

DEPARTMENT OF VETERANS AFFAIRS OFFICE OF INSPECTOR GENERAL

Office of Healthcare Inspections

VETERANS HEALTH ADMINISTRATION

Clinically Appropriate Anemia Care and Timing of a Colonoscopy Procedure for a Patient at the VA Caribbean Healthcare System in San Juan, Puerto Rico

REPORT #21-01334-269

SEPTEMBER 27, 2021

MISSION



The mission of the Office of Inspector General is to serve veterans and the public by conducting meaningful independent oversight of the Department of Veterans Affairs.

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 to assess concerns related to a patient's care and care coordination at the VA Caribbean Healthcare System (facility) in San Juan, Puerto Rico. Specifically, the OIG reviewed the diagnosis and treatment of the patient's <u>anemia</u> and the coordination and timing of the patient's <u>colonoscopy</u>.¹

The patient, who was in their 80s, had a medical history of <u>iron-deficiency anemia</u>, <u>high blood</u> <u>pressure</u>, and <u>diabetes</u>.² Prior to establishing care at the facility in 2012, the patient had been diagnosed with iron-deficiency anemia by a non-VA provider and had undergone both an <u>upper endoscopy</u> and colonoscopy. At the initial visit, a facility primary care provider prescribed an iron replacement medication to treat the patient's anemia. Repeat laboratory studies indicated persistent low iron levels.

In 2017, the patient developed a thrombosis, which required <u>anticoagulant</u> treatment and the patient was referred to the facility's <u>anticoagulation clinic</u> for follow-up. In spring 2018, the patient developed <u>atrial flutter</u>, and the consulting cardiologist recommended lifelong anticoagulation therapy. In summer 2019, the patient was diagnosed with cancer by a non-VA provider and completed <u>radiation treatment</u> at a non-VA facility.

At subsequent clinic visits, the facility primary care provider noted the patient's iron levels were normal and described the anemia as "chronic, stable." The patient remained on an anticoagulant and continued to be followed at regular intervals by the anticoagulation clinic.

Following an episode of rectal bleeding and weakness, the patient presented to the facility's Emergency Department on Day 1 and was admitted to the observation ward. The patient's <u>hemoglobin</u> levels were low. The patient received a blood transfusion and was evaluated by the facility's <u>Gastroenterology</u> Service staff. The patient had no further symptoms or bleeding and was discharged on Day 3. Gastroenterology staff recommended an outpatient colonoscopy that was scheduled for nine days later.

On Day 4, the patient returned to the Emergency Department after experiencing an episode of dizziness and was readmitted to the observation ward. Laboratory tests revealed a drop in the patient's hemoglobin from the previous day and elevated <u>troponin</u> levels. The patient's hemoglobin dropped again on Day 5, although there were no signs of active <u>gastrointestinal</u> <u>bleeding</u>. Cardiology Service staff recommended an anemia workup and blood transfusions as needed. The patient had a single episode of rectal bleeding on Day 6. The <u>hospitalist</u> performed a rectal exam, discontinued the anticoagulant medication, and requested that Gastroenterology

¹ The underlined terms below are hyperlinks to a glossary. To return from the glossary, press and hold the "alt" and "left arrow" keys together.

² The OIG uses the singular form of they (their) in this instance for the purpose of patient privacy.

Service perform the colonoscopy while the patient was admitted. The patient was scheduled for an inpatient colonoscopy procedure on Day 11, one day earlier than the previously scheduled outpatient colonoscopy. The patient had no further rectal bleeding and remained asymptomatic for the next two days.

On the morning of Day 10, the patient experienced chest pain, had <u>low blood pressure</u>, and was transferred to the intensive care unit. Cardiology Service staff noted the likelihood of a heart attack and recommended that the patient undergo <u>cardiac catheterization</u>. Cardiology staff requested that Gastroenterology Service first determine the underlying cause of and treat the patient's bleeding. On Day 12, Gastroenterology Service staff performed the colonoscopy and identified and treated the source of the bleeding. The following day, Cardiology Service staff performed a cardiac catheterization procedure. During the cardiac procedure, the patient experienced cardiac arrest and died. The patient's autopsy showed significant <u>coronary artery disease</u> and the manner of death was reported as "natural."

During the inspection, the OIG found that the patient's primary care provider evaluated the patient's anemia through laboratory testing and effectively treated the patient's anemia with iron supplements. The OIG determined that the use of an anticoagulant did not clinically affect the patient's anemia. Providers considered the patient's anemia when prescribing the anticoagulant, discussed the risks and benefits of anticoagulation therapy with the patient, and conducted follow-up at the required frequency.

The OIG determined that the timing of the patient's colonoscopy was clinically appropriate. Facility gastroenterologists and inpatient medical providers evaluated the patient across two admissions and adjusted the timing of the colonoscopy to meet the patient's clinical needs. The OIG found that the decision to perform the colonoscopy was made collaboratively across disciplines, weighing the patient's risks and needs, ultimately providing clearance for a cardiovascular intervention. When the patient's condition changed on Day 6, and again on Day 10, the OIG found that providers responded and adjusted the timing of the colonoscopy to meet the patient's needs.

The OIG made no recommendations.

Comments

The Veterans Integrated Service Network and Facility Directors concurred with the report (see appendixes A and B). No further action is required at this time.

Alud . Vaigh. M.

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

Contents

Executive Summary i
Abbreviationsv
Introduction1
Scope and Methodology2
Patient Case Summary
Facility Hospitalizations4
Inspection Results
1. Diagnosis and Treatment of the Patient's Anemia6
2. Timing of the Patient's Colonoscopy
Conclusion10
Appendix A: VISN Director Memorandum11
Appendix B: Facility Director Memorandum12
Glossary
OIG Contact and Staff Acknowledgments
Report Distribution

Abbreviations

EHR	electronic health record
DVT	deep venous thrombosis
g/dL	grams per deciliter
OIG	Office of Inspector General
VHA	Veterans Health Administration

VISN Veterans Integrated Service Network



Clinically Appropriate Anemia Care and Timing of a Colonoscopy Procedure for a Patient at the VA Caribbean Healthcare System in San Juan, Puerto Rico

Introduction

The VA Office of Inspector General (OIG) conducted an inspection to assess concerns related to a patient's care and care coordination at the VA Caribbean Healthcare System (facility) in San Juan, Puerto Rico.

Background

The facility, part of Veterans Integrated Service Network (VISN) 8, consists of a medical center, two specialty clinics, and four community-based outpatient clinics. The facility provides primary, tertiary, and long-term care. The facility is classified as a Level 1a, high-complexity facility with 260 hospital beds and 122 community living center beds.¹ From October 1, 2019, through September 30, 2020, the facility served 58,879 patients. The facility is affiliated with four accredited medical schools in Puerto Rico—University of Puerto Rico, Universidad Central del Caribe, Ponce School of Medicine, and San Juan Bautista Medical School.

Concerns

The OIG received concerns regarding the care and care coordination of a patient at the facility. Specifically, the OIG reviewed concerns regarding the diagnosis and treatment of the patient's <u>anemia</u> and the coordination and timing of the patient's inpatient <u>colonoscopy</u> procedure.²

¹ VHA Office of Productivity, Efficiency and Staffing, accessed May 25, 2021,

http://opes.vssc.med.va.gov/Pages/Facility-Complexity-Model.aspx. The VHA Facility Complexity Model categorizes medical facilities based on patient population, clinical services offered, educational and research missions, and administrative complexity. Complexity levels include 1a, 1b, 1c, 2, or 3, with Level 1a facilities being the most complex and Level 3 facilities being the least complex.

² The underlined terms are hyperlinks to a glossary. To return from the glossary, press and hold the "alt" and "left arrow" keys together.

Scope and Methodology

The OIG initiated the inspection on February 16, 2021, and conducted a virtual site visit April 12–May 4, 2021.

The OIG team interviewed the Chief of Staff and the Chiefs of <u>Gastroenterology</u> and Primary Care. The OIG also interviewed a primary care provider, <u>hospitalist</u>, clinical pharmacist, quality manager, gastroenterology physician, and gastroenterology <u>fellow</u>.

The OIG team reviewed relevant Veterans Health Administration (VHA) and facility policies and procedures, and the patient's electronic health record (EHR) from January 27, 2012, through February 12, 2021. In the absence of current VA or VHA policy, the OIG considered previous guidance to be in effect until superseded by an updated or recertified directive, handbook, or other policy document on the same or similar issue(s).

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

Oversight authority to review the programs and operations of VA medical facilities is authorized by the Inspector General Act of 1978, Pub. L. No. 95-452, 92 Stat. 1101, as amended (codified at 5 U.S.C. App. 3). The OIG reviews available evidence within a specified scope and methodology and makes recommendations to VA leaders, if warranted. Findings and recommendations do not define a standard of care or establish legal liability.

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

Patient Case Summary

The patient, who was in their 80s, had a medical history of anemia, <u>high blood pressure</u>, and <u>diabetes</u>, established care at the facility in early 2012.³ At the initial visit, a primary care provider documented that the patient had a history of <u>iron-deficiency anemia</u> that had been diagnosed by a provider in the community. The primary care provider noted that the patient had undergone both an <u>upper endoscopy</u> and a colonoscopy in 2011 and requested that the patient provide a copy of the reports from those procedures. The primary care provider prescribed an iron replacement medication to treat the patient's anemia.

In fall 2013, another primary care provider evaluated the patient. Repeat laboratory studies indicated persistent low iron levels. The primary care provider documented that the patient continued to have anemia and take an iron supplement.

In fall 2017, the patient developed a <u>deep venous thrombosis</u> (DVT), requiring treatment with an oral blood thinner. The inpatient team attending physician prescribed <u>dabigatran</u>, an <u>anticoagulant</u>, and referred the patient to the facility's <u>anticoagulation clinic</u> for follow-up.⁴ The patient was seen by the anticoagulation clinical pharmacist a month later, for an initial anticoagulation clinic appointment. An additional six follow-up telephone encounters with the anticoagulation clinical pharmacist took place over the next 11 months.

In spring 2018, the patient developed <u>atrial flutter</u>. The consulting facility cardiologist recommended lifelong anticoagulation therapy.

At subsequent clinic visits, the primary care provider noted the patient's iron level was normal and described the anemia as "chronic; stable." The primary care provider documented continuation of dabigatran and follow-up by the anticoagulation clinic.

In summer 2019, the patient was diagnosed with prostate cancer by a non-VA provider and scheduled for <u>radiation therapy</u>. By early 2020, the patient had completed 44 courses of radiation treatment at a non-VA facility.

In 2020, because of COVID-19 restrictions, the primary care provider and anticoagulation clinical pharmacist conducted telephone visits with the patient, during which the patient denied

³ The OIG uses the singular form of they (their) in this instance for the purpose of patient privacy.

⁴ VHA Directive 1033, *Anticoagulation Therapy Management*, July 29, 2015. Anticoagulants such as dabigatran are commonly used for both the treatment and prevention of an obstruction of a blood vessel with a blood clot, cardiac disease, and cerebrovascular accident. These medications can cause significant patient harm when misused or unmonitored. Less than therapeutic levels may increase the risk for complications while supratherapeutic levels increase the risk of bleeding complications.

any episodes of bleeding.⁵ Laboratory studies revealed the <u>hemoglobin</u> remained consistent with the patient's baseline hemoglobin levels through fall 2020.

Facility Hospitalizations

Hospitalization 1: Day 1—3

On Day 1, the patient presented to the facility's Emergency Department after an episode of rectal bleeding and weakness that occurred the day prior. An Emergency Department physician performed a rectal exam and documented normal stool color and consistency with no evidence of blood. A blood test showed a hemoglobin of 6.8 grams per deciliter (g/dL), indicating worsening anemia.⁶ The patient was admitted to the facility's observation ward in the early morning hours of Day 2. The anemia was treated with a transfusion of two units of blood. The admitting team requested a gastroenterology consultation to determine the source of the rectal bleeding.

On Day 3, a gastroenterology fellow (Gastroenterology Fellow 1) evaluated the patient and recommended a colonoscopy to evaluate the source of the bleeding. Since the patient had no further symptoms and no further bleeding, the colonoscopy was scheduled as an outpatient procedure for nine days later. The patient agreed to this plan and was discharged home.

Hospitalization 2: Day 4—Day 13

On Day 4, the patient returned to the Emergency Department after an episode of dizziness, resulting in a fall to the floor, with some mild associated shortness of breath. The patient denied rectal bleeding since discharge the day prior. The patient was admitted to the observation ward with a diagnosis of <u>near syncope</u>. Laboratory studies showed the patient's hemoglobin had dropped from 11.7 g/dL to 10 g/dL and revealed elevated <u>troponin</u> levels. The admitting physician placed a cardiology consult to evaluate the increased troponin levels, ordered laboratory studies to evaluate the cause of the patient's anemia, and documented a plan to repeat the patient's blood count and troponin levels.

On Day 5, the patient's hemoglobin dropped to 8.9 g/dL; the medical staff documented no evidence of active <u>gastrointestinal bleeding</u>. The patient denied chest pain or other cardiac symptoms. A cardiology fellow (Cardiology Fellow 1) evaluated the patient and opined that the elevation in troponin was secondary to a heart muscle injury from a combination of anemia and

⁵ World Health Organization, *Naming the coronavirus disease (COVID-19) and the virus that causes it*, accessed June 7, 2021, <u>https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it</u>. COVID-19 is an infectious disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

⁶ Mayo Clinic, *Hemoglobin-test*, accessed on May 12, 2021, <u>https://www.mayoclinic.org/tests-procedures/hemoglobin-test/about/pac-20385075</u>. Normal hemoglobin values for men are between 13.5 and 17.5 g/dL; normal hemoglobin values for women are 12.0 and 15.5 g/dL.

low blood pressure. An echocardiogram showed normal systolic function and no evidence of wall motion abnormalities. The cardiologist recommended an anemia workup and blood transfusions "as needed."

While on the observation ward the patient had no further symptoms until Day 6, when experiencing an episode of rectal bleeding. The hospitalist repeated a rectal exam on the patient, which showed some blood in the rectum. A repeat hemoglobin test that morning was 8.8 g/dL, which the hospitalist later documented was unchanged over the last 24 hours but had dropped from the day of admission. The hospitalist discontinued the dabigatran. Since the patient was hospitalized, the hospitalist requested the gastroenterologist perform the colonoscopy sooner than scheduled. The hospitalist transferred the patient from the observation ward to the inpatient medicine ward.

Later that day, a gastroenterology fellow (Gastroenterology Fellow 2) evaluated the patient and scheduled an inpatient colonoscopy earlier than the previously planned procedure. No medications were prescribed to reverse the anticoagulation since the patient had a "non-life-threatening bleed." The patient remained off the dabigatran. The patient had no further rectal bleeding and remained asymptomatic for the next two days. The patient had a bowel movement on Day 9 and reported no blood in the stool.

On the morning of Day 10, the patient had a 10-minute episode of chest pain, prompting a call to the <u>rapid response team</u>. Nursing staff noted the patient's blood pressure was low, which was initially treated with <u>intravenous fluids</u>. The blood pressure remained low, and the patient ultimately required an infusion of <u>norepinephrine</u>. The patient was transferred to the intensive care unit. Laboratory studies showed a drop in hemoglobin to 6.9 g/dL and a further increase in troponin levels. An intensive care unit <u>resident</u> physician noted that the increased troponin levels indicated heart muscle damage. A cardiology fellow (Cardiology Fellow 2) noted <u>electrocardiogram</u> changes suggestive of a heart attack and recommended treating the underlying causes of low blood pressure and anemia. The patient received a transfusion of two units of blood. The patient's echocardiogram. A cardiologist also recommended that the patient undergo <u>cardiac catheterization</u> but requested that Gastroenterology Service determine and treat the origin of the patient's bleeding prior to the cardiac procedure.

On Day 11, a gastroenterologist saw the patient and documented that a colonoscopy was indicated but noted concerns that the patient's heart attack would make the colonoscopy and anesthesia more dangerous. The gastroenterologist also noted that the patient's hemoglobin was 11 g/dl and that the patient had no further episodes of rectal bleeding. Because of the patient's condition, the colonoscopy was scheduled for the following day with the Cardiology Service on stand-by in case the patient's heart condition deteriorated further. The patient's cardiac catheterization was scheduled the day after the colonoscopy.

The gastroenterologist performed the colonoscopy on Day 12, noting scattered <u>diverticula</u> and evidence of inflammation of the rectum from the previous radiation therapy with slight oozing of blood. The gastroenterologist opined the rectal inflammation to be the source of the bleeding and used <u>laser coagulation</u> to control the bleeding.

The following day, a cardiologist and cardiology fellow (Cardiology Fellow 3) performed the cardiac catheterization. Toward the end of the procedure, the patient had a sudden drop in blood pressure. The cardiologist documented that the cardiac catheter was removed. The patient developed <u>agonal breathing</u>, suffered <u>respiratory arrest</u>, and was <u>intubated</u>. Shortly thereafter, the patient developed cardiac arrest. <u>Cardiopulmonary resuscitation</u> was performed; however, the patient did not respond and was ultimately pronounced dead.

The patient's autopsy noted significant <u>coronary artery disease</u> with heart muscle damage from a heart attack. The manner of death was reported as "natural."

Inspection Results

1. Diagnosis and Treatment of the Patient's Anemia

The OIG determined that the diagnosis and treatment of the patient's anemia was appropriate. The OIG found that the patient was diagnosed with iron-deficiency anemia prior to receiving care at the facility and that facility providers continued to evaluate the anemia through laboratory results as indicated and treat the condition accordingly.

Anemia management is based on diagnosis, clinical assessment, and laboratory findings. Causes of iron-deficient anemia include blood loss, an iron-poor diet, or an inability to absorb iron. Providers diagnose iron-deficiency anemia through laboratory tests to examine a patient's red blood cell size and color, and review hemoglobin, hematocrit, and <u>ferritin</u> levels. Colonoscopy and upper endoscopy procedures are generally used to identify underlying causes of anemia, such as internal bleeding. Providers commonly treat iron-deficiency anemia with iron supplements.⁷

The OIG interviewed the primary care provider who oversaw the patient's care from fall 2013 until the patient's death in late 2020. The primary care provider explained that the patient was diagnosed with anemia prior to receiving care at the facility. The primary care provider stated the patient had been followed by a community gastroenterologist and had colonoscopy and upper endoscopy procedures completed in 2011. The primary care provider continued to evaluate the patient's anemia through laboratory tests and reported that the iron supplements had been an effective treatment. The primary care provider stated that other than low hemoglobin levels, test

⁷ Mayo Clinic, *Iron deficiency anemia*, accessed May 19, 2021, <u>https://www.mayoclinic.org/diseases-conditions/iron-deficiency-anemia/symptoms-causes/syc-20355034</u>.

results were normal. Additionally, the primary care provider reported that the patient remained asymptomatic with no reports of rectal bleeding or bloody stool for years.

In fall 2017, the patient developed a DVT and was prescribed the anticoagulant, dabigatran. Because supratherapeutic anticoagulant levels can increase the risk of bleeding, the OIG reviewed the patient's anticoagulant management to assess for potential clinical effects on the anemia.

Anticoagulant Management

The OIG determined that the use of an anticoagulant did not clinically affect the patient's anemia and that facility providers prescribed and monitored the patient's anticoagulant in accordance with facility policy. The OIG found that facility providers considered the patient's anemia and discussed the risks and benefits of an anticoagulant upon initiation and conducted follow-up at the required frequency.

Facility policy states that for patients with significant anemia, providers should assess the risk versus benefit prior to initiating anticoagulant therapy. Once initiated, facility policy requires that patients are provided outpatient follow-up including two-week, one-month, three-month, and six-month follow-up assessments to evaluate adherence, <u>adverse events</u>, and whether pertinent laboratory values remain stable. Further, when laboratory values are within acceptable ranges and no adverse effects have been identified, follow-up assessments will be conducted every six months.⁸

The clinical pharmacist documented the patient met the criteria for dabigatran when the patient developed a DVT in fall 2017. In spring 2018, the cardiology fellow (Cardiology Fellow 4) documented a new onset of atrial flutter, discussed risks of anticoagulation therapy with the patient and a family member, and both agreed with the recommendation to continue with lifelong anticoagulation therapy. Further, the clinical pharmacist's telephone encounter that month documented a reciprocal discussion of the pros and cons of the anticoagulant and the atrial flutter diagnosis with the family member, who voiced understanding.

During an OIG interview, the clinical pharmacist discussed the patient's history of DVT and atrial flutter and the increased risk of death if the patient was not anticoagulated. The clinical pharmacist stated, "there's more than enough justification to start the patient on the anticoagulant." The clinical pharmacist further explained that in the absence of active bleeding or extremely low hemoglobin levels, the benefits of taking the anticoagulant in order to prevent a blood clot outweighed the risks. The primary care provider explained in an interview that the decision for anticoagulation therapy was difficult because of the patient's risk factors for

⁸ Facility Memorandum 00-16-72, Anticoagulation Therapy Management, October 2016.

bleeding; however, the patient's diagnosis of atrial flutter and the history of DVT both required anticoagulation therapy.

The OIG found that facility primary care providers effectively evaluated and treated the patient's iron-deficiency anemia. The OIG did not find evidence that the use of an anticoagulant, or management of such, clinically affected the patient's anemia. The OIG found anticoagulation management practices to be consistent with facility policy, as evidenced by assessing risk, conducting follow-up assessments at required intervals, and monitoring the patient's medication adherence, adverse events, and whether pertinent laboratory values remain stable. The OIG concluded that providers diagnosed and treated the patient's anemia and managed the anticoagulant appropriately.

2. Timing of the Patient's Colonoscopy

The OIG determined that the timing of the patient's colonoscopy was clinically appropriate. The OIG found that the facility's gastroenterologists and inpatient medical providers evaluated the patient across two admissions and adjusted the timing of the colonoscopy to meet the patient's clinical needs.

A review of the patient's EHR supports that in late 2020, the patient had two consecutive facility admissions, one day apart. The patient was admitted to the observation ward with the chief complaint of rectal bleeding. On the day of discharge, Gastroenterology Service assessed the patient as clinically stable, with no recurrence of rectal bleeding, and scheduled a diagnostic outpatient colonoscopy for less than two weeks later. The OIG team learned through interviews and an EHR review that providers assessed that previous radiation therapy was likely the cause of the patient's lower gastrointestinal bleed, and noted the condition was treatable and non-life-threatening.

According to the patient's EHR, on the day after being discharged, the patient returned to the facility's Emergency Department reporting an episode of dizziness and was admitted for observation. Two days later, the patient experienced rectal bleeding, at which time Gastroenterology Service reassessed the patient. According to Gastroenterology Fellow 2 who conducted the consultation, the patient was stable and did not require an urgent colonoscopy. The hospitalist requested that Gastroenterology Service staff perform the colonoscopy while the patient was hospitalized; an inpatient colonoscopy was scheduled to be performed one day earlier than the previously planned outpatient procedure.

The Chief of Gastroenterology, the hospitalist, and Gastroenterology Fellow 2 told the OIG team that colonoscopies were performed in the gastroenterology suite on a routine basis, and colonoscopies that needed to be done emergently were performed in the intensive care unit when the gastroenterology suite was closed (that is, evenings, weekends, and holidays). During interviews, the hospitalist reported that the gastroenterology suite was closed for a holiday during the patient's second admission; however, the gastroenterologist and Gastroenterology Fellow 2

confirmed that the Gastroenterology Service had the ability to perform emergent colonoscopies 24 hours a day, 7 days a week. The gastroenterologist informed the OIG team that the colonoscopy may have been performed sooner had it not been a holiday, but because the patient was medically stable at the time of assessment, the colonoscopy was scheduled after the holiday.

During an OIG interview, the hospitalist reported that a week after the second hospitalization, the patient complained of chest pain. Upon assessment, the patient was transferred to the intensive care unit.

The patient's EHR supported that the intensive care attending physician consulted with Gastroenterology and Cardiology Services to determine the patient's plan of care and that both Services agreed that a colonoscopy was necessary prior to cardiac intervention. Documentation within the patient's EHR indicated that on the ninth day of the patient's second hospitalization, Gastroenterology Service staff performed the colonoscopy without complication and documented that previous radiation therapy was the source of the rectal bleeding. The gastroenterologist noted that the bleeding was successfully treated, and the patient was cleared for the cardiac catheterization procedure.

The OIG found that the decision to perform the colonoscopy was made collaboratively across disciplines, weighing patient risks and needs, ultimately providing clearance for a cardiovascular intervention while the patient was in the intensive care unit. The OIG found that when the patient's condition changed on Day 6 and Day 10, facility providers responded and adjusted the timing of the colonoscopy to meet the patient's needs.

Conclusion

The OIG determined the diagnosis and treatment of the patient's anemia was clinically appropriate. The patient was diagnosed with iron-deficiency anemia and underwent a colonoscopy and endoscopy procedure within the community prior to receiving care at the facility. After initiating VHA care, facility primary care providers continued to evaluate the patient's anemia through laboratory results and successfully treated the condition with iron supplements. The patient developed a DVT in 2017, and facility providers considered the patient's anemia when they prescribed an anticoagulant and referred the patient to the anticoagulation clinic to be monitored. In 2018, the patient was diagnosed with atrial flutter. The primary care provider, clinical pharmacist, and cardiologist weighed the patient's risk factors associated with anemia, namely bleeding, with risk factors associated with atrial flutter and history of DVT, and ultimately recommended lifelong anticoagulation treatment. The OIG determined that the use of an anticoagulant did not clinically affect the patient's anemia and that facility providers prescribed and monitored the patient's anticoagulant in accordance with facility policy.

In late 2020, the patient presented to the facility's Emergency Department with an episode of rectal bleeding that led to an admission for observation. The Gastroenterology Service assessed the patient and due to the stable presentation with no reoccurrence of rectal bleeding, the patient was scheduled for an outpatient colonoscopy.

The patient had a subsequent admission for a different medical problem the day after discharge. The Gastroenterology Service assessed the patient and rescheduled the colonoscopy as an inpatient procedure. Due to the patient's changing condition during the second admission, the colonoscopy was ultimately performed in conjunction and collaboration with the facility's Cardiology Service and Critical Care Department to assist in finding and eliminating the source of rectal bleeding prior to a heart catheterization.

The OIG determined that the timing of the patient's colonoscopy was clinically appropriate. Facility gastroenterologists and inpatient medical providers evaluated the patient across two admissions and adjusted the timing of the colonoscopy to meet the patient's clinical needs. The OIG found that the decision to perform the colonoscopy was made collaboratively across disciplines, weighing patient risks and needs.

The OIG made no recommendations.

Appendix A: VISN Director Memorandum

Department of Veterans Affairs Memorandum

- Date: August 31, 2021
- From: Director, VA Sunshine Healthcare Network (10N8)
- Subj: Healthcare Inspection—Clinically Appropriate Anemia Care and Timing of a Colonoscopy Procedure for a Patient at the VA Caribbean Healthcare System in San Juan, Puerto Rico
- To: Director, Office of Healthcare Inspections (54HL04) Director, GAO/OIG Accountability Liaison office (VHA 10BGOAL Action)
- 1. Thank you for the opportunity to review our processes. I have reviewed the Office of the Inspector General's Report regarding the VA Caribbean Healthcare System in San Juan, Puerto Rico. I concur with the report's findings and conclusions.
- 2. For questions, please contact the VISN 8 Chief Quality Management Officer.

(Original signed by:)

Miguel H. LaPuz, M.D., MBA Network Director, VISN 8

Appendix B: Facility Director Memorandum

Department of Veterans Affairs Memorandum

- Date: August 23, 2021
- From: Director, VA Caribbean Healthcare System (672)
- Subj: Healthcare Inspection—Clinically Appropriate Anemia Care and Timing of a Colonoscopy Procedure for a Patient at the VA Caribbean Healthcare System in San Juan, Puerto Rico
- To: Director, VA Sunshine Healthcare Network (10N8)
- Thank you for the opportunity to review the Draft report, Clinically Appropriate Anemia Care and Timing of a Colonoscopy Procedure for a Patient at the VA Caribbean Healthcare System (VACHS) in San Juan, Puerto Rico. The VACHS concurs with the outcome of the inspection of no recommendations.
- 2. The VACHS appreciate the diligence of the Office of Inspector General Survey team for their professionalism and assistance strengthening the care of our Veterans.

(Original signed by:)

Carlos R. Escobar, BED-Arch, MSHP, FACHE Executive Director

Glossary

To go back, press "alt" and "left arrow" keys.

adverse events. Events connected with care or services delivered that result in patient harm or potential harm.⁹

agonal breathing. Abnormal breathing characterized by labored breaths, gasping, and often grunting.¹⁰

anemia. A condition that occurs when the body does not have enough healthy red blood cells.¹¹

anticoagulant. A medication that stops the blood from clotting.¹²

anticoagulation clinic. A coordinated program to manage patients treated with anticoagulants.¹³

atrial flutter. A rhythm disturbance in the heart resulting in the upper chambers beating too quickly.¹⁴

cardiac catheterization. A medical procedure that involves the insertion of a wire or tube into a patient's blood vessels to reach the heart chambers and to diagnose or treat certain heart problems.¹⁵

cardiopulmonary resuscitation. A procedure used to restore normal breathing after cardiac arrest.¹⁶

colonoscopy. A test that uses a camera attached to a flexible tube to examine the inside of the colon. It can be used to detect cancer or look for sources of lower intestinal bleeding.¹⁷

⁹ VHA Handbook 1004.08, *Disclosure of Adverse Events to Patients*, October 31, 2018.

¹⁰ National Cancer Institute, *Agonal respiration*, accessed May 18, 2021, <u>https://ncit.nci.nih.gov/ncitbrowser/ConceptReport.jsp?dictionary=NCI_Thesaurus&ns=ncit&code=C121624</u>.

¹¹ Veterans Health Library, *Anemia*, accessed May 18, 2021, https://www.veteranshealthlibrary.va.gov/Search/142,40464 VA.

¹²*Merriam-Webster.com Dictionary,* "Medical definition of anticoagulation," accessed May 18, 2021, <u>https://www.merriam-webster.com/medical/anticoagulation</u>.

¹³ VHA Directive 1033.

¹⁴ Mayo Clinic, *Atrial flutter*, accessed May 12, 2021, <u>https://www.mayoclinic.org/diseases-conditions/atrial-flutter/symptoms-causes/syc-20352586</u>.

¹⁵ National Heart, Lung and Blood Institute, *Cardiac catheterization*, accessed May 18, 2021, <u>https://www.nhlbi.nih.gov/health-topics/cardiac-catheterization</u>.

¹⁶ *Merriam-Webster.com Dictionary,* "Medical definition of cardiopulmonary resuscitation," accessed May 18, 2021, <u>https://www.merriam-webster.com/dictionary/cardiopulmonary%20resuscitation</u>.

¹⁷ Veterans Health Library, *Colonoscopy*, accessed May 5, 2021, <u>https://www.veteranshealthlibrary.va.gov/Encyclopedia/142,82148_VA</u>.

coronary artery disease. A common type of heart disease that is caused by plaque buildup in the walls of the arteries that supply blood to the heart.¹⁸

dabigatran. A medication used to treat and prevent blood clots from reoccurring in patients that reduces the risk of stroke and blood clots in patients with heart rhythm problems.¹⁹

deep venous thrombosis. A blood clot in one of the deep veins, typically found in legs. The clot can break off and cause obstruction in the pulmonary circulation.²⁰

diabetes. A chronic, lifelong condition in which the body has trouble using glucose.²¹

diverticula. Small bulging pouches, often found in the lower part of the large intestine, that can form in the lining of the digestive system.²²

echocardiogram. The use of sound waves to produce images of the heart.²³

electrocardiogram. A common and painless test that records electrical signals in the heart to quickly detect heart problems and monitor heart health.²⁴

fellow. A physician who participates in further education or research in a medical specialty after completion of medical training.²⁵

ferritin. A blood protein that contains iron. A ferritin test can show how much iron the body stores. Low ferritin levels indicate an iron deficiency. Patients with an iron deficiency may be anemic.²⁶

¹⁸ Centers for Disease Control and Prevention, *Coronary Artery Disease*, accessed May 18, 2021, <u>https://www.cdc.gov/heartdisease/coronary_ad.htm</u>.

¹⁹ Mayo Clinic, *Dabigatran*, accessed May 26, 2021, <u>https://www.mayoclinic.org/drugs-supplements/dabigatran-oral-route/description/drg-20074611</u>.

²⁰ Mayo Clinic, *Deep Venous Thrombosis (DVT)*, accessed May 12, 2021, <u>https://www.mayoclinic.org/diseases-conditions/deep-vein-thrombosis/symptoms-causes/syc-20352557</u>.

²¹ Veterans Health Library, *Do you have diabetes*? accessed May 20, 2021, <u>https://www.veteranshealthlibrary.va.gov/DiseasesConditions/Diabetes/142,89509_VA</u>.

²² *Merriam-Webster.com Dictionary*, "Definition of diverticula," accessed July 21, 2021, <u>https://www.merriam-webster.com/dictionary/diverticula</u>.

²³ Mayo Clinic, *Echocardiogram*, accessed May 12, 2021, <u>https://www.mayoclinic.org/tests-procedures/echocardiogram/about/pac-20393856</u>.

²⁴ Mayo Clinic, *Electrocardiogram (ECG or EKG)*, accessed May 12, 2021, <u>https://www.mayoclinic.org/tests-procedures/ekg/about/pac-20384983</u>.

²⁵ *Merriam-Webster.com Dictionary*, "Medical definition of fellow," accessed May 18, 2021, <u>https://www.merriam-webster.com/dictionary/fellow</u>.

²⁶ Mayo Clinic, *Ferritin test*, accessed June 20, 2021, <u>https://www.mayoclinic.org/tests-procedures/ferritin-test/about/pac-20384928</u>.

gastroenterology. A branch of medicine concerned with the structure, functions, diseases, and pathology of the stomach and intestines.²⁷

gastrointestinal bleed. A symptom of a disorder in the digestive tract that can have many different causes. It can include obvious or hidden blood in stool or vomit.²⁸

hemoglobin. The protein in red blood cells that carries oxygen. Low hemoglobin values indicate anemia.²⁹

hospitalist. A physician who specializes in providing and managing the care of hospitalized patients.³⁰

high blood pressure. A common condition in which the long-term force of the blood against artery walls is high enough that it may eventually cause health problems, such as heart disease.³¹

intubated. A procedure that involves placing a tube into the trachea through the mouth or nose in order to keep the airway open for oxygen, medicine, or anesthesia.³²

intravenous fluids. The administration of fluids such as medication, blood, or nutrients directly into a patient's veins.³³

iron-deficiency anemia. A condition in which the body does not produce adequate red blood cells when iron levels are low.³⁴

laser coagulation. The coagulation (clotting) of tissue using a laser.³⁵

²⁷ *Merriam-Webster.com Dictionary*, "Medical definition of gastroenterology," accessed May 18, 2021, <u>https://www.merriam-webster.com/dictionary/gastroenterology</u>.

²⁸ Mayo Clinic, *Gastrointestinal bleeding*, accessed May 18, 2021, <u>https://www.mayoclinic.org/diseases-conditions/gastrointestinal-bleeding/symptoms-causes/syc-20372729</u>.

²⁹ Mayo Clinic, *Hemoglobin-test*, accessed July 28, 2020, <u>https://www.mayoclinic.org/tests-procedures/hemoglobin-test/about/pac-20385075</u>.

³⁰ *Merriam-Webster.com Dictionary*, "Definition of hospitalist", accessed June 14, 2021, <u>https://www.merriam-webster.com/dictionary/hospitalist</u>.

³¹ Mayo Clinic, *High blood pressure*, accessed May 18, 2021, <u>https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/symptoms-causes/syc-20373410.</u>

³² National Institutes of Health, MedlinePlus, *Endotracheal intubation*," accessed May 18, 2021, <u>https://medlineplus.gov/ency/article/003449.htm</u>.

³³ *Merriam-Webster.com Dictionary*, "Medical definition of IV," accessed May 19, 2021, <u>https://www.merriam-webster.com/dictionary/IV</u>.

³⁴ Mayo Clinic, *Iron deficiency anemia*, accessed May 12, 2021, <u>https://www.mayoclinic.org/diseases-conditions/iron-deficiency-anemia/symptoms-causes/syc-20355034</u>.

³⁵ Medicinenet, *Medical definition of laser coagulation*, accessed May 19, 2021, <u>https://www.medicinenet.com/laser_coagulation/definition.htm</u>.

low blood pressure. A condition that occurs when blood pressure drops below the normal range. Doctors generally define low blood pressure as 90/60 mm Hg or below.³⁶

near syncope. A condition in which patients experience symptoms of lightheadedness and feel they are about to faint but do not loss consciousness.³⁷

norepinephrine. A medication generally used to treat short-term, low blood pressure.³⁸

radiation treatment. A type of cancer treatment that uses beams of intense energy to kill cancer cells.³⁹

rapid response team. A rapid response team, a component of a rapid response system, is called when a patient is showing signs of imminent clinical deterioration.⁴⁰

resident. An individual who meets the criteria of an accredited graduate program and practices medicine under the direction of a supervising physician.⁴¹

respiratory arrest. A state in which one stops breathing.⁴²

systolic. The contraction of the heart muscle that forces blood to circulate, also known as systole.⁴³

³⁶ Cleveland Clinic, *Low blood pressure*, accessed May 19, 2021, https://my.clevelandclinic.org/health/diseases/21156-low-blood-pressure-hypotension.

³⁷ NCBI Bookshelf, *Presyncope*, accessed July 21, 2021, <u>https://www.ncbi.nlm.nih.gov/books/NBK459383/</u>.

³⁸ Mayo Clinic, *Norepinephrine*, accessed June 24, 2021, <u>https://www.mayoclinic.org/drugs-</u> supplements/norepinephrine-intravenous-route/description/drg-20490844.

³⁹ *Merriam-Webster.com Dictionary*, "Medical definition of radiotherapy," accessed May 19, 2021, <u>https://www.merriam-webster.com/dictionary/radiotherapy</u>.

[&]quot;⁴⁰ Patient Safety Network, *Rapid Response Systems*, accessed January 27, 2020, <u>https://psnet.ahrq.gov/primer/rapid-response-systems</u>.

⁴¹ VHA Directive 1400.09 (1), *Education of Physicians and Residents*, December 26, 2018.

⁴² *Merriam-Webster.com Dictionary*, "Medical definition of respiratory arrest," accessed May 18, 2021, <u>https://www.merriam-webster.com/dictionary/respiratory%20arrest</u>.

⁴³ *Merriam-Webster.com Dictionary*, "Medical definition of systole," accessed June 1, 2021, <u>https://www.merriam-webster.com/dictionary/systole</u>.

troponin. A type of protein found in the muscles of the heart that can be found in blood when heart muscles become damaged. Troponin tests are often used to help determine if someone has suffered a heart attack.⁴⁴

upper endoscopy. A study that uses a camera attached to a flexible tube to examine the upper portion of the gastrointestinal tract. It can be used to determine the source of upper gastrointestinal bleeding.⁴⁵

wall motion abnormalities. Irregular contraction in an area of the heart that has been damaged from a heart attack or stressed from a lack of adequate oxygen supply; the abnormalities can be seen on an echocardiogram.⁴⁶

⁴⁴ MedlinePlus, *Troponin test*, accessed May 19, 2021, <u>https://medlineplus.gov/lab-tests/troponin-test/</u>.

⁴⁵ Veteran's Health Library, *Upper GI Endoscopy*, accessed May 12, 2021, https://www.veteranshealthlibrary.va.gov/142,82152_VA.

⁴⁶ Mayo Clinic, *Echocardiogram (ECG or EKG)*, accessed May 12, 2021, <u>https://www.mayoclinic.org/tests-procedures/echocardiogram/about/pac-20393856</u>.

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	Clarissa Reynolds, MBA, NHA, Director Stacy DePriest, MSW, LCSW Sandra Dickinson, MSW, LCSW Kevin Hosey, MBA, LCSW Kristin Huson, MSW, LICSW John A. Johnson, MD, FAAFP Kristen Leonard, DNP, RN Dawn Rubin, JD, MSN
Other Contributors	Limin Clegg, PhD Marlene DeMaio, MD, FAAOS Jeanne Martin, PharmD Jackelinne Melendez, MPA Natalie Sadow, MBA Robyn Stober, JD, MBA Robert Wallace, MPH, ScD

Report Distribution

VA Distribution

Office of the Secretary Veterans Health Administration Assistant Secretaries General Counsel Director, VA Sunshine Healthcare Network (10N8) Director, VA Caribbean Healthcare System (672)

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: Marco Rubio, Rick Scott U.S. House: Ted Deutch, Mario Diaz-Balart, Lois Frankel, Carlos Gimenez, Brian Mast, Maria Elvira Salazar, Debbie Wasserman Schultz, Frederica S. Wilson, Resident Commissioner for the Commonwealth of Puerto Rico: Jenniffer González-Colón Delegate to Congress from the U.S. Virgin Islands: Stacey E. Plaskett

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