheduled a four-month follow-up visit. At discharge from a winter 2016 hospitalization, the patient declined home health services for wound care of longstanding sacral pressure wounds.

At a primary care follow-up appointment in early 2017, the patient's presenting complaints were social concerns and continued leg pain. The primary care provider observed leg and feet edema on examination with no documentation of ulcers. The patient and spouse met with a PACT social worker to address social concerns.

Two months later, the patient was seen in the WCC clinic as a walk-in patient for a right heel ulcer of one month's duration. The WCC nurse documented an open wound on the right heel

[25] Chronic kidney disease is long-term, progressive worsening of renal function; Hemodialysis is a medical therapy to filter the wastes and water from your blood; A pressure ulcer is an area of tissue breakdown and ulceration where the tissues are squeezed between bony prominences and hard surfaces. *Merck Manuals*. https://www.merckmanuals.com/professional/dermatologic-disorders/pressure-ulcers/pressure-ulcers#v8381650. (The website was accessed on April 17, 2018.); Pulmonary hypertension is high blood pressure affecting the blood vessels in the lungs and the right side of the heart; Cancer of the blood-forming tissues, including bone marrow and lymphatic system, specifically the lymphoid cells which form the lymphatic tissue. Lymphatic tissue makes up your immune system. Chronic leukemia involves more mature cells. Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/leukemia/symptoms-causes/syc-20374373. (The website was accessed on April 16, 2018.); Obesity hypoventilation syndrome affects some obese people when poor breathing causes too much carbon dioxide (hypoventilation) and too little oxygen in the blood. National Heart, Lung, and Blood Institute. https://www.nhlbi.nih.gov/health-topics/obesity-hypoventilation-syndrome. (The website was accessed on April 17, 2018.); Edema is an excess buildup of fluid in connective tissue, usually in the legs; Obesity means having too much body weight.

with no sign of infection. The patient did not attend a scheduled podiatry appointment one week later.

In spring 2017, while speaking with the patient, a PACT social worker offered home health care services, which were declined. Later that month, the patient saw the primary care provider and was noted to have a new foot drop on examination and was referred to neurology services but was not seen by neurology.[26] The patient continued to have an ulcer on the right heel and was instructed to follow up with the WCC.

In early summer 2017, the patient was seen in the WCC for burning buttock pain, edema in the legs, a new right shin blister, and a continuing right heel ulcer. A nurse observed a left great toe wound. During the WCC appointment, the patient's spouse requested home health services for wound care. The home health services consult placed by the primary care provider in mid-summer was discontinued stating the spouse would be "performing dressing changes" based on WCC notes despite WCC notes in early to mid-summer that documented the patient's spouse as "doing the best [he/she][27] can" with "little knowledge related to care," being "overwhelmed" with the wound care, and "difficulty following written instructions since last visit." A WCC nurse also documented attempting to assist the patient with scheduling a podiatry clinic appointment at two separate appointments and no podiatry clinic appointment was ever made.

In an early summer WCC visit, the patient relayed having been started on antibiotics for cellulitis in the legs by the non-VA hemodialysis clinic.

The patient continued receiving hemodialysis three times a week at a non-VA clinic. In early summer, the patient was seen at the non-VA hemodialysis clinic. The non-VA hemodialysis records documented blood cultures were drawn for fever, chills, and hypotension symptoms. The blood cultures were positive for Methicillin-sensitive *Staphylococcus aureus* (MSSA), thus the patient received one dose intravenous (IV) cefazolin and three doses IV vancomycin before the patient's last hospitalization.[28] Notably, outpatient white blood cell (WBC) counts, drawn at the non-VA hemodialysis clinic monthly, were generally normal from early to mid-2017, with the

---

[26] Foot drop is a term to describe when patients have difficulty lifting the front part of their foot and is a sign of an underlying problem—either neurologic, muscular, or anatomic. Mayo Clinic.https://www.mayoclinic.org/diseases-conditions/foot-drop/symptoms-causes/syc-20372628. (The website was accessed on May 20, 2018.).

[27] The OIG uses gender neutral language to protect patients' privacy.

[28] Staphylococcus aureus is gram-positive aerobic bacteria causing many different types of infection. When Staphylococcus aureus is sensitive to penicillinase-resistant beta-lactam antibiotics it is considered methicillin-sensitive. *Merck Manuals*. https://www.merckmanuals.com/professional/infectious-diseases/gram-positive-cocci/staphylococcal-infections. (The website was accessed on May 22, 2018.); Cefazolin is a semisynthetic cephalosporin antibiotic given by IV to treat infection. *Merriam-Webster Medical Dictionary.* https://www.merriam-webster.com/medical/cefazolin. (The website was accessed on May 18, 2018.); Vancomycin is an antibiotic effective against gram-positive bacteria and is used mainly against staphylococci resistant to methicillin. *Merriam-Webster Medical Dictionary*. https://www.merriam-webster.com/dictionary/vancomycin (The website was accessed on May 18, 2018.)

last count in early summer 2017 reported as 10,100 cells/microliter. The non-VA records were not in the VA EHR at the time of the patient's emergency department visit and observation admittance.

In summer 2017, at a WCC visit, the patient reported injuring the left great toe. The patient was sent to the emergency department for evaluation of the left great toe ulcer with concern for infection.

The patient was evaluated by emergency department staff and an on-call podiatry intern. The podiatry intern conducted a physical examination and documented "swelling and redness" of the left great toe with a wound measuring "1.5cm x 1.5cm x 0.3cm and noted the "wound does not track nor probe to bone."[29] The patient's initial laboratory studies showed an elevated WBC count of 13,300 cells/microliter and a dose of IV vancomycin was given in the emergency department.

The patient was admitted to internal medicine for overnight acute care and observation with a plan to give IV antibiotics for cellulitis and discharge home the following day if the patient's laboratory studies normalized. The care plan also included marking the area of redness on the left leg and right heel to evaluate for progression, continuation of IV vancomycin, and continuation of hemodialysis. The resident's assessment was that the patient appeared "nontoxic" despite elevated WBCs, which the resident felt were unlikely to be caused by osteomyelitis since there was "no periosteal reaction on [x-ray] … and wound is not tracking to bone." The plan was to monitor redness and the WBC count's response to vancomycin, consider switching to oral antibiotics, and follow-up podiatry recommendations. The medicine attending physician admission note documented that the patient had previously received antibiotics from the non-VA hemodialysis provider and supported the current assessment and plan.

The following day, the podiatry intern documented recommendations for discharge with a plan for the patient to "[follow up] in clinic on Monday." The patient was discharged on doxycycline.[30]

In the discharge summary, the internal medicine attending physician documented reservations about discharge given the patient's increased WBC count from the day before (13,330 to 17,600 cells/microliter). The internal medicine attending physician also documented a discussion with the patient regarding staying another day and the patient's strong desire to go home.

[29] The basis for the probe to bone test is that if a probe can reach bone, so can bacteria; This is consistent with diabetic foot osteomyelitis in which bacteria reaches bone via spreading from adjacent soft tissue. When a wound "tracks to the bone," it is very likely the patient has a bone infection. Kenrick Lam, Suzanne A. V. van Asten, Tea Nguyen, Javier La Fontaine, and Lawrence A. Lavery, Diagnostic Accuracy of Probe to Bone to Detect Osteomyelitis in the Diabetic Foot: A Systematic Review, *Clinical Infectious Diseases 63,* no. 7 (2016):944–9488.

[30] Doxycycline is a broad-spectrum tetracycline antibiotic given orally to treat various bacterial infections. *Merriam-Webster Medical Dictionary*. https://www.merriam-webster.com/medical/doxycycline. (The website was accessed May 17, 2018.)

Additionally, the internal medicine attending physician noted the patient's podiatry clinic appointment could not take place on Monday due to his/her hemodialysis, and the podiatry clinic would call the patient on Monday to schedule an appointment. The patient's discharge paperwork was faxed to the outpatient non-VA hemodialysis clinic for follow-up care.

Post discharge, when contacted by two different MSAs for follow-up appointments, the family said the patient had died at home overnight, three days after discharge. According to the EHR, a sister-in-law reported the patient fell out of a wheelchair, and when the spouse went to help, the patient was not breathing. The family called 911 for help, but the patient was pronounced dead. No autopsy was performed.

Inspection Results

Issue 1: Patient's Acute Care Evaluation, Treatment, and Discharge Options

The OIG substantiated that facility providers,[31] at the time of the patient's most recent hospital admission, did not complete a thorough evaluation, appropriately treat the patient despite the involvement of multiple providers in the patient's care during the patient's 23-hour hospitalization, or provide discharge care options to potentially mitigate the patient's suffering. Without an autopsy report, the OIG was unable to determine if the aforesaid factors contributed to the patient's death. However, the OIG concluded that the patient's care during the hospital admission was not optimal. The OIG was unable to determine whether facility providers discharged the patient without discussion with the family of the patient's medical condition. Because the complainant did not name a specific provider whose care was concerning, the OIG team reviewed all the providers who participated in the patient's most recent hospital admission.

Patient's Acute Care Evaluation

The OIG found that facility providers did not fully complete a clinical history and exam on the patient during the hospital admission. Of the providers reviewed, none documented all required elements of the patient's clinical history or exam according to facility policy.[32]

Asking patients about the medications they are taking is part of the clinical history. In VHA, this process is called medication reconciliation. VHA Directive 2011-012 and facility policy 11-42, *Medication Reconciliation,* state that VA providers are responsible for completing medication reconciliation at every episode or transition in a patient's level of care where medications will be administered, prescribed, modified, or may influence the care given.[33] The patient was receiving IV antibiotics at a non-VA hemodialysis clinic for MSSA bacteremia. None of the patient's providers contacted the hemodialysis clinic to determine which antibiotics the patient received or how long such antibiotics should be administered.

An internal medicine attending physician noted in the EHR that the patient had "been receiving antibiotics in dialysis, although … [the patient] isn't sure which ones." An intern documented in

[31] System Policy 11-42, *Medication Reconciliation,* November 3, 2016. System providers have a responsibility to care for the patient. Providers include physicians, medical trainees, advanced practice nurses, physician assistants, and other healthcare professionals who provide primary care or specialty care within the limitations of their individual VA privileges or scopes of practices.

[32] System Policy11-29, *Assessment and Reassessment of Patients*, March 1, 2013.

[33] VHA Directive 2011-012, *Medication Reconciliation*, March 9, 2011; System Policy11-42.

the EHR that the patient reported having a fever two to three days before the admission. The patient did not have a fever documented during the 23-hour admission.

Given that the patient reported fevers and told providers of receiving antibiotics at the non-VA hemodialysis clinic, the OIG team would have expected the providers to call the non-VA hemodialysis clinic staff to determine the antibiotics received, and whether the patient required additional antibiotics to complete treatment. Failure by facility providers to complete the patient's medication reconciliation may have led to a lack of knowledge of the patient's recent medications that limited the treatment providers' abilities to treat the patient accurately and potentially increased the patient's risk for adverse events. MSSA bacteremia is a severe infection and could potentially lead vital organs to stop working, and in severe cases cause death.

The OIG found that facility providers did not complete a thorough laboratory and imaging evaluation of the patient. Medical literature supports that the providers should have aggressively pursued the cause of infection and requested a surgical consultation for inspection, exploration, and drainage of the infection source.[34]

MSSA bacteremia requires follow-up blood cultures, but none were ordered. An internal medicine resident told the OIG team "[w]e did not draw blood cultures as they are rarely positive in afebrile patients." The medical literature states blood cultures are positive in about 50 percent of all acute bone infection cases.[35] An internal medicine resident indicated that if the patient was found to have positive blood cultures, antibiotics would need to be continued.

The OIG reviewed the non-VA hemodialysis monthly laboratory results, which indicated the patient's WBC count was consistently within the normal range from late winter 2016 through early summer 2017. A complete blood count differential should have been obtained by the internal medicine team before the patient's discharge because the WBC count rose from an already elevated 13.3 to 17.6 on IV Vancomycin to which the MSSA bacteremia was

[34] Dennis L. Stevens, Alan L. Bisno, Henry F. Chambers, E. Dale Everett, Patchen Dellinger, Ellie J.C. Goldstein, Sherwood L. Gorbach, Jan V. Hirschmann, Edward L. Kaplan, Jose G. Montoya, and James C. Wade, "Practice Guidelines for the Diagnosis and Management of Skin and Soft-Tissue Infections," *Clinical Infectious Disease* 41 (October 2005): 1373–1406. A marked left shift [of WBCs], or a C-reactive protein level >13 mg/L, hospitalization should be considered, and a definitive etiologic diagnosis pursued aggressively by means of procedures such as Gram stain and culture of needle aspiration or punch biopsy specimens, as well as requests for a surgical consultation for inspection, exploration, and/or drainage.

[35] Edited by John E. Bennett, Raphael Dolin, Martin J. Blaser, *Mandell, Douglas, and Bennett's Principles and Practice of Infectious Disease, 8th ed*. (Philadelphia: Elsevier/Saunders, 2015), 2237–2271.

susceptible.[36] The EHR lacked evidence that the internal medicine team pursued a definitive etiologic diagnosis.[37]

The providers' imaging evaluation of the patient was incomplete. The magnetic resonance imaging is the "most accurate imaging modality for defining bone infection, and it also provides the most reliable image of deep soft tissue infections."[38] A trans-esophageal echocardiogram is warranted in a patient with MSSA bacteremia.[39] Neither were ordered.

Reviewing the totality of the evaluation, the OIG would have expected the providers to minimally document in the EHR consideration of blood cultures, a complete blood count with differential, and magnetic resonance imaging given the patient's increasing WBC count on IV antibiotics. Complications of MSSA bacteremia should have been assessed with a trans-esophageal echocardiogram.[40]

Facility providers' failures to evaluate appropriate laboratory and imaging results and remove the source of infection may have contributed to the patient's declining health and likely hindered the provision of additional needed treatment.

Patient's Acute Care Treatment

The OIG substantiated that at the time of the patient's most recent hospital admission, facility providers did not treat the patient's condition appropriately. The OIG found that although the antibiotic therapy administered during the patient's hospitalization empirically covered the cellulitis and MSSA bacteremia, the source of the MSSA bacteremia was not identified and removed.[41]

Providers diagnosed the patient with cellulitis and provided one dose of IV vancomycin before sending the patient home on oral doxycycline. IV vancomycin is often prescribed as an initial

---

[36] When a WBC count is abnormal, a differential segment can measure the types and percentages of various types of white cells including neutrophils, bands, eosinophils, monocytes, and lymphocytes. Laboratory Manager, "Interpreting the Complete Blood Count and Differential," article, May 14, 2016. http://laboratory-manager.advanceweb.com/interpreting-the-complete-blood-count-and-differential/. (The website was accessed on November 20, 2018.)

[37] The medical definition of etiologic is "etiologic treatment of a disease seeks to remove or correct its cause… causing or contributing to the cause of a disease or condition." *Merriam-Webster Medical Dictionary*. https://www.merriam-webster.com/medical/etiologic. (The website was accessed on May 17, 2018.)

[38] Lipsky, et al.

[39] Edited by John E. Bennett, Raphael Dolin, Martin J. Blaser. *Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 8th ed*. (Philadelphia: Elsevier/Saunders, 2015), 2264.

[40] Edited by John E. Bennett, Raphael Dolin, Martin J. Blaser. *Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 8th ed*. (Philadelphia: Elsevier/Saunders, 2015), 2264.

[41] Que and Moreilon, "Infectious Diseases and Their Etiologic Agents: Staphylococcus aureus (Including Staphylococcal Toxic Shock Syndrome)."

antibiotic in hospitalized patients when Methicillin-resistant *Staphylococcus aureus* is suspected. Outpatient treatment with oral doxycycline is an appropriate treatment for MSSA and Methicillin-resistant *Staphylococcus aureus* cellulitis, although it is often not the first medication of choice. The internal medicine team discharged the patient home on oral doxycycline, taking into consideration that the patient had a high potassium level not uncommon in patients receiving hemodialysis. The facility antibiogram showed doxycycline was effective to eradicate Methicillin-resistant *Staphylococcus aureus* skin infections, which the providers believed they were treating.[42]

An internal medicine resident told the OIG that if the patient "had blood cultures positive for MSSA bacteremia, we would have switched antibiotics to cefazolin and needed a much longer course of IV therapy (likely 2–4 weeks) …" An internal medicine attending physician added the patient "would have needed repeat blood cultures," and "If we found out [the patient] had positive cultures after [the patient] had left the hospital, I would have called [the patient] immediately and told [the patient] to return to the hospital." The statements by an internal medicine resident and attending physician led the OIG to conclude that the patient would have very likely received the appropriate care for MSSA bacteremia if the patient's care team had the information at the time of the patient's observation admission. Given the likely appropriate level of medication at the time of death and a high rate of sudden cardiac death in dialysis patients, the OIG was unable to determine whether facility providers' failures contributed to the patient's death.

Patient's Acute Care Discharge Options

The OIG was unable to determine whether facility providers discharged the patient without a discussion with the family of the patient's medical condition. The OIG identified conflicting reports regarding family healthcare discussions at the time of discharge. The OIG determined the patient was competent and included in discussions about care; including family members in the discussions was not required.

[42] The medical definition of antibiogram is "… a collection of data usually in the form of a table summarizing the percent of individual bacterial pathogens susceptible to different antimicrobial agents Note: An antibiogram is generated after bacteria are isolated (as from a patient's tissues or body fluids) and subjected to laboratory testing." Hospitals offer more directed help to their [providers] by creating antibiograms, or tables charting antibiotic resistance patterns within a specific facility. *Merriam-Webster Medical Dictionary*. https://www.merriam-webster.com/medical/antibiogram. (The website was accessed on May 17, 2018.); Differences between Gram positive and Gram negative bacteria include the thickness of the cell wall, which is approximately 20 to 30 nanometers thick in Gram positive and 8 to 12 nanometers thick in Gram negative; the amount of peptidoglycan in the cell walls; and the lipid and lipoprotein content, which is low in Gram positive bacteria and high in Gram negative. https://www.reference.com/science/difference-between-gram-positive-gram-negative-502ab67ec3a99003?aq=Difference+between+Gram+Positive+and+Gram+Negative&qo=cdpArticles. (The website was accessed May 18, 2018.)

The OIG substantiated that facility staff did not document a discussion with the family related to discharge options for care other than continued hospitalization or discharge to home. Also, the OIG identified a failure by the acute care medical team to create a transition plan. Per VHA Directive 1140.11, discharge from the hospital to home is a transition in care that warrants a comprehensive plan.[43] The OIG found the facility inadequately addressed the required transition care planning elements when planning the patient's discharge.

It was important the patient receive coordinated discharge planning because of the numerous chronic medical conditions that placed the patient at risk of care being overlooked or not addressed and therefore a worsening health status. Poor care coordination between the PACT team, WCC, podiatry clinic, and the non-VA hemodialysis clinic likely contributed to the patient's readmission.

The interdisciplinary team care nurse documented the internal medicine day supervising resident was made aware "additional comment needed on original Home Care [pre-admission] orders in order to continue with orders at time of discharge."[44] The internal medicine team did not document discussion about home health with the patient, and the home health consult was not renewed as requested. Although the podiatry intern recommended that the patient follow-up in the podiatry clinic Monday, the internal medicine attending physician documented in the discharge summary that the patient would be in hemodialysis on Monday, and the podiatry clinic MSA would need to contact the patient and schedule an appointment on Monday. The EHR documented the podiatry clinic MSA called the patient on Monday but was unable to leave a message, and a follow-up letter was mailed. The only outpatient appointment scheduled for the patient by the inpatient team was with the primary care provider for late summer 2017, (52 days after discharge).

A physician documented that the patient was not cognitively impaired and that the patient was eager to be discharged. The physician offered continued hospitalization as an option of care. An internal medicine attending physician encouraged the patient to remain in the hospital for another day. The complainant stated the patient wanted to go home, and the EHR documentation supported that statement. A discharging resident noted that evidence shows that it may be counterproductive when patients sign out against medical advice. The resident shared a preference for talking to patients about the risks of early discharge and encouraging them to stay as the internal medicine attending physician had done.[45]

---

[43] VHA Directive 1140.11.

[44] VHA Directive 1140.11. A comprehensive geriatric assessment encompasses an all-inclusive functional, psychosocial, and medical evaluation, is customarily conducted by an interdisciplinary team and is the optimal basis for recommendation of tertiary preventive strategies for a geriatric patient.

[45] David Alfandre. Reconsidering Against Medical Advice Discharges: Embracing Patient-Centeredness to Promote High Quality Care and a Renewed Research Agenda, *J Gen Intern Med* 28, no. 12 (2013): 1657–62.

The OIG determined the family wanted options for care other than hospitalization or discharge, and they did not receive them. The patient and family left the hospital without receiving their discharge care options and with only a primary care appointment that was scheduled 52 days following discharge. The patient's discharge plan did not include WCC and podiatry clinic appointments that may have contributed to a worsening infection.

Failure to Communicate Care Options to Mitigate the Patient's Suffering

The OIG substantiated that facility providers did not communicate care options to mitigate the patient's suffering. The OIG found no evidence in the EHR that a palliative care option was communicated to the patient. The internal medicine attending physician stated palliative care conversations usually happen in the outpatient setting or when the prescriber has time to get to know the patient over a few days. Pastoral care was offered to the patient, who declined. The patient was discharged with controlled pain; however, the providers did not discuss care options with the patient and family, who left the hospital without knowledge of GEC services that could potentially mitigate the patient's suffering.

Issue 2: Patient's Outpatient Coordination of Care

The OIG substantiated that prior to the patient's most recent hospital admission, the facility's outpatient care team knew that the patient had chronic illnesses and multiple wounds and failed to appropriately coordinate the patient's care. The patient's kidney disease, diabetes, and chronic lymphoid leukemia placed the patient at increased risk for developing skin wounds and pressure ulcers.

In fall 2016, the patient's primary care provider evaluated the patient's foot and documented a "Foot Risk score of 2."[46] The patients foot risk score was high-risk per VHA policy, which indicated a high susceptibility to develop foot ulcers.[47] The primary care provider ordered a podiatry consult, and a podiatrist saw the patient in late 2016. The podiatrist's plan of care included that the patient be seen by podiatry every four months. The patient did not attend an appointment that was scheduled for three months later.[48] Of note, facility policy states that when a patient misses an appointment, the clinic MSAs shall call the patient a minimum of two times, and if unable to reach the patient, send a letter. The OIG team found no documentation that a podiatry clinic MSA called the patient to reschedule the missed appointment. A WCC note in

[46] Foot risk scores are the result of an in-depth evaluation of the foot's circulation and sensation as well as foot deformities by a foot care specialist. VHA considers a level 2 score as moderate-risk for primary amputation.

[47] VHA Directive 2012-020; VHA Directive 1410.

[48] VHA Directive 1230. A "no-show" occurs when a patient does not present for a scheduled appointment. The patient was considered a no-show for the early 2017 appointment.

early summer 2017, documented the patient reported speaking with podiatry to schedule an appointment a week later. An appointment was not scheduled.

At a spring 2017 primary care visit, the primary care provider saw the patient for left knee and leg pain. The primary care provider's note documented foot drop and a "…small blister on heel..." and assessment of the patient's diabetes, chronic kidney disease, and chronic lymphoid leukemia without remission. The plan of care for the foot drop and blister included an ankle-foot orthotic consult, a neurology consult, and a replacement heel protector.[49] Consults were placed on the same day of the patient's visit.

Seven days after the placement of the neurology consult, the neurology service discontinued the consult and documented "Denied. Please order EMG [electromyogram] to evaluate peroneal compression. Please order PT [physical therapy] for conservative management…." The OIG team reviewed the patient's EHR and determined electromyogram and physical therapy consults were not ordered. Further, there was no documentation by the primary care provider regarding the rationale for not placing the electromyogram and physical therapy orders.

Between early spring and summer 2017, a WCC nurse treated the patient for multiple wounds, including left lower extremity pressure ulcers, over five visits despite not having received WCC consults as required by facility policy.

The last four months of the patient's outpatient care was fragmented. The patient's care plan lacked the coordination expected for a geriatric patient who was at risk for foot ulcers with chronic illnesses and multiple wounds. Deficiencies in the patient's care coordination included the lack of primary care provider follow-up on recommendations for neurological evaluation of the patient's leg and foot pain; delay in scheduling an orthotics team evaluation; delay in scheduling a podiatry clinic appointment; delay in placement of a home health care consult; and delay in exploring alternative care options as the patient's spouse became overwhelmed with the patient's care.[50] Consideration of skilled nursing home care for the patient's wound, geriatric PACT referral, or a geriatric evaluation, for the patient's weakening and worsening medical condition, was not documented.[51] The PACT team took no documented action. Overall, no single

[49] An orthotic is a device such as a brace or splint for supporting, immobilizing, or treating muscles, joints, or skeletal parts which are weak, ineffective, deformed or injured. *Merriam-Webster*. https://www.merriam-webster.com/dictionary/orthotic (This website was accessed on May 30, 2018.)

[50] Delay is the act of postponing, hindering, or causing something to occur more slowly than normal. *Merriam-Webster Medical Dictionary*. https://www.merriam-webster.com/dictionary/delay. (The website was accessed on July 9, 2018.)

[51] Geriatric PACT teams provide healthcare for patients with more than one chronic disease and with declining mental and physical capabilities. Geriatric PACT integrates traditional healthcare services with community-based services; According to VHA Directive 1140.04, a geriatric evaluation consists of a comprehensive multidimensional assessment and the development of an interdisciplinary plan of care. Geriatric evaluation is undertaken by an interdisciplinary team of health care professionals, for a group of predominantly older patients and others with medical and psychosocial complexity.

staff member took the responsibility to coordinate the patient's complex outpatient care needs. The WCC clinicians who treated the patient with the most frequency during the four months preceding death also took no action to coordinate the patient's complex outpatient care needs. The OIG team concluded the deficiencies in the patient's care coordination likely contributed to the patient's worsening wounds.

Issue 3: Resident Supervision

The OIG, while reviewing the patient's quality and coordination of care, determined the podiatry clinic did not follow the facility policy of resident supervision explicit to consult services. Attending physicians oversee interns, residents, and fellows. The attending physician's role is to enhance a resident's knowledge while ensuring the quality of care delivered to each patient by the resident.

The facility policy 011-04, *Resident Supervision Policy for Post-Graduate Medical, Dental, and Podiatry Residents*, is specific on the elements required for supervision of consult service residents. The consult attending physician "must meet with each patient who received consultation by a resident and perform an evaluation in a timely manner based on the patient's condition, but at least by the end of the next working day."

There was no documentation that an attending podiatrist physically evaluated the patient to verify the clinical history, evaluation, or laboratory and imaging findings. A podiatry intern documented, "This patient was discussed with … attending physician, who agrees with the medical management outlined in my note and believes it is medically appropriate." The attending podiatrist did not document a physical evaluation of the patient who was discharged in the early evening the day after admission.[52]

The podiatry intern, who provided the most complete evaluation, assumed the post-graduate year one role just five days before the patient was admitted. The other providers relied upon the podiatry intern's assessment of the foot and "probe to bone" test to develop the imaging and treatment plan. The OIG would have expected an attending podiatrist to perform and document a clinical evaluation to verify that the podiatry intern's assessment was correct per facility policy. If the "probe to bone" test was not correctly executed by the intern, an infection of the bone might have been missed.

[52] The patient was admitted to an acute care inpatient setting for observation.

Conclusion

The OIG substantiated that facility providers, at the time of the patient's most recent hospital admission, failed to complete a thorough evaluation, including a full clinical history with medication reconciliation. The providers' evaluations were incomplete and may have contributed to the patient's declining health, which likely hindered the provision of additional needed treatment.

System providers failed to appropriately treat the patient's condition and consider that elevated white blood cell counts were potentially a sign of underlying infection. While the treatment plan for cellulitis was acceptable, and it is likely the patient had an appropriate level of medication at the time of death to control an MSSA bacteremia infection, the OIG would have expected the providers to identify and remove the source of infection. Given the likely suitable level of medication at time of death and high number of sudden cardiac deaths in dialysis patients, the OIG was unable to determine whether facility providers' failures contributed to the patient's death.

The OIG was unable to determine whether facility providers discharged the patient without a discussion with the family of the patient's medical condition. There were conflicting reports regarding family healthcare discussions at the time of discharge. The patient was competent and included in discussions about care; including family members in the discussions was not required.

The OIG substantiated the family wanted options for care other than hospitalization or discharge, and they did not receive them. The patient and family left the hospital without documentation of the patient's discharge care options and with only a primary care appointment scheduled for 52 days after discharge. A comprehensive discharge plan to meet the patient's complex medical needs was not documented. Further, WCC and podiatry clinic appointments were not made for the patient upon discharge by any of the hospital staff, which could have contributed to a worsening infection.

System providers did not communicate care options to potentially mitigate the patient's suffering. The OIG found that facility providers did not communicate the options for GEC services, such as a geriatric evaluation or palliative care, and ensure podiatry clinic, WCC, physical therapy, and occupational therapy appointments were made and communicated to the patient and patient's family.

Podiatry MSAs did not consistently follow facility policy for the number of times to call a patient before sending a letter when attempting to schedule appointments.

Although WCC staff treated the patient for multiple wounds over five visits, WCC consults were not performed as required by facility policy.

Outpatient care was fragmented for the last four months of the patient's life. The coordination of care expected for a geriatric patient who had chronic illnesses, multiple wounds, and was "at risk" for foot ulcers was lacking. Overall, no facility provider took the responsibility to coordinate the patient's complex outpatient care needs. The OIG team concluded the deficiencies in the patient's care coordination likely contributed to the patient's worsening wounds.

The OIG determined a podiatry clinic attending provider failed to examine the patient and document resident supervision within the time frame dictated by the facility's resident supervision policy explicit to consult services.

The OIG made eight recommendations.

Recommendations 1–8

1. The VA Eastern Colorado Health Care System Director confirms that providers who perform patients' clinical histories complete medication reconciliation to include non-VA medications.

2. The VA Eastern Colorado Health Care System Director confirms that healthcare providers further evaluate patients when indicators of infection are present, including rising white blood cell counts, and that providers take action as appropriate.

3. The VA Eastern Colorado Health Care System Director ensures that patient care teams verify that resources needed upon discharge, including family assistance, are available and meets patients' needs.

4. The VA Eastern Colorado Health Care System Director strengthens processes and documentation that is consistent with Veterans Health Administration Directive 1140.11 when elderly patients are transitioning in care.

5. The VA Eastern Colorado Health Care System Director conducts a review of the interdisciplinary discharge planning team notes and patient discharge orders to identify and correct provider to patient communication deficiencies, and if deficiencies are noted, develop action plans to rectify the communication and mitigation issues identified.

6. The VA Eastern Colorado Health Care System Director verifies that outpatient podiatry scheduling practices align with Veterans Health Administration and VA Eastern Colorado Health Care System podiatry scheduling policies and takes action as necessary.

7. The VA Eastern Colorado Health Care System Director verifies that Wound Care Clinic practice aligns with VA Eastern Colorado Health Care System policy and takes action as necessary.

8. The VA Eastern Colorado Health Care System Director ensures that a review is conducted of podiatry resident supervision and develop and implement corrective action plans with timelines and oversight of podiatry residency program as necessary.

Appendix A: VISN Director Comments

Department of Veterans Affairs Memorandum

Date: March 5, 2019

From: Director, Rocky Mountain Network (10N19)

Subj: Healthcare Inspection—Quality and Coordination of a Patient's Care at the VA Eastern Colorado Health Care System, Denver, Colorado

To: Director, Office of Healthcare Inspections (54HL05)
Director, Management Review Service (VHA 10EG GOAL Action)

I have reviewed the findings, recommendations and action plan of the Eastern Colorado Health Care System, Denver VA. I am in agreeance with the above.

(Original signed by:)
Ralph T. Gigliotti
VISN 19 Network Director

Appendix B: System Director Comments

Department of Veterans Affairs Memorandum

Date: March 1, 2019

From: Director, VA Eastern Colorado Health Care System (554/A2-00)

Subj: Healthcare Inspection—Quality and Coordination of a Patient's Care at the VA Eastern Colorado Health Care System, Denver, Colorado

To: Director, Rocky Mountain Network (10N19)

1. Enclosed is VA Eastern Colorado Health Care System's (ECHCS) response, as directed by the Director, Seattle Office of Healthcare Inspections (54SE) Memorandum of January 25, 2019, regarding the above referenced OIG Healthcare Inspection. We appreciate the opportunity to review the draft Report and provide feedback to each finding and OIG Recommendation.

2. Following a comprehensive review of these Recommendations, we submit our response and determination of concurrence.

Recommendation 1. Concur in Principle

Recommendation 2. Concur in Principle

Recommendation 3. Concur in Principle

Recommendation 4. Concur in Principle

Recommendation 5: Concur

Recommendation 6. Concur

Recommendation 7. Concur

Recommendation 8. Concur

3. Please contact Quality Management for additional information or questions regarding our response.

(Original signed by:)
Sallie A. Houser-Hanfelder, FACHE
Director, VA Eastern Colorado Health Care System

Comments to OIG's Report

Recommendation 1

The VA Eastern Colorado Health Care System Director confirms that providers who perform patients' clinical histories complete medication reconciliation to include non-VA medications.

Concur in Principle.

Action Plan: Medicine Service orientation and educational materials have been modified to explicitly address expectations for comprehensive medication reconciliation at the time of admission, especially around non-VA medications. Each attending provider will review these goals, objectives, and expectations with all team members at the start of each rotation.

Target date for completion: An audit of completion of this orientation process will be completed by June 1, 2019.

Director Comments

VHA Directive 2011-012 **"**Medication Reconciliation" and the Joint Commission's (TJC) National Patient Safety Goal NPSG.03.06.01 require medication reconciliation. It is also part of licensed independent practitioners' ongoing professional evaluations, and addressed in ECHCS Bylaws and Rules of the Medical Staff (2017) page 93, Section d, ix. We expect medication reconciliation to include reviewing prescribed VA medications for adherence and side effects, non-VA medications, and all un-prescribed or over-the-counter medications. The Computerized Patient Record System (CPRS) shows medication reconciliation to include non-VA medications was completed by the Emergency Department (ED) physician's ER Walk-In Note. In the admission History and Physical note, the admitting provider also documents this process, including the addition of one medication not appearing on the patient's electronic lists (a probiotic [he/she][53] took at night) plus clarification of a narcotic medication that was no longer on the CPRS medication list but was still being taken once or twice a day as needed for pain.

The patient reported to his/her caregivers that he/she had been prescribed an antibiotic at his/her non-VA hemodialysis center but could not recall the name or further details. As the patient was admitted to treat a skin and soft tissue infection of the left leg, the team made an assumption that those prior antibiotics were prescribed for the same reason that they were seeing the patient. As a result, the prior antibiotic prescription was not further identified nor was its significance appreciated. We acknowledge that the team taking over for the patient's care the next day should have reached out to the non-VA dialysis center to obtain information about the antibiotic that was prescribed and the rationale for doing so.

[53] The OIG uses gender neutral language to protect patients' privacy.

Recommendation 2

The VA Eastern Colorado Health Care System Director confirms that healthcare providers further evaluate patients when indicators of infection are present, including rising white blood cell counts, and that providers take action as appropriate.

Concur in Principle.

Action Plan: An Educational In-service will be conducted for hospital medicine with attention to the importance of further evaluation of signs and symptoms of worsening infection such as an increasing WBC.

Target date for completion: May 1, 2019

Director Comments

The treating inpatient team diagnosed non-purulent cellulitis of the left foot, appropriately treated with initial IV antibiotics targeting gram positive organisms. The team documented concern for the higher WBC on hospital day two (2) and recommended the patient remain in the hospital despite evidence of clinical improvement and ongoing lack of fever. The patient, having capacity, declined to remain hospitalized. Complicating the interpretation of the higher WBC was a prior diagnosis of CLL [chronic lymphoid leukemia], with chronic absolute lymphocytosis and total WBC levels within our system similar to the value obtained on hospital day two (2). We acknowledge that a differential showing a left shift would have strengthened their recommendation to the patient to remain in the hospital for further treatment.

Recommendation 3

The VA Eastern Colorado Health Care System Director ensures that patient care teams verify that resources needed upon discharge, including family assistance, are available and meets patients' needs.

Concur in Principle.

Action Plan: Interdisciplinary Care Coordinator practice and documentation will be altered to reflect asking both the patient and family caregivers "what concerns they may have" regarding the plans as proposed.

Target date for completion: May 1, 2019

Director Comments

Documentation in the medical record confirmed the patient was provided information regarding options of care during this admission. The assessment by the discharging inpatient team was that the patient was clinically improving, possessed decision-making capacity, and verbalized a strong desire to go home. The team was aware that a home health consult for wound care had

been placed two (2) days prior to admission by the patient's outpatient team. The recommended option to remain in the hospital for ongoing observation and treatment was clearly documented but was not accepted by the patient. A follow-up appointment for Podiatry Clinic the next business day was made, but at the patient's request was cancelled due to a scheduling conflict with non-VA hemodialysis. The medical record documents two (2) outreach phone calls to reschedule this appointment. The team was aware that the patient would be having three (3) times weekly contact with the non-VA healthcare system to receive dialysis starting the next business day and thereafter. Had the patient or family expressed reservations regarding the safety of going home, rather than the desire to go home with home wound care, the inpatient team would have documented those reservations and would have responded to them appropriately. We concur that the inpatient team should document asking family caregivers what reservations they may have about the plans as proposed to better identify their potential concerns.

OIG Comments: There was no evidence documented in the EHR of the treatment team initiating a conversation with the family regarding the patient's discharge plan and the family's role in caring for the veteran at home. This conversation, if held, may have elicited reservations the family had regarding the safety of going home.

Recommendation 4

The VA Eastern Colorado Health Care System Director strengthens processes and documentation that is consistent with Veterans Health Administration Directive 1140.11 when elderly patients are transitioning in care.

Concur in Principle.

Action Plan: The Interdisciplinary Care Coordinator notes and clinical practice will be revised to ensure that all nine components of the Directive are reliably addressed.

Target date for completion: May 1, 2019

Director Comments

Section 27 of Directive 1140.11 lists common "errors and mishaps" in transitions of care for elderly patients, as well as a series of nine required steps to prevent them. We have previously discussed medication reconciliation and care coordination with other services, as well as assessment of need for ancillary health care services. The issue of coordination of follow-up appointments is discussed in Recommendation 6. Care Coordination notes also cover transportation, education, and any durable medical equipment issues. We concur that "communication with non-VA providers involved in the transition" requires further education and emphasis with clinical staff.

Recommendation 5

The VA Eastern Colorado Health Care System Director conducts a review of the interdisciplinary discharge planning team notes and patient discharge orders to identify and correct provider to patient communication deficiencies, and if deficiencies are noted, develop action plans to rectify the communication and mitigation issues identified.

Concur.

Action Plan: A review of the interdisciplinary care coordination and discharge planning process, inclusive of notes and orders, will be conducted to identify and correct any deficiencies and ensure full adherence to applicable policy.

Target date for completion: April 2019

Director Comments

Discharge planning is addressed daily by the Deputy Chief of Staff, Mental Health/Surgery/Social Work/Medicine Services' Chiefs, Utilization Management, SAIL [Strategic Analytics for Improvement and Learning] RN, and Access Center RN Supervisor.

ECHCS has a multi-disciplinary process improvement initiative entitled, "Capacity Management." One of the key components to this active project is interdisciplinary discharge planning. The Access Center RN Supervisor, enrolled in VA's Inpatient Flow Academy, is facilitating a project looking specifically at our interdisciplinary discharge planning rounds. The project is focused on revising the existing way we discharge plan to a more proactive, patient-centered approach, which will include medication delivery and teaching, and follow-up plans with clear instructions. There is anticipated review of any communication errors related to patient discharges.

An Utilization Management/Care Coordinator (CC) is spearheading a morning bedside rounding Plan/Do/Study/Act (PDSA) with two (2) Attending Internists and bedside nursing staff. The PDSA proposal is to test a way to provide a better format for rounding that is both efficient on the front and back end–planning for discharge. Patient/family engagement in the rounding process is expected to promote understanding of medical conditions, prognosis and treatment plans. The first PDSA cycle should be completed toward the end of March or mid-April 2019.

The CCs are leading an improvement project to smooth out discharge times. The action items are focused around standardizing and streamlining the actions to be completed for discharge and removing identified barriers to this process. The CCs will also play a more active role in the discharge process and be the central points of contact for this coordination, assuring all key elements are in place and understood.

Recommendation 6

The VA Eastern Colorado Health Care System Director verifies that outpatient podiatry scheduling practices align with Veterans Health Administration and VA Eastern Colorado Health Care System podiatry scheduling policies and takes action as necessary.

Concur.

Target date for completion: March 15, 2019

Director Comments

ECHCS concurs with the reviewers that rescheduling practices for the missed Podiatry appointment several months prior to admission were incomplete. The Health Administration Service (HAS) Chief has confirmed with the Medical Support Assistant (MSA) Trainers that the 10-day training curriculum for new MSAs and refresher training include scheduling outreach requirements for no-shows per VHA Directive 1230.

OIG Comment: The OIG considers this recommendation open to allow the submission of documentation to support closure.

Recommendation 7

The VA Eastern Colorado Health Care System Director verifies that Wound Care Clinic practice aligns with VA Eastern Colorado Health Care System policy and takes action as necessary.

Concur.

Target date for completion: March 15, 2019

Director Comments

The Wound Care Coordinator collaborated with other services and developed procedures in response to the recommendation. The formal policy draft "Interdisciplinary Wound Care" is almost complete and includes:

1. Surgical wounds will be followed by the appropriate surgical specialty. Surgery will change their own wound-vac dressings.
2. Pressure ulcers, skin tears, non-surgical trauma injuries, ostomies, and non-healing surgical wounds that have been properly consulted will be followed by Wound Care.
3. Dermatological wounds and skin conditions will be followed by Dermatology.
4. Lower extremity wounds will be followed by Podiatry.
5. Wound Care is responsible for approving and tracking, wound-vac machines and specialty mattresses.
6. Wound Care is responsible for approving Fee-based Wound Care consults and clarification of Home Health wound care orders.

OIG Comment: The OIG considers this recommendation open to allow the submission of documentation to support closure.

Recommendation 8

The VA Eastern Colorado Health Care System Director ensures that a review is conducted of podiatry resident supervision and develop and implement corrective action plans with timelines and oversight of podiatry residency program as necessary.

Concur.

Action Plan: A Podiatry All Staff meeting (Residents and Attending Physicians) was held January 28, 2019 to review VHA Handbook 1400.01 regarding resident supervision to reiterate the importance of ongoing attention to proper supervision of care.

Target date for completion: January 28, 2019

Director Comments

A review completed by the Health Information Management Section Chief revealed there was a total of seven (7) provider notes entered for the observation admission (including the ED), with four (4) being completed by Residents and one (1) by a Fellow (five [5] total that pertains to the review). Only one (1) of the notes did not have Resident Supervision summer 2017 - Provider Discharge Instructions), which is an 80 percent compliance rate for this admission.

The PGY1 Podiatry Resident was consulted to see the patient in the ED on the day of admission following a wound care clinic appointment earlier that day. Labs and x-rays were ordered, along with the recommendation by the PGY1 Podiatry Resident for oral antibiotics and wound care instructions. The Podiatry consultation note properly documents attending supervision according to local policy and VHA HB 1400.01 – Resident Supervision (pdf pg.6, HB pg. 3, paragraph 5). The Podiatry Resident also properly followed the published *Podiatric House Staff Procedure Supervision* guidelines in the 2018 Resident Manual delineating "Treat and Manage ER Patient in the ER" as R1 and Supervisor Level 3 (Faculty by phone).

The ED physician elected to admit the patient to the Medicine Service for overnight observation and IV antibiotics. An addendum to the Podiatry Inpatient Progress Note on hospital day two (2) reflects the Resident spoke with the Medicine team and provided recommendations for discharge and follow-up clinic appointment the next business day.

OIG Comment: The OIG considers this recommendation open to allow the submission of documentation to support closure.

OIG Contact and Staff Acknowledgments

Contact	For more information about this report, please contact the Office of Inspector General at (202) 461-4720.
Inspection Team	Carrie Jeffries, ANP-BC, FACHE, Team Leader Dannette Johnson, DO Barbara Miller, BSN Lauren Olstad, LCSW, MSW John Rumbaugh, MBA, MA Susan Tostenrude, MS, Project Leader Andrew Waghorn, JD
Other Contributors	Felicia Burke, MS Shirley Carlile, BA Laura Dulcie, BSEE Laura Granados-Savatgy, MPA Patrice Marcarelli, MD Ronald Penny, BS Natalie Sadow, MBA

Report Distribution

VA Distribution

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

Non-VA Distribution

House Committee on Veterans' Affairs
House Appropriations Subcommittee on Military Construction, Veterans Affairs, and Related Agencies
House Committee on Oversight and 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: Michael F. Bennet, Cory Gardner
U.S. House of Representatives: Ken Buck, Jason Crow, Diana DeGette, Doug Lamborn, Joe Neguse, Ed Perlmutter, and Scott R. Tipton

The OIG has federal oversight authority to review the programs and operations of VA medical facilities. OIG inspectors review available evidence to determine whether reported concerns or allegations are valid within a specified scope and methodology of a healthcare inspection and, if so, to make recommendations to VA leadership on patient care issues. Findings and recommendations do not define a standard of care or establish legal liability.

OIG reports are available at www.va.gov/oig.