



January 2020

VA HEALTH CARE

Improved Communication about Available Data Needed to Enhance the HIV Screening Process

Why GAO Did This Study

VHA is the largest single provider of medical care to HIV infected individuals in the nation. In 2018, VAMCs tested approximately 240,000 veterans for HIV and provided HIV care to over 31,000 veterans. Early diagnosis and timely treatment is important for achieving favorable health outcomes and reducing the risk of transmitting the virus to others.

The accompanying Joint Explanatory Statement for the Consolidated Appropriations Act, 2018 included a provision for GAO to examine how VAMCs have implemented VHA's HIV screening policy. This report examines (1) approaches that selected VAMCs use to facilitate HIV screening, and (2) the extent to which VHA monitors HIV screening. GAO analyzed VHA documents, including VHA directives and a nongeneralizable sample of 103 veterans' medical records, to understand how providers made decisions and documented actions related to HIV screening. GAO also interviewed VHA and VAMC officials, the latter from five facilities selected based on factors such as the range of HIV prevalence rates.

What GAO Recommends

VA should (1) improve communication regarding the availability of data on the timeliness with which test results are communicated to veterans, and (2) disseminate data to HIV lead clinicians on the timeliness with which veterans are linked to HIV care. VA concurred with GAO's recommendations.

View [GAO-20-186](#). For more information, contact Debra A. Draper at (202) 512-7114 or draperd@gao.gov.

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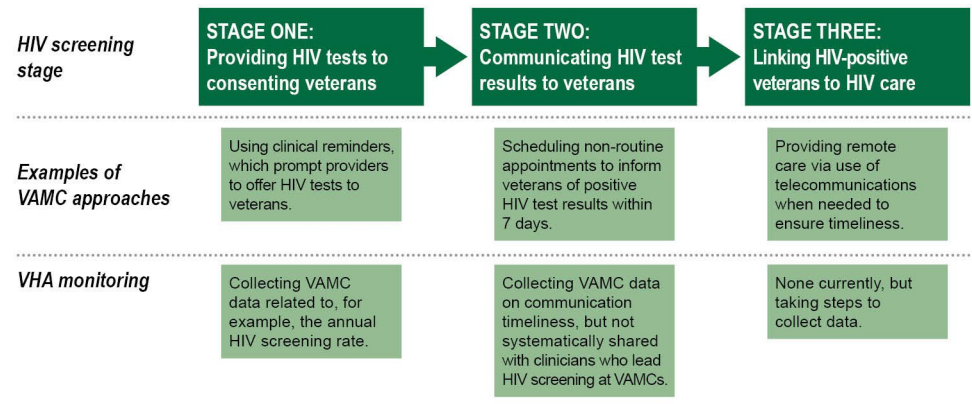
VA HEALTH CARE

Improved Communication about Available Data Needed to Enhance the HIV Screening Process

What GAO Found

Officials from five selected Department of Veterans Affairs (VA) medical centers (VAMC) reported using various approaches to facilitate human immunodeficiency virus (HIV) screening, which involves three stages. For example, for the first stage of HIV screening (providing HIV tests to consenting veterans), officials told GAO that VAMCs use information technology solutions, such as clinical reminders that prompt providers to offer HIV tests to veterans who have not been tested. These clinical reminders can also prompt providers to offer an HIV test on a repeated, rather than a one-time, basis to veterans with known higher risk factors for acquiring HIV.

Examples of VAMC Approaches and VHA Monitoring for Human Immunodeficiency Virus (HIV) Screening



Source: GAO analysis of Department of Veterans Affairs medical centers (VAMC) and Veterans Health Administration (VHA) information. | GAO-20-186

The Veterans Health Administration (VHA) monitors the first stage of HIV screening by collecting and disseminating data that VAMCs can use to calculate and, if necessary, improve facility HIV testing rates. VHA also collects data on the time frames in which results for eight types of tests are communicated to veterans; these data could indicate how timely test results are being communicated generally (stage two of HIV screening). However, VHA has not effectively communicated the availability of these data to HIV lead clinicians. In addition, VHA does not currently monitor whether VAMCs link veterans who test positive for HIV to care in a timely manner (stage three of HIV screening). VHA officials indicated that they are in the process of building the capacity to collect and disseminate to HIV lead clinicians data on the number of veterans at each VAMC who are linked to HIV care within 30 days, as recommended. However, the time frames for completing these efforts have been extended due to competing priorities, such as implementing required improvements in the diagnosis and treatment of veterans with Hepatitis C. Until VHA improves VAMC staff's access to, or provides them with, these data, it increases its risk that HIV-positive veterans do not receive timely treatment. Such treatment can improve veterans' health outcomes and prevent the transmission of the virus to others.

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Abbreviations

AIDS	acquired immunodeficiency syndrome
CDC	Centers for Disease Control and Prevention
CD4	cluster of differentiation 4
EHR	electronic health record
EPRP	External Peer Review Program
HHRC	HIV, Hepatitis, and Related Conditions Programs
HIV	human immunodeficiency virus
NAT	nucleic acid test
NCEHC	National Center for Ethics in Health Care
NHAS	National HIV/AIDS Strategy
OPC	Office of Primary Care
PrEP	pre-exposure prophylaxis
RAPID	Office of Reporting, Analytics, Performance, Improvement, and Deployment
VA	Department of Veterans Affairs
VAMC	VA medical center
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network

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January 23, 2020

The Honorable John Boozman
Chairman
The Honorable Brian Schatz
Ranking Member
Subcommittee on Military Construction, Veterans Affairs, and Related
Agencies
Committee on Appropriations
United States Senate

The Honorable Debbie Wasserman Schultz
Chairwoman
The Honorable John Carter
Ranking Member
Subcommittee on Military Construction, Veterans Affairs, and Related
Agencies
Committee on Appropriations
House of Representatives

The Department of Veterans Affairs' (VA) Veterans Health Administration (VHA) operates one of the largest health care systems in the nation, serving approximately 9 million veterans. Each year, VA medical centers (VAMC) test hundreds of thousands of veterans for the human immunodeficiency virus (HIV), a virus that weakens a person's immune system by destroying important cells that fight disease and infection and, when untreated, can lead to acquired immunodeficiency syndrome (AIDS).¹ According to VHA, in 2018, VAMCs tested approximately 240,000 veterans for HIV and provided medical care to over 31,000 veterans who tested positive for the virus, making VHA the largest single provider of medical care to HIV infected individuals in the United States.²

¹In this report, the term "VAMC" refers to an individual VA medical center and any of its associated facilities, such as community-based outpatient clinics. AIDS is the last stage of HIV. Individuals with AIDS are at risk of developing an opportunistic infection, or an infection that occurs more often or more severely among individuals with weakened immune systems—such as salmonella, a bacterial infection of the intestines, or candidiasis, a fungal infection of the mouth or lungs—and typically survive 3 years without treatment.

²In this report, an HIV test refers to a specific sequence of tests that are conducted by a laboratory upon the initiation of a diagnostic test order by a provider to determine whether a veteran is infected with HIV.

Research has shown that avoiding delays in HIV screening—including delays in testing, diagnosis, and treatment—is important for achieving favorable health outcomes.³ Individuals who are diagnosed and treated before the disease is far advanced can live nearly as long as an individual who does not have HIV, and HIV treatment helps prevent transmission of the virus to, for example, a sexual partner.⁴

HIV screening at VAMCs involves three stages. First, a consenting veteran is tested for HIV. Second, the veteran's provider communicates the test result to the veteran. And, third, the provider links the veteran to HIV care if the result was positive and, thus, a diagnosis was made. Responsibilities for VAMC providers, VHA program offices, and others are established in VHA policy that pertains to HIV screening. For example, under VHA policy, providers are required to offer tests to veterans at least once as part of routine medical care (a "one-time test") and link diagnosed veterans to HIV care expeditiously, ideally within 14 days, but no more than 30 days if possible.⁵ VHA's HIV, Hepatitis, and Related Conditions Programs (HHRC) within the Office of Specialty Care Services is responsible for overseeing these aspects of HIV screening, including collecting data on the timeliness with which providers link veterans to HIV care. In addition, providers are required to communicate all test results, including HIV test results, to veterans within established time frames (e.g., generally within 7 calendar days for positive test results

³See, for example, R.P. Walensky, et al., "Cost-Effectiveness of HIV Testing and Treatment in the United States," *Clinical Infectious Diseases*, vol. 45, suppl. 4 (2007): p. S248-254; and The INSIGHT START Study Group, "Initiation of Antiretroviral Therapy in Early Asymptomatic HIV Infection," *The New England Journal of Medicine*, vol. 373 (2015): 795-807.

⁴HIV treatment may lower the amount of the virus in an infected individual's blood to an undetectable level. These individuals have significantly reduced risk of transmitting HIV to a sexual partner.

⁵Veterans Health Administration Directive 1304, *National Human Immunodeficiency Virus Program* (Washington, D.C.: Aug. 15, 2019). VHA policy recommends that veterans who test positive for HIV have contact with a VAMC provider within 30 days of their diagnosis.

and 14 calendar days for negative test results).⁶ VHA's Office of Primary Care (OPC), within the Office of the Deputy Undersecretary for Health Operations and Management, is responsible for VHA's policy on the communication of all test results and collaborates with VHA's Office of Reporting, Analytics, Performance, Improvement, and Deployment (RAPID) to collect related data. VAMC staff who are responsible for overseeing HIV screening must ensure that the providers at their facilities communicate HIV test results to veterans and link HIV-positive veterans to care within recommended time frames. VAMC staff are also directed to use available data to make screening-related improvements as needed.

The accompanying Joint Explanatory Statement for the Consolidated Appropriations Act, 2018 included a provision for GAO to review how VAMCs have implemented VHA's HIV screening policy, which requires that VAMCs use the most current recommended HIV test when clinically indicated.⁷ In this report, we examine

1. approaches that selected VAMCs use to facilitate HIV screening; and
2. the extent to which VHA monitors the HIV screening performed at VAMCs.

For each objective, we reviewed VHA policy to understand providers' requirements related to the three stages of HIV screening and VHA's related oversight responsibilities. These requirements and responsibilities are described in various VHA directives, some of which are specific to HIV, and others that apply to all medical tests, including HIV tests. Two of

⁶VHA policy requires that providers communicate test results that require action or medical intervention, such as the initiation of HIV treatment, to veterans within 7 calendar days from the date on which the results are available, except in exceptional circumstances. In this report, we refer to such test results as "positive" test results. VHA policy also requires that providers communicate test results that require no action or medical intervention, such as the initiation of HIV treatment, within 14 calendar days from the date on which the results are available. In this report, we refer to such test results as "negative" test results. See Veterans Health Administration Directive 1088, *Communicating Test Results to Providers and Patients* (Washington, D.C.: Oct. 7, 2015).

⁷164 Cong. Rec. H2817 (daily ed. Mar. 22, 2018); Pub. L. No 115-141, 132 Stat. 348 (2018).

these directives, which were specific to HIV, were consolidated into one updated directive in August 2019.⁸

We reviewed a nongeneralizable sample of medical records for 103 veterans who were tested for HIV in calendar year 2017 at five selected VAMCs. We selected the five VAMCs for variation in (1) the HIV prevalence rate in calendar year 2017 (the most recent year for which data were available), (2) the HIV testing rate in calendar year 2017 (the most recent year for which data were available), (3) facility complexity level, and (4) geographic location.⁹ See table 1 for a list of the five VAMCs we selected and their four associated Veterans Integrated Service Networks (VISN).¹⁰

⁸Veterans Health Administration Directive 1113, *Testing for Human Immunodeficiency Virus in Veterans Health Administration Facilities* (Washington, D.C.: May 5, 2015) and Veterans Health Administration Directive 1304, *National Human Immunodeficiency Virus Program* (Washington, D.C.: Nov. 24, 2014) were rescinded on August 15, 2019, with the issuance of a revised version of Directive 1304. See Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019). We refer to each of these directives throughout this report, which were in effect during different periods of our review.

⁹We ranked VAMCs by the HIV prevalence rate, or the percentage of veterans with an HIV diagnosis, in calendar year 2017 and used quartiles to categorize VAMCs. We selected two VAMCs from the first quartile (highest prevalence rate) and one VAMC from the second, third, and fourth quartiles. We then ranked VAMCs by the HIV testing rate, or the percentage of undiagnosed veterans who were tested for HIV at the facility, in calendar year 2017, again using quartiles to categorize VAMCs. We selected two VAMCs from the first quartile (highest testing rate), one VAMC from the second quartile, and two VAMCs from the fourth quartile. VHA categorizes VAMCs according to complexity level, which is determined on the basis of the characteristics of the patient populations served, clinical services offered, educational and research missions, and administrative complexity. We selected one VAMC from each complexity level. We also selected VAMCs to ensure variation in geographic location.

¹⁰VISNs are regional health care networks that manage the day-to-day functions of VAMCs within their networks through, for example, administrative and clinical oversight.

Table 1: Selected Department of Veterans Affairs Medical Centers (VAMC) and Associated Veterans Integrated Service Networks (VISN) Included in Review

VAMC	VISN
Wm. Jennings Bryan Dorn VA Medical Center (Columbia, S.C.)	7
Atlanta VA Medical Center (Decatur, Ga.)	7
El Paso VA Health Care System (El Paso, Tx.)	17
Cheyenne VA Medical Center (Cheyenne, Wy.)	19
Jerry L. Pettis Memorial Veterans' Hospital (Loma Linda, Calif.)	22

Source: GAO analysis of Veterans Health Administration information. | GAO-20-186

The sample of 103 medical records included two groups: (1) the medical records for all 38 veterans who tested positive for HIV at the five selected VAMCs, and (2) a random sample of medical records for 65 veterans who tested negative for HIV at the same VAMCs. We reviewed their medical records to understand how providers made decisions and documented actions related to HIV screening. Examples provided from our review of veterans' medical records cannot be generalized.

We took additional steps to address each objective. To describe approaches that VAMCs have used to facilitate each stage of HIV screening, we interviewed HHRC officials and officials at the five selected VAMCs—including primary care providers, infectious disease providers, and laboratory staff—and their four associated VISNs to understand how these providers determine if veterans should be offered an HIV test, obtain veterans' consent to be tested, and order the most current recommended test (stage one); communicate HIV test results to veterans within established time frames (stage two); and ensure that newly diagnosed veterans are promptly linked to HIV care (stage three). We identified approaches that were reported by officials from more than one of the five selected VAMCs, and also reviewed VAMC policies that describe facility-specific approaches.¹¹ Perspectives obtained from VAMC and VISN officials cannot be generalized.

To determine the extent to which VHA monitors HIV screening, we interviewed HHRC officials regarding the collection and dissemination of data on HIV testing rates and the availability of the most current

¹¹The identified approaches are examples, rather than a comprehensive list, of those reported to us by VAMC officials. Officials at each of the five VAMCs reported using at least one approach to facilitate each stage of HIV screening.

recommended HIV test at VAMCs (stage one) and VAMCs' timeliness in linking newly diagnosed veterans to HIV care (stage three), as well as VAMCs' use of this data to make related improvements as needed. We also spoke with officials from VHA's National Center for Ethics in Health Care (NCEHC), who are responsible for VHA's policy on informed consent for clinical procedures, including HIV testing, and OPC officials responsible for VHA's policy on the communication of test results, including HIV test results, regarding their monitoring of these aspects of HIV screening (stages one and two).¹² We reviewed VHA documentation related to relevant monitoring efforts. We then compared these efforts to VHA policy on the monitoring of HIV screening, including the development and use of data reports for such monitoring, as well as federal internal control standards related to monitoring, information and communication, and risk assessment.¹³

We conducted this performance audit from July 2018 to January 2020 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

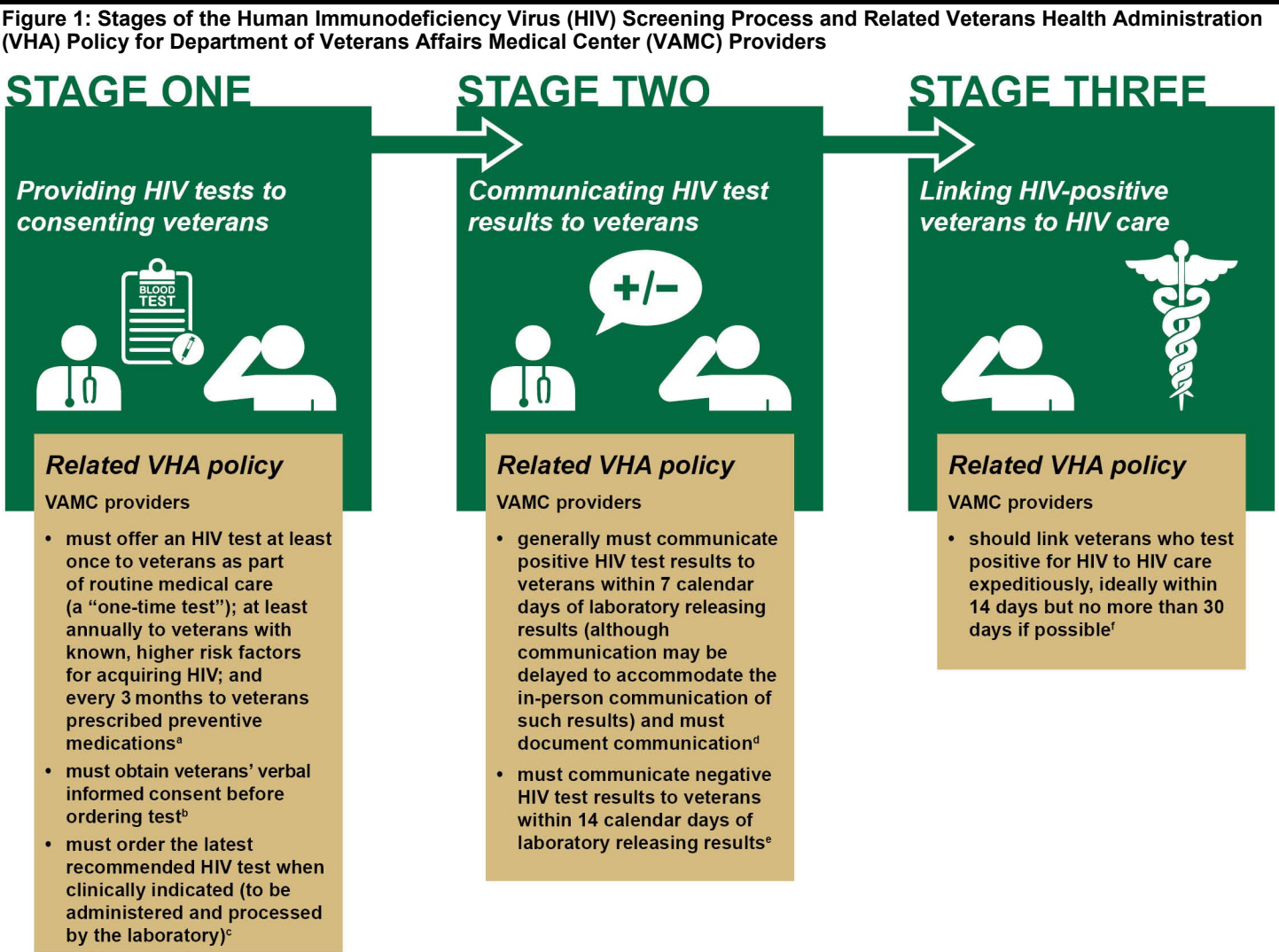
VHA recommends that all veterans who receive VHA services be screened for HIV as part of routine medical care, including those who do not think they are at risk for acquiring the virus. The aim is to ensure that veterans who are infected with the virus can be diagnosed as early as possible, receive life-saving care, and avoid passing the virus on to

¹²For VHA's policy on informed consent, see Veterans Health Administration Handbook 1004.01(2), *Informed Consent for Clinical Treatments and Procedures* (Washington, D.C.: amended April 4, 2019). Prior to April 2019, VHA's policy required that providers document that they obtained veterans' verbal consent to be tested for HIV. In April 2019, after beginning our review, VHA amended its policy and no longer requires that providers document verbal consent, but continues to require that providers obtain verbal consent. For VHA's policy on the communication of test results, see Veterans Health Administration Directive 1088 (Washington, D.C.: Oct. 7, 2015).

¹³Veterans Health Administration Directive 1304 (Washington, D.C.: Nov. 24, 2014; rescinded Aug. 15, 2019) and Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019). See also GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014). Internal control is a process effected by an entity's management, oversight body, and other personnel that provides reasonable assurance that the objectives of an entity will be achieved.

others. VHA has made earlier diagnosis of HIV a priority for the agency and established certain requirements for VAMC providers that aim to achieve early diagnoses and rapid linkages to HIV care for veterans.

HIV screening at VAMCs involves three stages, and related VHA policy sets forth providers' requirements related to each of these stages. (See fig 1.)



Source: GAO analysis of VHA policy as of August 15, 2019. | GAO-20-186

^aVeterans Health Administration Directive 1304, *National Human Immunodeficiency Virus Program* (Washington, D.C.: Aug. 15, 2019). Veterans who are at higher risk of acquiring HIV include veterans who are injection drug users; veterans who have engaged in certain sexual behaviors; and veterans

being treated for a sexually transmitted disease. VHA policy also requires that providers follow Centers for Disease Control and Prevention (CDC) recommendations on the use of preventive medications—or pre-exposure prophylaxis (PrEP)—to reduce veterans' risk of acquiring HIV, including the recommendation that patients using PrEP be tested for HIV every 3 months.

^bVeterans Health Administration Handbook 1004.01(2), *Informed Consent for Clinical Treatments and Procedures* (Washington, D.C.: amended April 4, 2019). Prior to April 2019, VHA policy required that providers document that they obtained veterans' verbal consent to be tested for HIV. In April 2019, VHA amended its policy and no longer requires that providers document verbal consent, but continues to require that providers obtain verbal consent.

^cVeterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019). VHA policy requires that providers follow CDC recommendations related to HIV testing. CDC recommends that a test that detects the presence of HIV antigens and antibodies in the blood be used to diagnose an individual with HIV. Antigens are foreign substances that cause an individual's immune system to activate. If an individual is HIV positive, an antigen is produced before antibodies develop. Antibodies are produced by the immune system when an individual is exposed to bacteria or viruses, such as HIV.

^dVeterans Health Administration Directive 1088, *Communicating Test Results to Providers and Patients* (Washington, D.C.: Oct. 7, 2015). VHA's policy applies to all test results that require medical intervention (including positive HIV diagnostic test results, which require the initiation of HIV treatment), but specifies that it may be necessary for providers to communicate positive HIV test results to veterans during face-to-face visits that are scheduled at veterans' convenience given the sensitive nature of the diagnosis. Thus, the policy allows for this communication to occur beyond the 7 calendar day time frame in exceptional circumstances.

^eVeterans Health Administration Directive 1088 (Washington, D.C.: Oct. 7, 2015). VHA's policy applies to all test results that do not require medical intervention (including negative HIV diagnostic test results).

^fVeterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019). VHA's policy aligns with the National HIV/AIDS Strategy (NHAS) for the United States, a 5-year plan released by the White House Office of National AIDS Policy in 2010 and updated in 2015 that guides the federal government's response to the HIV epidemic. See The White House Office of National AIDS Policy, *National HIV/AIDS Strategy for the United States: Updated to 2020* (Washington, D.C.: July 2015). VA is one of the federal agencies responsible for implementing the NHAS.

Stage one: providing HIV tests to consenting veterans. A provider in a primary care clinic, a specialty care setting (such as an infectious disease clinic), or other outpatient setting (such as a women's health clinic) offers a voluntary HIV test to an eligible veteran. In accordance with Centers for Disease Control and Prevention (CDC) recommendations, VHA policy requires providers to offer a one-time test to all veterans; annual tests to veterans with known higher risk factors for acquiring the virus, such as injection drug use; and tests every 3 months to veterans with known higher risk factors who are prescribed preventive medication known as pre-exposure prophylaxis (PrEP).¹⁴ Once a provider obtains consent from the veteran to be tested for HIV, the provider

¹⁴Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019). CDC recommends that providers repeat HIV testing every 3 months to document that patients who are prescribed PrEP are still HIV negative. Veterans who are at higher risk of acquiring HIV also include veterans who have engaged in certain sexual behaviors and veterans being treated for a sexually transmitted disease.

initiates an HIV test order with the laboratory. Although VHA policy previously required that providers document that they obtained veterans' verbal consent to be tested for HIV, as of April 2019, providers must obtain, but no longer need to document, such consent.¹⁵ In addition, under VHA policy, providers must order the most current CDC-recommended HIV test (which detects HIV antigens and antibodies) when clinically indicated, and laboratories must follow the CDC-recommended HIV testing algorithm (see text box).¹⁶ A blood sample is collected from the veteran, and the laboratory processes the HIV test.

¹⁵Veterans Health Administration Handbook 1004.01(2) (Washington, D.C.: amended April 4, 2019). According to VHA officials, VAMCs may continue to require that facility providers document that they obtained veterans' verbal consent to be tested for HIV.

¹⁶Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019). Antigens are foreign substances that cause an individual's immune system to activate. If an individual is HIV positive, an antigen is produced before antibodies develop. Antibodies are produced by the immune system when an individual is exposed to bacteria or viruses, such as HIV. Other types of HIV tests, such as a test that detects the presence of the virus in the blood, are typically not indicated for the diagnosis of HIV, but may be used in some instances, such as when an individual had a high-risk exposure or a possible exposure along with early symptoms of HIV.

Centers for Disease Control and Prevention (CDC) Recommended Human Immunodeficiency Virus (HIV) Testing Algorithm

HIV is categorized into two types, HIV-1 and HIV-2. In 2014, CDC published an algorithm that outlines a recommended sequence of tests that laboratories should use to determine an HIV test result. CDC recommends that laboratories first conduct an HIV antigen/antibody test to determine the presence of either type of HIV followed by an HIV antibody differentiation test, or a nucleic acid test (NAT), as needed, to differentiate the type of HIV.^a

An HIV antigen/antibody test detects the presence of both antigens and antibodies in a blood sample. Antigens are foreign substances that cause an individual's immune system to activate. If an individual is HIV positive, an antigen is produced before antibodies develop. Antibodies are produced by the immune system when an individual is exposed to bacteria or viruses, such as HIV. A NAT looks for the presence of the virus itself in a blood sample. The NAT can indicate whether or not the virus is present in the blood (a positive or negative result) or the amount of virus present in the blood (known as an HIV viral load test).^b

HIV-1 and HIV-2 have the same routes of transmission—through certain types of direct contact with certain bodily fluids from an individual infected with HIV who has a detectable viral load—and both types can cause acquired immunodeficiency syndrome (AIDS), which is the last stage of HIV.^c HIV-2 is differentiated from HIV-1, because its clinical management differs and is less likely to cause AIDS.

Source: GAO summary of CDC information. | GAO-20-186

^aCenters for Disease Control and Prevention and Association of Public Health Laboratories, *Laboratory Testing for the Diagnosis of HIV Infection: Updated Recommendations* (June 27, 2014).

^bCDC recommends that viral load tests should typically not be used as the sole HIV diagnostic test.

^cIndividuals with AIDS are at risk of developing an opportunistic infection, or an infection that occurs more often or more severely among individuals with weakened immune systems—such as salmonella, a bacterial infection of the intestines, or candidiasis, a fungal infection of the mouth or lungs—and typically survive 3 years without treatment.

Stage two: communicating HIV test results to veterans. After the HIV test is processed and the test result is confirmed, the laboratory releases the result to the veteran's provider. According to VHA policy, providers generally must communicate positive test results to veterans within 7 calendar days, except in exceptional circumstances, including positive HIV test results, which are encouraged to be communicated in person. Providers are required to document this communication in veterans' medical records.¹⁷ Providers must also communicate negative test

¹⁷Veterans Health Administration Directive 1088 (Washington, D.C.: Oct. 7, 2015) and Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019). VHA policy recommends that providers communicate positive HIV test results to veterans in person given the sensitive nature of the diagnosis, which may extend beyond the 7 calendar day time frame.

results, including negative HIV test results, within 14 calendar days, and they may document this communication, but are not required to do so.¹⁸

Stage three: linking newly diagnosed veterans to HIV care. If the test result is positive, and, thus, a diagnosis was made, the provider should link the veteran to HIV care expeditiously—ideally within 14 days, but no more than 30 days if possible, according to VHA policy.¹⁹ Infectious disease providers or primary care providers may treat HIV-positive veterans. VHA policy further notes that delays in linking veterans to HIV care beyond 30 days are justifiable only in exceptional circumstances, such as if the veteran is unable to be located.²⁰ This recommendation aligns with the National HIV/AIDS Strategy (NHAS) for the United States, a 5-year plan released by the White House Office of National AIDS Policy in 2010 and updated in 2015 that guides the federal government’s response to the HIV epidemic.²¹ VA is one of the federal agencies responsible for implementing the NHAS.

Various VHA program offices, VISNs, and VAMC staff have policy and quality improvement responsibilities related to HIV screening, including the following:

- **HHRC.** This VHA program office is responsible for policy and general oversight related to providing HIV tests to consenting veterans (stage one) and linking HIV-positive veterans to care (stage three). This includes, among other things, developing and disseminating data reports used to monitor the quality of HIV care and aligning VHA efforts with the NHAS.
- **OPC.** This VHA program office is responsible for VHA’s policy on the communication of all test results (stage two). OPC officials told us that

¹⁸VA officials stated that, for example, if providers communicate negative test results to veterans during an appointment, providers may document this communication in progress notes within veterans’ health records, which typically include a history of veterans’ medical problems, providers’ assessment of these problems, any tests or consults ordered, and instructions given to veterans.

¹⁹Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019).

²⁰Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019).

²¹The White House Office of National AIDS Policy, *National HIV/AIDS Strategy for the United States: Updated to 2020* (Washington, D.C.: July 2015). The 2015 NHAS includes a goal to increase the percentage of individuals who are linked to care within one month of testing positive for HIV from 65 percent to 85 percent by 2020.

they collaborate with other VHA offices responsible for performance measurement to conduct an ongoing, quarterly review of veterans' medical records from each VAMC to determine the percentage of results for eight specified tests that were communicated to veterans within established time frames.²² HIV tests are not one of the eight tests included in the review.

- **NCEHC.** This VHA program office is responsible for oversight efforts related to informed consent for clinical treatments and procedures, including, but not limited to, HIV testing.
- **VISNs.** VISNs are responsible for ensuring that VAMCs follow VHA policy on HIV screening and fulfill related responsibilities.
- **VAMC staff.** VAMC leadership must ensure that providers communicate HIV test results to veterans and link newly diagnosed veterans to HIV care within recommended time frames. Leadership must also appoint an HIV lead clinician at the VAMC to serve as a subject matter expert, as well as the point of contact, for HIV screening; this individual may also be responsible for tracking HIV screening. HIV lead clinicians may also review and use HIV screening-related data to inform improvements at their VAMCs.

²²OPC officials told us that they collaborate with RAPID, which is responsible for VHA performance measurement and which works with VHA's External Peer Review Program (EPRP) contractor to conduct the medical records reviews. EPRP is contracted to conduct data collection and analysis on the quality of care provided by VAMCs. EPRP staff collects medical records data for a sample of veterans who received at least one of the eight specified tests and analyzes the medical records to calculate the percentage of positive test results that were communicated to veterans within 7 days and negative test results that were communicated to veterans within 14 days, as required by VHA policy for all test results, except in exceptional circumstances. See Veterans Health Administration Directive 1088 (Washington, D.C.: Oct. 7, 2015). The eight tests included in the medical records review detect two viral infectious diseases; produce images of or assess an individual's bones, muscles, or organs; detect physical abnormalities that may indicate diagnoses of different types of cancer; or detect birth defects and genetic disorders in a developing fetus. OPC and RAPID officials told us that they conducted annual medical records reviews prior to fiscal year 2019 to test their methodology and began conducting quarterly medical records reviews in fiscal year 2019 to implement their data collection and analysis.

Information Technology Solutions and Contacting Veterans As Needed Are Among the Approaches That Selected VAMCs Use to Facilitate HIV Screening

Officials from the five selected VAMCs reported using information technology solutions and other strategies to facilitate each of the three stages of HIV screening: providing HIV tests to consenting veterans (stage one), communicating HIV test results to veterans (stage two), and linking HIV-positive veterans to care (stage three).


Officials from Selected VAMCs Reported Using Information Technology Solutions, Such as Clinical Reminders, to Facilitate the Provision of HIV Tests for the First Stage of Screening

Officials from multiple VAMCs in our review stated their providers use information technology solutions, such as clinical reminders, to fulfill their requirements related to the first stage of HIV screening: offering HIV tests to veterans, obtaining veterans' verbal consent to be tested, and ordering the most current recommended HIV test.

Offering HIV tests to veterans. Officials from three VAMCs in our review told us that providers often use clinical reminders that were developed and implemented by the VAMC or associated VISN to prompt them to offer HIV tests to veterans.²³ (See fig. 2.) According to these officials, clinical reminders are used to prompt providers to offer a one-time HIV test to veterans who have not been tested. They can also be used to facilitate providers' identification of veterans who are at higher risk for acquiring HIV and subsequently prompt them to offer these veterans an HIV test on an annual, rather than a one-time, basis. For example, officials at two of these three VAMCs indicated that the reminders include prompts for determining if veterans are at higher risk of acquiring HIV or fields to document identified risk factors. One of these officials told us that the recurrence of these clinical reminders can subsequently be increased or decreased to prompt providers to offer an HIV test to veterans who are at higher risk of acquiring HIV on a more or less frequent basis, depending on the risk factors identified over time.

²³According to VHA officials, a clinical reminder is an automatic reminder that is integrated into a veteran's electronic health record to initiate a preventive care activity, such as offering an HIV test to the veteran. A VHA official stated that the implementation of an HIV testing clinical reminder is optional across the VHA system.

Figure 2: Example of a Department of Veterans Affairs Medical Center (VAMC) Clinical Reminder for the Provision of Human Immunodeficiency Virus (HIV) Tests to Veterans

 Reminder Resolution: HIV Screening

HIV SCREENING

Informational Items

☒ Your patient is DUE for HIV Screening based on information available to this reminder. Check box to review the clinical reminder's findings (clinical maintenance). **A**

CLINICAL REMINDERS BRIEF

	--STATUS--	--DUE DATE--	--LAST DONE--
HIV Screening	DUE NOW	DUE NOW	unknown

Frequency: Due every 1 year for ages 18 and older.
HIV testing is required at least once, unless patient has limited life expectancy or Tx is not indicated.

Thereafter, risk assessment is required annually for high risk patients & every 5 years for low risk patients. For patients at no risk, the reminder can be resolved permanently using the ONCE AND DONE or UNLIKELY TO BENEFIT options.

The clinical reminder prompts providers to offer an HIV test to a veteran. **A**

HIV Risk Assessment and Testing

Choose One Below

☒ Patient reports one or more of the following risk factors for HIV (Annual risk assessment) **B**

HIV Risk Factors

- Sex with Men after 1975
- Having unprotected sex with multiple partners
- Injection Drug User (past or present)
- Exchanged sex for money or drugs or had sexual partners that did
- Sexual partner who was HIV infected, bisexual, or injection drug user.
- Heterosexual individuals who have had OR whose sexual partners have had more than one sexual partner since their most recent HIV test.
- Diagnosed with a sexually transmitted disease within the past year.
- Blood Transfusion between 1978 and 1985
- HIV test request without disclosure of risk factors

☐ Patient reports no higher risk factors for HIV. (5 year risk assessment) **C**

☐ Patient reports NO risk factors for HIV, but agrees to testing. (Once and done) **D**

The clinical reminder facilitates providers' documentation of factors that determine if a veteran is at higher risk of acquiring HIV. If the veteran reports at least one higher risk factor, the clinical reminder will recur on an annual basis. **B**

If the veteran reports no higher risk factors, the provider can either **C** set the clinical reminder to recur in 5 years or **D** turn off after the veteran receives a non-risk based, one-time HIV test.

Source: Screenshots and GAO analysis of an HIV clinical reminder implemented by a VAMC. | GAO-20-186

Note: According to an official within the Veterans Integrated Service Network that developed the clinical reminder that was implemented by the VAMC, veterans who have "no higher risk factors for HIV" have low risk factors. The official indicated that this population may include veterans who are in a monogamous sexual relationship or who consistently use protection (such as condoms, the use of which reduces the risk of acquiring sexually transmitted diseases and HIV). The clinical reminder was developed to give providers the option to set the reminder to recur less than every year without permanently turning it off for this population. According to the official, "Tx" is defined as treatment. The images shown in this figure are screenshots of selected portions of the clinical reminder that are relevant to this report.

Obtaining veterans' verbal consent to be tested. According to officials from the three VAMCs that discussed the use of clinical reminders, this technology prompts providers to obtain veterans' verbal consent to be tested for HIV before ordering tests. Further, the reminders give providers a way to document that consent was obtained.²⁴ For example, officials at one of the three VAMCs stated that providers can access the laboratory menu, which they use to order an HIV test, through the clinical reminder. The officials stated that providers must either (a) document that they obtained veterans' verbal consent within the clinical reminder before accessing the menu, or (b) document that verbal consent was obtained once they have accessed the menu.

Ordering recommended HIV tests. Officials from four of the VAMCs in our review reported that the facilities' laboratory menus are designed to make it easier for providers to order the most current CDC-recommended HIV test. For example, officials from two VAMCs told us that the most current CDC-recommended HIV test is either the first result that appears when searching for an HIV test within the laboratory menu or the first HIV test that appears within a list of different types of HIV tests. According to officials from another VAMC, the facility's laboratory menu includes a prompt that explains that an HIV viral load test (a test that is primarily used to monitor an active HIV infection) is not recommended solely to be used for diagnostic purposes if a provider attempts to order such a test for this purpose.

²⁴We interviewed VAMC officials between January 31, 2019, and April 16, 2019. During the majority of this time VHA policy required that providers document that they obtained veterans' verbal consent to be tested for HIV. As of April 4, 2019, VHA no longer requires that providers document verbal consent, but continues to require that providers obtain verbal consent. See Veterans Health Administration Handbook 1004.01(2) (Washington, D.C.: amended April 4, 2019). According to VHA officials, VAMCs may continue to use clinical reminders as a way for providers to document that consent was obtained, but such documentation does not restrict providers' ability to order an HIV test from the laboratory menu.

Officials from Selected
VAMCs Reported
Contacting Veterans to
Schedule Non-Routine
Appointments to
Communicate Positive HIV
Test Results for the
Second Stage of
Screening

Officials at each of the five VAMCs in our review told us that staff contact veterans to schedule non-routine, in-person appointments within the 7 day time frame to inform them that they have tested positive for HIV.²⁵ According to officials at four VAMCs, staff first place phone calls to veterans and request that the veterans schedule face-to-face visits with providers. Officials at two VAMCs explained that providers attempt to inform veterans of positive HIV test results in person given the sensitive nature of the diagnosis, as recommended by VHA policy.²⁶ If staff cannot reach the veterans by phone, officials at these two VAMCs indicated that they send letters to the veterans asking them to contact their providers to obtain their test results. Further, officials at three VAMCs stated that staff send letters to veterans to inform them of negative HIV test results within the required 14 day time frame. Officials from all five VAMCs in our review also reported using various, additional approaches to communicating negative HIV test results to veterans, including notifying them by phone, informing them of test results during face-to-face visits, or uploading test results into veterans' personal electronic health records (EHR).

In addition, all five VAMCs in our review have developed protocols to prevent delays in the communication of positive HIV test results to veterans when the provider who ordered the test is unavailable. These protocols are generally outlined in facility-specific policies, which we reviewed, that require that a designee communicate positive HIV test results to veterans in lieu of the ordering provider.²⁷ According to officials at three VAMCs, these protocols apply when the ordering provider is unavailable for a certain number of consecutive days (typically 3 days). Officials told us that if the designee is not available, their facility's protocol requires that VAMC leadership (such as the Chief of Medicine) communicate the results to the veteran.

²⁵For the VHA policy that establishes this time frame, see Veterans Health Administration Directive 1088 (Washington, D.C.: Oct. 7, 2015) and Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019).

²⁶Veterans Health Administration Directive 1088 (Washington, D.C.: Oct. 7, 2015) and Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019).

²⁷VHA policy requires that the provider who places the order for a test, including but not limited to an HIV test, assign a qualified designee to receive the test result when the ordering provider is unavailable. According to this policy, the designee is responsible for notifying the veteran of the test result in a timely manner. See Veterans Health Administration Directive 1088 (Washington, D.C.: Oct. 7, 2015).

Officials from Selected VAMCs Use Referrals to Community Providers and Telecommunications to Link Veterans Newly Diagnosed with HIV to Care for the Third Stage of Screening

Officials from all five VAMCs in our review indicated that providers may refer eligible HIV-positive veterans to care within the community to ensure that treatment occurs in a timely manner.²⁸ According to officials at two of these VAMCs, these referrals are often made based upon veterans' preferences or primary care providers' comfort levels in providing HIV care to veterans who are also eligible for community care. An official at another of these VAMCs told us that eligible veterans who live further distances from the VAMC may ask to be referred to community care.

According to officials from multiple VAMCs in our review, providers may also use telecommunications to provide HIV care to veterans. For example, officials from two VAMCs told us that their facilities offer telehealth consultations with an infectious disease provider to veterans who live outside the city in which the VAMC is located or who otherwise find it inconvenient to be seen in-person by an infectious disease provider at the facility.²⁹ Telehealth allows infectious disease providers to care for veterans who would otherwise receive HIV care from primary care providers or in the community. Officials at another VAMC reported that infectious disease providers are available via cell phone or Skype (software that can be used to make one-to-one or group voice or video-based calls from a cell phone or computer) to assist primary care providers who assume responsibility for veterans' HIV care.

²⁸VHA provides care to veterans through community providers when VHA cannot provide the needed care. Eligibility for community care is based on specific requirements, such as the availability of VHA care, and the needs and circumstances of each veteran, among others.

²⁹Telehealth uses information technology solutions, such as video-conferencing equipment, to provide health care services to veterans in locations where they are not typically provided, with the aim of facilitating access to care and improving health outcomes.

VHA Facilitates Monitoring of the Provision of HIV Tests, but Has Not Completed All Steps to Enable Monitoring of Subsequent Stages of HIV Screening

VHA facilitates monitoring of the first stage of HIV screening by providing information to VAMCs that include data on the number of veterans who have been tested for the viral infection. While VHA does not collect data on the timeliness with which HIV test results are communicated to veterans, data resulting from VHA's monitoring of the communication of other test results may indicate whether veterans are informed of HIV test results within recommended time frames. However, HIV lead clinicians may not be aware that they have access to this information. VHA does not currently monitor whether veterans who test positive for HIV are linked to care within recommended time frames; however, VHA has taken steps to collect and disseminate data that can be used to monitor this stage of screening.

VHA Collects and Disseminates Data for VAMCs to Use to Monitor the Offering of HIV Tests to Veterans

According to HHRC officials, the office collects and disseminates annual and biannual data to each VAMC's HIV lead clinician on the offering of HIV tests to veterans. (See table 2 for information related to VHA's monitoring activities.) This includes data on (1) the number of veterans who are eligible to receive one-time HIV tests, as well as the number of eligible veterans who were tested, for each VAMC and VISN; and (2) the number of veterans who are prescribed PrEP who are tested for HIV every 3 months to document that they are still HIV negative as recommended by the CDC.³⁰ HHRC officials told us that they share the one-time testing rate data with HIV lead clinicians on an annual basis, and that these clinicians can use the data to calculate their VAMCs' one-time HIV test rates and, subsequently, compare their rates regionally or to VAMCs that offer the same complexity of services. According to HHRC officials, they upload these data to an internal data sharing website and notify HIV lead clinicians that the data are available via email and during regularly scheduled conference calls that facilitate the discussion of issues related to HIV screening.³¹ HHRC officials also told us that VHA uses the same method to share with HIV lead clinicians on a biannual basis data on the HIV test rate for veterans who are prescribed PrEP.

³⁰Centers for Disease Control and Prevention, *US Public Health Service: Preexposure Prophylaxis for the Prevention of HIV Infection in the United States—2017 Update: a Clinical Practice Guideline* (March 2018).

³¹According to HHRC officials, the data are available to any VAMC provider or staff member who has access to the internal data sharing website; they indicated that they also disseminate the data to infectious disease providers through a listserv.

Table 2: VHA’s Current and Past Efforts to Monitor VAMCs’ Provision of HIV Tests to Consenting Veterans

VHA policy requirement for VAMC providers	Current VHA monitoring activities
Offering HIV tests to veterans	<p>According to officials from VHA’s HIV, Hepatitis, and Related Conditions Programs, they collect the following data on the testing of veterans for HIV by each Department of Veterans Affairs medical center (VAMC), which is disseminated to all VAMCs and the associated Veterans Integrated Service Networks, which are regional health care networks that provide clinical oversight to VAMCs within their regions:</p> <ul style="list-style-type: none"> • Annual data on the number of veterans who are eligible to receive a one-time test, as well as the number of eligible veterans who were tested.^a • Biannual data on the number of veterans with risk factors for acquiring HIV who use preventive medication, known as pre-exposure prophylaxis (PrEP), and whether they are tested every 3 months as recommended by the Centers for Disease Control and Prevention (CDC).^b
VHA policy requirement for VAMC providers	Past VHA monitoring activities
Obtaining and documenting veterans’ verbal consent to be tested	VHA’s National Center for Ethics in Health Care oversaw a system-wide review of data collected from a sample of 30 medical records from each VAMC for veterans who were tested for HIV between fiscal years 2013 and 2016 to determine whether providers documented that they obtained veterans’ verbal informed consent. ^c
Ordering recommended HIV tests	In 2018, VHA’s Director of Pathology and Laboratory Medicine Service conducted a one-time, system-wide review of data collected from VAMCs regarding laboratory protocols to determine whether CDC’s HIV testing algorithm, which outlines a recommended sequence of tests that laboratories should use to determine an HIV test result, was followed, indicating that providers were able to order the most current CDC-recommended HIV test. ^d

Source: GAO analysis of interviews with VHA officials and VHA documents. | GAO-20-186

^aAccording to Veterans Health Administration (VHA) policy in effect during our review, providers must offer human immunodeficiency virus (HIV) tests at least once to veterans as part of routine medical care. See Veterans Health Administration Directive 1113, *Testing for Human Immunodeficiency Virus in Veterans Health Administrations Facilities* (Washington, D.C.: May 5, 2015; rescinded Aug. 15, 2019) and Veterans Health Administration Directive 1304, *National Human Immunodeficiency Virus Program* (Washington, D.C.: Aug. 15, 2019).

^bAccording to VHA policy, providers must follow CDC’s recommendations on the use of PrEP to reduce veterans’ risk of acquiring HIV. See Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019). CDC recommends that providers repeat testing every 3 months to document that patients who are prescribed PrEP are still HIV negative.

^cAs of April 2019, VHA’s policy on informed consent no longer requires that providers document verbal consent, but continues to require that providers obtain verbal consent. See Veterans Health Administration Handbook 1004.01(2), *Informed Consent for Clinical Treatments and Procedures* (Washington, D.C.: amended April 4, 2019).

^dIn response to a Department of Veterans Affairs led investigation at a VAMC in Florida as to whether the facility had implemented CDC’s HIV testing algorithm as required by Veterans Health Administration Directive 1113 (Washington, D.C.: May 5, 2015; rescinded Aug. 15, 2019), the U.S. Office of Special Counsel requested that VA conduct a system-wide review to ensure that all VAMCs were following this policy.

VISNs and VAMCs have used VHA’s data on the offering of HIV tests to veterans to support local efforts to improve HIV screening. For example, HHRC officials told us that VISNs have used data on the number of veterans who are eligible to receive one-time HIV tests, and who were tested, to support applications for VHA-sponsored grants intended to

improve the offering of such tests to homeless veterans.³² Officials from four VAMCs in our review told us that they have used these data to identify the need to increase testing, which led to the implementation of new strategies, such as clinical reminders that prompt providers to offer one-time and risk-based HIV tests to veterans.

While VHA recently monitored the documentation of verbal consent by collecting data that VAMCs used to make related improvements, such monitoring is no longer needed due to a change in VHA policy. Between fiscal years 2013 and 2016, NCEHC (the VHA office responsible for VHA's policy on informed consent) oversaw a system-wide review that led to improvements in the number of VAMC providers that documented in veterans' medical records that they obtained veterans' verbal consent to be tested for HIV. In 2019, VHA amended its policy and no longer requires providers to document that they obtained verbal consent.

In addition, VHA recently monitored VAMC laboratory protocols for HIV testing, but HHRC noted that this monitoring is no longer needed, because the recommended testing technologies have been implemented. In 2018, VHA conducted a one-time review of VAMC laboratory protocols to ensure that CDC recommendations for the use of HIV tests were followed at each VAMC, such as recommendations related to the type of HIV test that providers should order for diagnostic purposes. VAMCs were required to submit verification to VHA showing that their laboratories had implemented the most current CDC-recommended testing technologies. According to HHRC officials, this provided assurance that providers were ordering the most current CDC-recommended HIV test and that laboratories were following the CDC-recommended HIV testing algorithm. VHA's Director of Pathology and Laboratory Medicine Service reviewed the verification submitted by each VAMC, and VAMCs were required to develop action plans to address any identified deficiencies. As of August 7, 2018, VHA found that all VAMCs were following CDC's recommendations related to the availability and use of HIV tests. According to HHRC officials, VHA does not need to continue its monitoring effort in this area, since the implementation of recommended testing technologies by VAMCs was a one-time effort. Further, officials from the five VAMCs in our review told us that the VAMCs were using the

³²HHRC officials told us they have been unable to make these grants since fiscal year 2014 due to internal funding restrictions related to the ongoing realignment of VHA's organizational structure.

CDC-recommended HIV test, and nothing inconsistent came to our attention during our medical records review.

VHA Makes Data on the Timeliness of Communicating Test Results Available, but Has Not Ensured that VAMC Staff Are Aware They Have Access to It

OPC and RAPID (the VHA offices responsible for VHA's policy on the communication of test results and related performance measurement) make data available to VAMC staff that may indicate the timeliness with which HIV test results are communicated to veterans. OPC and RAPID publish a quarterly report on the timeliness with which results from the eight tests that are included in its review of veterans' medical records are communicated to veterans at each VAMC. While HIV tests are not one of the eight tests included in the OPC and RAPID review, VAMC officials we interviewed told us that VAMC procedures for communicating results are generally the same for all tests. OPC officials stated that VAMC officials could use the data to identify needed performance improvement efforts related to the communication of test results.³³ OPC officials added that while it is not the primary goal of the OPC and RAPID review, data on the eight tests included in the review may serve as a sample, providing some indication as to whether VAMC procedures promote the timely communication of results of any test to veterans.

Although OPC and RAPID publish a quarterly report on the timeliness of communicating test results, HIV lead clinicians may not be aware they have access to this information. OPC and RAPID officials told us that VAMC staff responsible for serving as liaisons for OPC's medical records review are notified by RAPID via email of the report's availability.³⁴ RAPID officials added that any VAMC staff may opt in to the email group that officials use to notify liaisons that the timeliness data have been published. HIV lead clinicians we interviewed reported that they did not know that they can opt in to this email group.

According to RAPID officials, the main mechanism for making VAMC staff aware that they can join this email group is through their VAMC

³³VHA policy requires that VAMC officials review monitors of test result communication and ensure that any identified performance improvement issues are addressed. See Veterans Health Administration Directive 1088 (Washington, D.C.: Oct. 7, 2015).

³⁴The VAMC staff serves as liaisons to VHA for all EPRP conducted reviews, including but not limited to the review on the time frames in which test results are communicated to veterans. According to an OPC official, these liaisons are typically staffed in the VAMCs' quality management office. The report includes data on various EPRP-calculated VHA performance measures, including but not limited data on performance measures related to the timely communication of test results.

colleagues. VHA has not taken steps to more systematically communicate the availability of these timeliness data to all VAMC staff (including HIV lead clinicians). Standards for internal control in the federal government require that agencies communicate necessary information throughout all agency reporting lines to achieve the agencies' objectives and respond to identified risk.³⁵ VHA policy requires that HIV lead clinicians serve as VAMC points of contact on HIV testing, diagnosis, and care, which may include monitoring HIV care.³⁶

An HIV lead clinician we interviewed also noted that these data could be used as an indicator as to whether HIV test results are being communicated to veterans in a timely manner. Further, having these data could help staff determine if delays in communicating test results pose risks to the timely completion of HIV screening, such as whether veterans who test positive for HIV are linked to care for their diagnosis as expeditiously as possible. If there are unnecessary delays in communicating positive HIV test results to veterans, providers may be at risk of delaying the start of needed HIV treatment. According to VHA policy, and confirmed by RAPID officials, the timely communication of test results to veterans is essential for high quality care, and the timely follow-up of positive test results may help veterans achieve favorable health outcomes.

VHA Does Not Collect or Disseminate Data to Monitor VAMCs' Timeliness in Linking Veterans Who Test Positive for HIV to Care, but Has Taken Steps to Do So

VHA does not monitor whether veterans who test positive for HIV are linked to care for their diagnosis within the recommended 30-day time frame.³⁷ However, according to HHRC officials, they have taken steps to collect and disseminate data that would allow monitoring of this stage of HIV screening. HHRC officials stated that prior to 2018 they used a data tool to monitor the timeliness (among other aspects) of HIV care across the VHA system. Officials told us that this tool collected data on the date of a veteran's first inpatient stay or outpatient encounter after being diagnosed with HIV, but not the reason for the visit, such as whether the visit was associated with the veteran's HIV diagnosis. Officials stated that in spring 2016, they began building a data tool to use as the underlying

³⁵See [GAO-14-704G](#).

³⁶Veterans Health Administration Directive 1113 (Washington, D.C.: May 5, 2015; rescinded Aug. 15, 2019) and Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019).

³⁷For the VHA policy establishing this time frame, see Veterans Health Administration Directive 1304 (Washington, D.C.: Aug. 15, 2019).

Linking Veterans to Preventive Care for Human Immunodeficiency Virus (HIV)

In addition to linking veterans who test positive for HIV to care for their diagnosis, Department of Veterans Affairs (VA) medical centers link veterans who test negative for HIV to preventive care. The use of preventive medication, or pre-exposure prophylaxis (PrEP), reduces the risk of acquiring HIV in adults.

Officials from VA's HIV, Hepatitis, and Related Conditions Programs (HHRC) told us that they implemented a PrEP quality improvement initiative in September 2016, which focuses on increasing the use of PrEP among veterans who live in areas of the country with a higher prevalence of HIV compared to the national average. HHRC officials told us that the initiative focuses on providing high quality care to veterans in accordance with current recommendations on the use of PrEP. For example, the Centers for Disease Control and Prevention (CDC) has recommended that providers prescribe PrEP medications to individuals who test negative for HIV within one week of documenting the test result.

HHRC officials told us that they monitor the time frames in which veterans are prescribed PrEP medication by collecting data on a biannual basis on the date on which veterans' blood was drawn for the purposes of conducting an HIV test and the date on which veterans' were prescribed the medication. HHRC officials told us that these data are disseminated to VA medical center staff responsible for improving HIV screening to improve the appropriate use of PrEP as needed.

Source: GAO analysis of Veterans Health Administration and CDC information. | GAO-20-186

source of information to determine whether veterans are linked to care specifically for their HIV diagnosis within the recommended time frame.³⁸ According to officials, the data tool was implemented in October 2018, and as of early November 2019, they were in the process of building the capacity to generate a report based on these data showing the time frames in which veterans are linked to HIV care.

HHRC officials initially indicated that they expected to begin monitoring linkage to HIV care in August or September 2019, but they were not able to do so for various reasons. According to HHRC officials, the process of building the new data tool and the capacity to generate a report has been lengthy due to competing priorities related to VHA's ongoing development of a new EHR system.³⁹ These officials added that they have been simultaneously focused on implementing required improvements in the diagnosis and treatment of veterans with Hepatitis C.⁴⁰ According to officials, the time frame to develop the new data tool and report has been extended due to these competing priorities.

HHRC officials told us that once monitoring begins, they will report on the number of veterans who are linked to HIV care within the recommended 30-day time frame for each VAMC on an annual basis, retroactive to fiscal year 2018. According to HHRC officials, the data will be disseminated by publishing them on an internal data sharing website that each VAMC's HIV lead clinician can access.⁴¹ The officials explained that these

³⁸HHRC officials told us that they will measure whether providers placed an order for a cluster of differentiation 4 (CD4) count test or viral load test within 30 days of receiving a veteran's confirmed positive HIV test result. A CD4 count test measures the amount of CD4 cells, a type of cell that fights off viruses such as HIV, in the blood. A viral load test measures the amount of virus present in the blood. Providers order a CD4 test after an HIV diagnosis has been made to determine how much damage HIV has done to the immune system. Providers order a viral load test to assess the progression of HIV and to determine how well HIV medication is managing the infection.

³⁹VA is currently collaborating with the Department of Defense to implement a new EHR system from the Cerner Corporation. The Cerner Corporation is to provide both departments with a common EHR system that is intended to support the provision of seamless care and create a single health record for service members and veterans. According to VA officials, the new EHR system will take 10 years to fully implement.

⁴⁰According to the Department of Veterans Affairs' Office of Inspector General, from fiscal years 2015 to 2017 VHA received appropriations to improve the treatment of veterans with Hepatitis C, a viral infection of the liver.

⁴¹According to VHA officials, the data will be available to any VAMC provider or staff member who has access to the internal data sharing website; they indicated that they will also disseminate the data to infectious disease providers through a listserv.

clinicians will be notified when the data have been published via email and during regularly scheduled conference calls with HHRC. HHRC officials also told us that the data may be used to inform any needed improvements in the timeliness of linking newly diagnosed veterans to HIV care.

Standards for internal control in the federal government require that agencies perform ongoing monitoring activities and evaluate results to remediate any identified deficiencies on a timely basis.⁴² VHA policy requires that HHRC develop data reports for monitoring the quality of HIV care that are to be disseminated to the VISNs or VAMCs, among other entities and individuals, and lead VHA efforts toward meeting the NHAS's recommendations.⁴³ However, until HHRC disseminates data on the timeliness with which veterans are linked to HIV care, VAMCs are limited in their ability to identify any delays and take the necessary steps to ensure that this occurs within recommended time frames, now and in the future. In our nongeneralizable review of the 38 medical records for veterans who tested positive for HIV, we observed some instances of delay. Specifically, we found that six veterans were first seen by an infectious disease provider, who typically treats HIV, more than 30 days after being informed of their positive test results. We were unable to identify a documented explanation in the six medical records for why linkages to care exceeded 30 days. Delays in linking veterans to HIV care can increase the risk that veterans are not promptly beginning treatment to help achieve favorable health outcomes. According to the 2015 NHAS, evidence shows that earlier treatment reduces the risk that an individual with HIV will develop AIDS or transmit the virus to others.

Conclusions

Veterans who are voluntarily tested for HIV at VAMCs, informed of positive HIV test results in a timely manner, and expeditiously linked to care before their infections progress further have improved health outcomes, a longer life expectancy, and a reduced risk of transmitting the virus to, for example, a sexual partner. VHA has monitored the provision of HIV tests to veterans and reported related improvements resulting from these monitoring efforts, ensuring that, for example, veterans are

⁴²See [GAO-14-704G](#).

⁴³Veterans Health Administration Directive 1304, *National Human Immunodeficiency Virus Program* (Nov. 24, 2014; rescinded Aug. 15, 2019) and Veterans Health Administration Directive 1304, *National Human Immunodeficiency Virus Program* (Aug. 15, 2019).

receiving the most current CDC-recommended test. However, VHA's dissemination of data on the time frames in which test results are communicated to veterans and monitoring of the time frames in which HIV-positive veterans are linked to care specific to their diagnosis needs improvement.

Recommendations for Executive Action

We are making the following two recommendations to VA:

The Under Secretary for Health should take steps to improve communication to VAMC staff (including HIV lead clinicians) about the availability of data on the time frames in which test results are communicated to veterans. (Recommendation 1)

The Under Secretary for Health should disseminate data to HIV lead clinicians on the extent to which veterans who test positive for HIV are linked to care within recommended time frames. (Recommendation 2)

Agency Comments

We provided a draft of this report to VA for review and comment. In its written comments, which are reproduced in appendix I, VA concurred with our recommendations. VA stated that it will communicate to VAMC staff, including HIV lead clinicians, how providers may be notified when the data on the time frames in which test results are communicated to veterans have been published. Further, VA stated that HIV test results will be added to the OPC and RAPID quarterly review of such time frames beginning in the second quarter of fiscal year 2020. VA also indicated that as of December 2019, the agency began annual monitoring of whether veterans are linked to HIV care within recommended time frames and will notify HIV lead clinicians of the availability of the data during conference calls scheduled to take place in January and March 2020.

We are sending copies of this report to the appropriate congressional committees and the Secretary of Veterans Affairs. In addition, this report is available at no charge on the GAO website at <https://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-7114 or at DraperD@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix II.



Debra A. Draper
Director, Health Care

Appendix I: Comments from the Department of Veterans Affairs



DEPARTMENT OF VETERANS AFFAIRS
WASHINGTON DC 20420

December 30, 2019

Ms. Debra A. Draper
Director
Health Care
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Draper:

The Department of Veterans Affairs (VA) has reviewed the Government Accountability Office (GAO) draft report: ***VA HEALTH CARE: Improved Communication About Available Data Needed to Enhance the HIV Screening Process*** (GAO-20-186).

The enclosure provides general and technical comments and sets forth the actions to be taken to address the draft report recommendations.

VA appreciates the opportunity to comment on your draft report.

Sincerely,

A handwritten signature in blue ink, appearing to read "P. Powers".

Pamela Powers
Chief of Staff

Enclosure

Enclosure

Department of Veterans Affairs (VA) Comments to
Government Accountability Office (GAO) Draft Report
***VA HEALTH CARE: Improved Communication About Available Data
Needed to Enhance the HIV Screening Process***
(GAO-20-186)

General Comments:

The VA National Human Immunodeficiency Virus (HIV) Program is governed by Veterans Health Administration (VHA) Directive 1304 and falls under the HIV, Hepatitis, and Related Conditions Programs (HHRC), within VHA's Office of Specialty Care Services. HHRC leads the coordination of quality improvement activities using population-based approaches for HIV prevention and diagnosis; care; and treatment of Veterans with HIV, and those at risk for HIV, across VHA's health care system.

Veterans with HIV infections suffer from high rates of medical and psychiatric co-morbidities, including mental health, substance use, and metabolic disorders; cardiovascular disease; and renal dysfunction. VHA's National HIV Program ensures that these Veterans receive the highest quality comprehensive clinical care, including testing, diagnosis, timely linkage to care, and treatment of co-morbidities. Additionally, HHRC strives to reduce health disparities, and promote evidence-based HIV care and preventive services.

VHA is the single largest provider of HIV care in the United States (U.S.), with over 31,000 Veterans diagnosed with HIV in care in 2019, 75 percent of whom overall are virally suppressed. Of all the HIV-positive patients in care in 2019, 86 percent were on antiretroviral therapy (ART) and 92 percent of those with labs in the calendar year were virally suppressed.

VHA is a Federal partner in the National HIV/AIDS Strategy (NHAS), which is in the process of developing 2030 strategic targets so that 95 percent of people living with HIV in the U.S. are aware of their status, 95 percent are retained in care, and 95 percent of people on ART are virally suppressed. VHA utilizes the HIV Care Continuum model to assess gaps in care from diagnosis, linkage to care, retention in care, treatment, and viral suppression, meaning that no detectable virus is present in the blood. VHA's National HIV Program has implemented a VA-specific plan to continue to meet the targets identified by NHAS.

VHA policy requires that all Veterans be offered HIV testing at least once in their lifetime, with testing offered at least annually to those who have on-going risk of exposure. In Fiscal Year 2019, the number of Veterans eligible for HIV screening was 3,921,688, which included all Veterans in VHA care who had not received an HIV test and did not have a diagnosis of HIV.

In the last decade, HIV testing has nearly quadrupled among Veterans in VHA, with 44 percent of all enrolled Veterans having received an HIV test as of the end of 2019.

Enclosure

Department of Veterans Affairs (VA) Comments to
Government Accountability Office (GAO) Draft Report
***VA HEALTH CARE: Improved Communication About Available Data
Needed to Enhance the HIV Screening Process***
(GAO-20-186)

Between 2014 and 2017, 100 percent of those newly diagnosed with HIV and who were still living within 90 days of their diagnosis, were linked to VHA care within 90 days of their diagnosis. This indicator was based on general guidelines provided in the 2010 NHAS that recommended that individuals newly diagnosed with HIV be linked to care within three months of their HIV diagnosis.

In the beginning of 2018, VHA transitioned to a new data source and updated this linkage to care indicator to be defined as having received an HIV-specific lab (e.g., a CD4 or HIV viral load) within 30 days of initial diagnosis. This update was based on guidance in the 2015 NHAS and the Centers for Disease Control and Prevention's updated HIV Care Continuum model, published in June 2018, which provided the data definition.

In 2018, 84 percent of Veterans in care, newly diagnosed with HIV were linked to HIV-specific care in VHA within 30 days. This increased to 86 percent in 2019. VHA does not currently have the ability to determine what proportion of the remaining 14 percent of Veterans newly diagnosed are linked to HIV-specific care in the community within 30 days, following the same parameters. On December 12, 2019, HHRC published VA's HIV Care Continuum Report, which includes linkage to care data at the National, Veterans Integrated Service Network (VISN), and facility level. This report is posted on HHRC's secure sharepoint site with open access to all VA medical center (VAMC) staff with personal identity verification access.

VHA continues to promote increased HIV testing, particularly for Veterans at high risk due to the on-going opioid crisis in the U.S., and at VA facilities located in areas with a high prevalence of HIV in the community as determined by the U.S. Department of Health and Human Services *Ending the HIV Epidemic: A Plan for America*.

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Recommendation 1: The Under Secretary for Health should take steps to improve communication to VAMC staff (including HIV Lead Clinicians) about the availability of data on the time frames in which test results are communicated to veterans.

VA Comment: Concur. The Veterans Health Administration (VHA) Office of Primary Care will provide information to the Patient Aligned Care Team Community of Practice group on the timeframes in which test results, including Human Immunodeficiency Virus (HIV), are expected to be communicated to Veterans. This communication will also include information about how providers can sign up to be notified when the External Peer Review Program (EPRP) data on communication of test results has been published. Beginning with the second quarter of Fiscal Year 2020, HIV test results will be added to the EPRP study. In addition, this information will be announced on a Chief Medical Officer and Quality Management Officer call.

The HIV, Hepatitis, and Related Conditions Programs (HHRC) in the Office of Specialty Care Services will provide information about how providers can sign up to be notified when the EPRP data on communication of test results has been published via email communication to all HIV Lead Clinicians through HHRC's email. This will also be presented and discussed on the next HHRC Monthly Issues call and the next quarterly HIV Lead Clinician call. Target Completion Date: March 2020.

Recommendation 2: The Under Secretary for Health should disseminate data to HIV Lead Clinicians on the extent to which veterans who test positive for HIV are linked to care within recommended time frames.

VA Comment: Concur. HHRC in the Office of Specialty Care Services presented VA's HIV Care Continuum, which included updated linkage to care data, at VHA's December 2, 2019, virtual conference, *Ending the HIV Epidemic: VA's Response*. There were over 300 participants across VHA at this conference. This report was posted on a secure SharePoint site, which is accessible to all VHA providers and will be updated annually. Notification of the availability of this report has been sent to the HIV Lead Clinicians via email, and will also be presented and discussed on HHRC's next HHRC Monthly Issues Call in January 2020 and the next Quarterly HIV Lead Clinician Call in March 2020. Target Completion Date: March 2020.

Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact

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Staff Acknowledgments

In addition to the contact named above, Hernán Bozzolo (Assistant Director), Karen Belli (Analyst-in-Charge), Hannah Grow, Cathy Hamann, and Tatyana Walker made key contributions to this report. Also contributing were Jacquelyn Hamilton, Diona Martyn, and Vikki Porter.

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