United States Government Accountability Office

Report to the Chairman, Committee on Veterans' Affairs, House of Representatives

November 2018

VA MEDICAL CENTERS

VA Should Establish Goals and Measures to Enable Improved Oversight of Facilities' Conditions

GAO-19-21

November 2018

VA MEDICAL CENTERS

VA Should Establish Goals and Measures to Enable Improved Oversight of Facilities' Conditions

GAO Highlights

Highlights of GAO-19-21, a report to the Chairman of the Committee on Veterans' Affairs, House of Representatives

Why GAO Did This Study

VHA oversees one of the largest health care systems, serving approximately 9-million veterans at numerous health care facilities, including 170 medical centers. To ensure a safe environment for veterans and employees, VHA must keep its facilities clean and well maintained.

GAO was asked to examine (1) how VHA medical centers identify maintenance and repair needs and challenges they face in addressing those needs, and (2) to what extent VHA provides oversight to ensure medical centers are providing a safe, clean, and functional environment.

GAO reviewed VHA's procedures and standards related to facility operations and maintenance functions at medical centers and interviewed VHA's administrative office officials regarding oversight of these functions. GAO also interviewed VHA officials from three regional offices and six medical centers selected based on factors such as geographic location and veteran population served, and conducted site visits at four of these medical centers.

What GAO Recommends

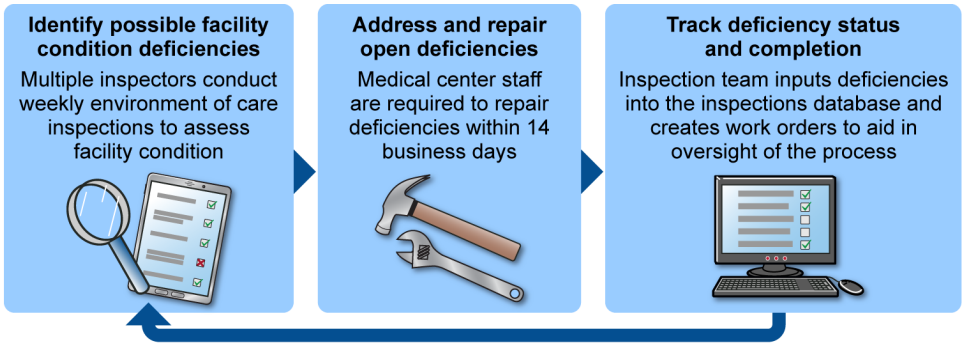
GAO recommends that VHA set a timeline for defining goals, objectives, and outcome-oriented performance measures that can address challenges and help achieve a clean and safe care environment. VA concurred with the recommendation and provided general and technical comments, which GAO incorporated as appropriate.

View GAO-19-21. For more information, contact Andrew Von Ah at (202) 512-2834 or VonAhA@gao.gov.

What GAO Found

Veterans Health Administration's (VHA) medical centers conduct regular inspections of the settings in which patients receive health care services, called the "environment of care", to identify maintenance and repair needs. These inspections also help ensure compliance with accreditation standards requiring, among other things, that utility systems operate properly and that areas are clean and in good repair. The main three steps in the process associated with these inspections are shown below. In addition to the environment of care inspections, VHA conducts other periodic assessments of facilities' major systems, such as plumbing and air conditioning.

The Three Main Steps of the Environment of Care Inspection Process



Source: GAO analysis. | GAO-19-21

VHA inspections routinely identify deficiencies reflective of an aging infrastructure—VHA's buildings are on average 55 years old. This situation in turn is leading to workload and staffing challenges in addressing maintenance and repair needs. For example, according to VHA's 2017 data, medical centers reported conducting approximately 11,000 total inspections for the year that resulted in about 128,000 identified deficiencies. Most of these deficiencies were closed within 14 business days, as required by VHA. However, nearly 30,000 of them were not closed or had been addressed through a plan for future work. Medical center officials added that correcting deficiencies may only be a temporary solution for issues related to aging structures that need extensive repairs and renovations. In addition, VA headquarters and field officials said that staff vacancies are common and can affect the efficiency and speed of maintenance and repairs.

VHA provides guidance and selected oversight to ensure medical centers implement the process for environment of care inspections. However, VHA lacks performance goals, objectives, and measures that would enable it to provide effective oversight, address challenges, and assess how well it is achieving a clean, safe, and functional environment. As part of ensuring compliance with the inspection process, VHA measures whether medical centers meet certain requirements, such as having appropriate staff present for inspections. VHA does not, however, have measures that enable it to assess how well medical centers are achieving desired outcomes. Although it has stated its intent to develop such measures, VHA has not yet committed to a time frame for doing so.

Contents

Abbreviations

VA	Department of Veterans Affairs
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network

U.S. GOVERNMENT ACCOUNTABILITY OFFICE
441 G St. N.W.
Washington, DC 20548

November 13, 2018

The Honorable David P. Roe
Chairman
Committee on Veterans' Affairs
House of Representatives

Dear Mr. Chairman:

The U.S. Department of Veterans Affairs (VA) administers one of the largest health care systems, serving approximately 9 million enrolled veterans annually at health care facilities across the country, including 170 VA medical centers, through the Veterans Health Administration (VHA).[1] To ensure a safe environment for veterans and employees, VHA is responsible for keeping these facilities safe, clean, and well maintained.

VHA obligated more than $6.5 billion for the operations and maintenance of its medical facilities for fiscal year 2018. This amount pays for day-to-day functions, such as operating heating and cooling systems, laundering textiles, maintaining hospital grounds, and making needed repairs. Efforts related to maintaining the "environment of care"—the setting in which patients receive health care services—are also a part of day-to-day operation and maintenance activities. Repairs can range from small, recurring maintenance projects such as repainting walls and repairing water leaks in pipes and roofs to larger non-recurring projects such as upgrading water treatment plants and modernizing boiler systems.

You asked us to review issues related to VHA medical centers' facility operations and maintenance functions. In this report, we examine: (1) how VHA medical centers identify maintenance and repair needs and challenges the centers face in addressing those needs, and (2) to what extent VHA provides oversight to ensure medical centers are providing a safe, clean, and functional environment.

[1]According to VHA documentation, a VA medical center is a facility that provides two or more categories of care (inpatient, outpatient, residential rehabilitation, or institutional extended care). Of the 170 VA medical centers, 145 were VA hospitals in 2017. The other 25 medical centers did not provide acute care services and could not be classified as hospitals. They did, however, provide a mix of other bed-care services, such as community living centers and/or residential rehabilitation care, thus meeting the VA medical center criteria.

To determine how VHA identifies maintenance and repair needs at medical centers and challenges they face in addressing those needs, we reviewed VHA procedures, policies, and standards related to operations and maintenance functions at medical centers and published reports from VA, GAO, and relevant stakeholder groups. We also reviewed VHA's environment of care inspections data for fiscal years 2016–2017 as reported by medical centers related to their compliance with facility maintenance standards. We focused this review on environment of care inspections because these inspections are identified in VHA guidance as critical to all aspects of patient care in a medical facility. As such, environment of care standards are important considerations for VHA's engineering staff when planning and executing maintenance and operations functions. We assessed the reliability of environment of care inspections data by reviewing documentation and interviewing knowledgeable agency officials to identify steps VA takes to ensure the quality and accuracy of the data, such as training inspectors on entering inspections data. Through these steps, we determined that the data were sufficiently reliable for the purposes of this reporting objective.

Further, we selected three Veterans Integrated Service Networks (VISN) and six medical centers—two medical centers within each VISN—for review and site visits. [2] We chose the three VISNs to include a range in terms of geographic location and veteran demographics and ones with higher numbers of identified deficiencies and percentages of deficiencies not addressed within 14 days in fiscal year 2017. We chose the six medical centers based on these factors as well as on their proximity to the selected VISN's location, and to include both urban and rural centers. We conducted in-person site visits at four of the six selected medical centers and interviewed officials responsible for overseeing, planning, and budgeting for facility maintenance and operations. We observed the environment of care inspections process at two of the medical centers during our site visits. The results of the information obtained at VISNs and medical centers are not generalizable to the entire population of VISNs and medical centers. Table 1 shows the VISNs and medical centers selected for our review.

[2]VA provides healthcare services through 18 geographically divided Veterans Integrated Services Networks (VISN). Each VISN is responsible for coordination and oversight of all administrative and clinical activities within its specified geographic region. Starting in October 2015, VA merged 21 VISNs into 18 total VISNs.

Table 1: VISNs and VA Medical Centers Selected for Review and Site Visits

VISN	VHA Medical Center
VISN 5: VA Capitol Health Care Network (Linthicum, MD)	• Perry Point VA Medical Center- VA Maryland Health Care System (Perry Point, MD) • Martinsburg VA Medical Center (Martinsburg, WV)
VISN 12: VA Great Lakes Health Care System (Westchester, IL)	• VA Illiana Health Care System (Danville, IL) • Jesse Brown VA Medical Center (Chicago, IL)
VISN 22: Desert Pacific Healthcare Network (Long Beach, CA)	• VA Long Beach Healthcare System (Long Beach, CA) • VA Greater Los Angeles Healthcare System (Los Angeles, CA)

Source: GAO analysis. | GAO-19-21

Notes: Site visits were conducted at VA Medical Centers in VISN 5 and VISN 22.

To determine how VHA provides oversight to ensure medical centers are providing a safe, clean, and functional environment, we reviewed VHA policy and guidance on the environment of care inspections process. We interviewed officials from the VHA administrative office that oversees compliance in the environment of care at medical centers and the selected VISNs and medical centers about:

- challenges that may affect VHA's ability to maintain or operate medical centers;
- VHA oversight; and
- the implementation of environment of care policies.

We compared the information from these documents and interviews to best practices for results-oriented management as identified in previous GAO work.[3]

We conducted this performance audit from June 2017 to November 2018 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

[3]GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, GAO/GGD-96-118 (Washington, D.C.: June 1996); *Veterans Justice Outreach Program: VA Could Improve Management by Establishing Performance Measures and Fully Assessing Risks*, GAO-16-393 (Washington, D.C.: Apr. 28, 2016); *Performance Measurement and Evaluation: Definitions and Relationships*, GAO-11-646SP (Washington, D.C.: May 2, 2011); and *Managing for Results: Enhancing Agency Use of Performance Information for Management Decision Making*, GAO-05-927 (Washington, D.C.: Sept. 9, 2005).

the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

VHA policy requires that all medical facilities provide a safe, clean, functional environment for patients, visitors, and employees. The Joint Commission, [4] an organization that accredits medical centers and other hospitals throughout the country, has developed standards that require medical centers to undertake several actions that relate to engineering, environmental management, and safety including:

- maintaining the patient environment by ensuring that a suitable temperature is maintained, that areas are clean and appropriately lighted, and furnishings and equipment are in good repair;
- managing utility systems to ensure operational reliability; and
- minimizing fire hazards and providing a safety system in case of fire.

To help ensure medical centers maintain these standards, VHA requires medical centers to conduct regular environment of care inspections of the facility.[5] According to VHA officials, because of the large size of many medical centers, most conduct environment of care inspections in a different part of their facility every week throughout the year. In 2016, a VHA directive formally established VHA's Comprehensive Environment of Care Program (Environment of Care Program) and outlined management and oversight responsibilities for the program.[6] Environment of care inspections are a main component of the program.

In addition to the environment of care inspections, VHA uses other inspections to help execute and oversee facility operations and maintenance functions. For example, every 3 years, VA contracts for Facility Condition Assessments, where contractors evaluate all buildings and major systems at a medical facility (e.g., structural, mechanical,

[4]The Joint Commission is an independent, not-for-profit organization that accredits and certifies nearly 21,000 health care organizations and programs in the United States. It is governed by a 32-member Board of Commissioners that includes physicians, administrators, nurses, employers, quality experts, a consumer advocate and educators.

[5]VHA directs medical centers to conduct environment of care inspections, also referred to as environment of care rounds, a minimum of once per fiscal year in non-patient care areas, and twice per fiscal year in patient care areas.

[6]Department of Veterans Affairs, *Directive 1608: Comprehensive Environment of Care (CEOC) Program* (February 1, 2016).

plumbing, and others) and identifies needed repairs and replacements.[7] This inspection gives a graded score from A to F for VHA facilities, with "C minus" as the average facility score received for overall infrastructure conditions at VHA facilities as of 2015. This inspection focuses on major systems, while environment of care inspections focus on day-to-day facility conditions, including that of patient-care areas. Furthermore, preventative maintenance inspections are usually conducted on systems, such as boilers or heating, ventilation, and air-conditioning (HVAC) systems, and would vary in frequency based on the manufacturer requirements.[8] Medical center staff also noted that facility operations and maintenance issues may be identified by staff in the course of their day-to-day duties and reported to engineering for repair.

VHA medical centers employ staff trained in plumbing, carpentry, grounds maintenance, and other trades needed to maintain facilities, as well as housekeeping staff. These employees are responsible for carrying out the work necessary to ensure medical centers comply with safety standards, and VHA policies and inspection requirements.

The majority of funding for medical centers, including funding for operations and maintenance, is determined on the basis of past years' allocations, veteran populations served, and the types of services provided.[9] The budget for VA medical facilities has increased by approximately 30 percent over the last 5 fiscal years.

[7] VHA is currently conducting a pilot of the Department of Defense Builder facility condition tool as a replacement for the Facility Condition Assessment. VHA expects the pilot to conclude, and a decision to be made, in Spring 2019

[8]See appendix II for a table containing other relevant inspections that may also detect condition issues at medical centers.

[9]VHA Central Office allocates funding to the VISN-level using the Veteran's Equitable Resource Allocation model and VISNs then allocate funds to medical centers though the Veterans Affairs Medical Center Allocation System. There are 10 different functions within the Medical Facilities account that may fund operations and maintenance activities. They are: Energy/Green Management; Engineering & Environmental Management Service; Engineering Service; Grounds Maintenance & Fire Protection; Operating Equipment Maintenance & Repair; Other Facilities Operation Support; Plant Operation; Recurring Maintenance & Repair; Textile Care Processing & Maintenance; and Transportation.

Medical Centers Rely on Environment of Care Inspections to Identify Deficiencies but May Encounter Challenges in Completing Needed Repairs

Environment of Care Inspections

The medical center director or a designee, such as the medical center's Environment of Care Coordinator, has the overall responsibility for managing and leading weekly environment of care inspections at a medical center. Each medical center should have an environment of care committee, and the medical center director or a designee should facilitate committee meetings to discuss the environment of care processes, findings, trends, and any other related issues. Inspections are conducted by an environment of care inspection team, which is made up of representatives from various facility departments, including, among others:

- Environmental Management Service—which is responsible for ensuring a state of physical and biological cleanliness, including proper handling of waste materials—and
- Engineering Service, which is responsible for utilities that allow the physical plant to function, including basic systems such as heating and electrical, among others.

According to VHA guidance, the team is to conduct its inspections using a VHA checklist as a guide to determine if there are any deficiencies. For example, the checklist includes questions such as:

- Are there loose floor tiles/carpet?
- Are ceiling tiles stained or other signs of leaks?
- Are there any electrical hazards present?

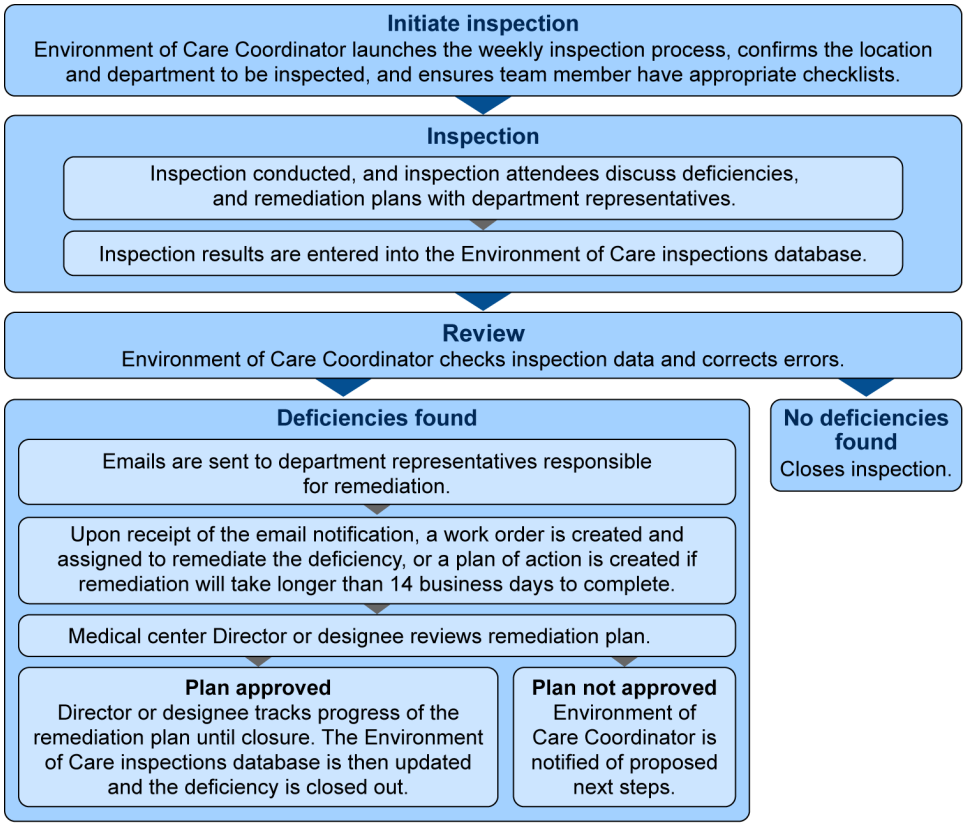
Team members record information on deficiencies that they identify into an Environment of Care inspections database, which is used to document and track the status of deficiencies.[10]

During interviews with medical center staff at all six of the medical centers included in our review, officials told us they follow the environment of care inspections process that VHA guidance outlines. At two of the medical centers we visited, we accompanied inspections team on environment of care inspections and observed staff following this process. The inspection teams walked through the areas designated for inspection, for example examining conditions of floors, ceilings and fire safety systems. Also, as we discuss later in the report, VHA officials also monitor aspects of the inspections process, such as who attends the inspection. VHA officials told us they also collect data on performance measures related to utilization of the environment of care checklists and environment of care inspections process but no longer track these measures because medical centers achieved 100 percent utilization of these measures in 2015.[11] Figure 1 below details the process used to identify and address deficiencies, as outlined in VHA guidance.

[10]The environment of care inspections results are entered into the Environment of Care Rounding System, which is a web-based tool used to document and track the status of deficiencies.

[11]The two performance measures VHA officials no longer track are: medical facilities fully implement the Environment of Care Rounding System with the accompanying checklists; and the environment of care checklists are used and submitted within two business days.

Figure 1: The Veterans Health Administration Process for Identifying and Addressing Environment of Care Deficiencies



Source: GAO analysis of Veterans Health Administration guidance. | GAO-19-21

As previously mentioned, VHA guidance considers these inspections to be critical to all aspects of patient care in a medical facility, and officials at all six medical centers confirmed that they rely on these inspections to identify needed repairs. For example, officials in one medical center noted that the frequency and thoroughness of these inspections has helped them determine day-to-day wear and tear issues and informed their planning processes. Medical center staff noted that condition deficiencies identified through this process are often minor but are nonetheless important to maintenance of a clean and safe patient environment. For example, a damaged or stained ceiling tile identified during an inspection could be a potential safety hazard to patients or indicate an issue with leaking pipes. The replacement of the tile itself is a minor repair, but that repair could be an indication of an important maintenance issue at the medical center. As table 2 below shows, the deficiencies commonly

identified through the inspections process include items that need to be cleaned or dusted or walls that need minor repairs.

Table 2: Five Condition Deficiencies Identified Most Frequently on Veterans Health Administration Environment of Care Inspections, Fiscal Year 2017

1.	Ceiling tiles stained or other signs of leaks
2.	Furnishings not clean, safe and in good repair. Walls with holes, scrapes not patched and/or painted.
3.	Flooring is not maintained, appears unclean with possible debris.
4.	Vents, lights, and ceiling tiles with dust, water stains, and/or mold.
5.	Emergency and normal electrical lighting systems not working properly.

Source: GAO analysis of VHA data. | GAO-19-21

Medical center staff we interviewed said, in general, the most common environment of care deficiencies can be addressed by medical center staff, but medical centers told us they sometimes use contractors if warranted. In most cases, a deficiency can be addressed with simple repairs such as patching and repainting walls, replacing stained and damaged tiles, or by cleaning. On our site visits, we saw examples of the types of issues that medical center staff address during environment of care inspections. In one case, we were shown a recurring deficiency at the medical center caused by moving hospital beds. Moving beds in and out of rooms was damaging the plaster corners of a wall near the door. We were also shown the solution, which was a metal corner guard the medical center had installed in some rooms, and the center was working to install corner guards in other locations as funds became available. Figure 2 below shows examples of deficiencies we observed during environment of care inspections at medical centers.

Figure 2: Examples of Environment of Care Deficiencies and Solutions Observed at the Veterans Health Administration's Medical Centers

Fire sprinkler head missing metal plate

Fire sprinkler head with proper configuration

Wall corner with damaged plaster and paint

Wall corner with metal protective cover

Source: GAO. | GAO-19-21

Other types of condition deficiencies that are not directly in the environment of care, such as a broken boiler, typically would not be identified during environment of care inspections, but rather medical center staff said they are identified during scheduled preventive maintenance activities, or during other facility inspections. Regardless of how they are identified, more serious repairs often require a different funding and approval process than day-to-day maintenance. For example, if significant damage occurred to a medical center's roof and the

cost of repairs is greater than $25,000, it would most likely be deemed a non-recurring maintenance project and would require approval from either the VISN or VA's central office.[12]

Challenges in Addressing Identified Deficiencies

The buildings that VHA manages are, on average, 55 years old, and many have substantial capital repair and improvement needs. A VA-commissioned report noted that there were significant barriers that facility management staff faced in maintaining facilities to a high quality. According to the report, while some of these barriers involved immediate resource constraints such as budgets for staffing and conducting maintenance and janitorial tasks, the root cause of many of these issues is the general age and underlying condition of VHA facilities.[13]

Workload

Engineering officials at medical centers told us that the amount of work associated with conducting weekly inspections and addressing environment of care deficiencies is substantial. For example, according to VHA's data for fiscal year 2017, medical centers reported conducting about 11,000 weekly inspections, during which more than 128,000 deficiencies were identified. Most deficiencies were closed within 14 business days, as required by VHA policy, but nearly 30,000 deficiencies across all medical centers had not been addressed within 14 days or had been addressed through a plan for future work.

One significant factor contributing to the number of deficiencies and the associated workload is the advanced age of many medical centers. A VHA commissioned study found that the general age and underlying condition of medical centers, including VHA buildings' being older than 50 years on average and lack of capital investment to address infrastructure concerns, are the root causes of many barriers that facility management staff faced in achieving their objectives of maintaining high quality

[12]A repair or project that costs between $25,000 and $20 million could be considered a non-recurring maintenance project and may also be considered a capital project. Non-recurring maintenance projects supporting an infrastructure system, such as a boiler plan replacement, have no upper threshold limit. For more information on VHA's non-recurring maintenance program see GAO, *VA Construction: Improvements Needed In The Minor Construction And Non-Recurring Maintenance Programs*, GAO-18-479 (Washington, D.C.: June, 2018)

[13]McKinsey & Company Inc., *Independent Assessment of the Health Care Delivery Systems and Management Processes of the Department of Veterans Affairs, Assessment K (Facilities)*, (Sept.1, 2015).

facilities, and exacerbate the workload issues at these medical centers.[14] This observation was echoed by medical center officials in our review. For example at one medical center officials told us that in some cases, correcting deficiencies found on an environment of care inspection is a temporary solution for issues related to aging structures that need extensive repairs and renovations. For example, a roof that needs to be repaired due to leaks and other structural issues may result in an increase in the number of interior ceiling tiles with water stains. Maintenance staff must then continue to identify and replace stained ceiling tiles, until the root cause, which is subject to a different funding and approval process, is addressed.[15]

Also, medical center staff we interviewed said the administrative requirements associated with the environment of care program contributed to workload challenges. Medical center staff are responsible for entering deficiency data into the Environment of Care inspections database, which is used to document and track results from the environment of care inspections. The same staff can also be responsible for reconciling the environment of care inspections database with other systems, like the medical center's work order system and other inspections databases.[16] Medical center staff said that each deficiency can result in as many as four or more separate data entry actions in the Environment of Care inspections database and in a separate system used to track work orders. As an example of the administrative workload related to the inspection process, the Long Beach medical center in

[14]VA was required to contract for an independent assessment of health care services furnished in its facilities. Pub. L. No. 113-146, § 201(a)(1), 128 Stat. 1754, 1769 (2014). VHA contracted with the Centers for Medicare & Medicaid Services' Alliance to Modernize Healthcare (operated by MITRE Corporation, a private entity) and the Institute of Medicine to conduct the assessment. Parts of the evaluation were subcontracted to other organizations, including McKinsey & Company and the RAND Corporation. See Centers for Medicare & Medicaid Services' Alliance to Modernize Healthcare, *Independent Assessment of the Health Care Delivery Systems and Management Processes of the Department of Veterans Affairs*, (Sept. 1, 2015).

[15]Projects that exceed certain dollar thresholds, or that can be defined as a capital project, are subject to the Strategic Capital Investment Planning process. This process is VA's main mechanism for planning and prioritizing capital-planning projects across all of VA, and is separate from day-to-day maintenance and repair planning functions. Emergent issues can be processed as an out-of-cycle project outside of the normal planning and budgeting cycle.

[16]Work orders are the means of reporting condition issues that requires medical centers engineering staff to perform work to repair or replace an item. Work orders can also be used to track the status of repairs or maintenance requests.

California, whose main building was built in 1967, reported the most deficiencies in its VISN. According to VHA data, this medical center reported more than 3,500 environment of care deficiencies related to facility condition in fiscal year 2017, and medical center officials said this resulted in as many as 12,000 or more separate data-entry actions.[17]

Additionally, VHA's aging information technology systems exacerbate the administrative workload. VA medical center officials told us that VHA's work order system lacks interoperability with the Environment of Care inspections database, resulting in the need to manually record information on deficiencies in both systems. Officials we spoke with at VA medical centers told us that this process can substantially add to post-inspection workload and to the administrative burden associated with tracking and closing out deficiencies. Medical center staff also noted that it can often be the same staff member performing environment of care inspections, conducting the work to correct deficiencies, and performing administrative tasks.

Limitations in VA's information technology systems, among other things, led GAO to designate VA health care as a high-risk area. Information technology limitations we previously identified at VA include the outdated, inefficient nature of certain systems and a lack of system interoperability.[18]

Staffing

Staffing shortages have also been recognized by VA's Central Office staff as an issue that needs to be addressed across VA facilities. For example, officials said that in addition to the engineering staff's shortages discussed below, there is also a known shortage at many medical centers of qualified cleaning and janitorial staff, a shortage that can affect the ability for medical centers to quickly address some of the environment of care deficiencies. Additionally, we have previously reported that VA is collaborating with the Office of Personnel Management to address challenges with recruiting and retaining engineering positions.[19]

[17]The number of environment of care deficiencies varies across medical centers and VISNs. For instance, the San Diego VA Medical Center, also located within VISN 22, reported approximately 158 deficiencies in fiscal year 2017.

[18]GAO, *High-Risk Series*, GAO-17-317 (Washington, D.C.: February 15, 2017).

[19]GAO-18-479.

Officials at medical centers included in our review discussed the difficulty of recruiting and retaining employees to perform maintenance work, such as painters, electricians, and other relevant maintenance trades. All six of the medical centers reported vacancies during the last year in engineering department positions that are needed to complete maintenance and repairs, such as electricians and painters. The extent to which these medical centers experienced vacancies, however, varied widely. The lowest number of reported vacancies by a medical center was two and the highest number of reported vacancies was 49. Factors cited by medical center officials on why they had difficulty hiring and retaining staff encompassed a range of issues, including loss of long-time staff due to retirement, and a lack of qualified applicants for vacant positions. For example, medical centers located in and around Los Angeles, California, reported that their location—in a high cost of living area with a competitive private-sector jobs market—affected their ability to recruit and retain these employees. Conversely, medical centers located farther from urban areas reported difficulty finding and retaining staff due to their relatively rural locations and smaller overall population.

Officials from all six medical centers said that while they endeavor to address all environment of care deficiencies in accordance with the inspection requirements, these vacancies affected their ability to perform maintenance and repair functions. For example, officials from one medical center reported that four out of seven electrician positions at their medical center were vacant. The officials said in addition to their rural location, their need for engineering staff knowledgeable in a range of electrical systems made recruitment difficult. Their facility has buildings that are over 50 years old, as well as newer buildings, with significantly different electrical systems. The officials noted that while all electrical work was eventually completed, the lack of staff slowed or deferred repairs, or required contract labor. Another medical center noted that a shortage of relevant engineering staff meant that work orders and preventative maintenance functions were backlogged and that they had to utilize overtime to accomplish required functions. When faced with changing workload demands and staffing shortages, medical centers can, and do, utilize contractors.[20]

[20]GAO, *Veterans Affairs Contracting: Improvements in Polices and Processes Could Yield Cost Savings and Efficiency*, GAO-16-810. (Washington, D.C.: Sept.16, 2016.)

VHA Takes Steps to Help Medical Centers Comply with Inspection Requirements but Does Not Have Goals or Measures to Determine Program Effectiveness

While VHA provides guidance and oversight to ensure medical centers implement the environment of care inspection process, it lacks performance goals, objectives, and measures that would enable it to assess how well it is achieving its policy of a clean, safe, and functional environment. We have previously found that results-oriented organizations set performance goals to define desired program outcomes and develop performance measures that are clearly linked to these performance goals and outcomes.[21] Program goals communicate what results the agency seeks, and performance measures show the progress the agency is making toward achieving program goals. Performance measurement also gives managers crucial information to identify gaps in program performance and plan any needed improvements. Without such goals and measures in place, VHA is limited in its ability to effectively manage the Environment of Care Program, including making effective use of program data and addressing obstacles to improving program performance.

VHA's Oversight of the Environment of Care Program Focuses on Compliance with Inspections Requirements

VHA's oversight of the Environment of Care Program focuses on ensuring that medical centers are conducting the inspections according to VHA requirements. To help medical centers achieve compliance with the inspection requirements, VHA does the following:

- develops guidance for medical center and VISN staff on their roles and responsibilities in conducting inspections and compliance monitoring, and on how to use the Environment of Care inspections database software;
- oversees the deployment and maintenance of the Environment of Care inspections database software, which medical centers use to track deficiencies and staff attendance at inspections, among other things; and
- provides summary reports from inspections data on deficiencies, closure status, and staff attendance rate at inspections to officials at the medical center and VISN-level for program management purposes

To monitor a medical center's compliance with environment of care requirements, VHA tracks three measures, which, according to VHA officials, were established to ensure that medical centers were meeting

[21]GAO-05-927.

requirements related to the inspections process, such as having relevant staff present for the inspections. Table 3 below shows the three measures VHA currently uses along with the related performance targets.[22]

Table 3: Veterans Health Administration Environment of Care Inspections Process Performance Measures

Performance measure	Minimum performance target
Deficiencies identified during environment of care inspections are closed within 14-business days or have a documented plan for action.	85 percent of deficiencies within each quarter are closed or have a plan for action within 14- business days.
A member of the Senior Management Team or an acting designee attends environment of care inspections on a regular basis.	85 percent of environment of care inspections within a fiscal year are attended by a senior leader.
A facility's environment of care inspection team members participate in weekly inspections.	85 percent participation in weekly environment of care inspections over the fiscal year.

Source: VHA. | GAO-19-21

We have previously reported that performance measures should focus on outcomes to help agencies manage programs to achieve desired results.[23] VHA's current measures do not indicate whether desired outcomes are being achieved or how effective inspections are but rather whether staff are following policies related to inspections. As a result, these measures provide program managers with little information on the actual quality of the environment of care, such as the level of cleanliness and safety provided. For example:

- One performance measure is based on the requirement that medical centers address deficiencies within 14 days, either by fixing the

[22]VHA guidance on the environment of care inspections process lists a total of six performance measures. However, as noted above, VHA officials told us they no longer monitor the measures related to utilization of the environment of care checklists and environment of care inspections process because medical centers achieved 100 percent utilization. Further, they do not track a third performance measure that medical facilities trend environment of care data from the previous fiscal year and create an improvement plan for high priority issues. According to VHA officials, VA Central Office no longer tracks this measure because it was deemed a measure better tracked at the VISNs and medical center-level, and was not relevant for VA Central Office-level purposes.

[23]GAO, *Federal Buildings: GSA Should Establish Goals and Performance Measures to Manage the Smart Buildings Program* GAO-18-200 (Washington, D.C.: Jan. 30, 2018)

problem or by preparing an action plan describing how the problem will be fixed. However, because this requirement can be met with an action plan, it is not a useful measure for understanding the deficiencies that have not yet been remediated.

- Similarly, the two performance measures on staff attendance at inspections do not directly relate to the condition of the facility but reflect the level of compliance with inspection requirements. We spoke with officials at one medical center who said vacancies within their information security office prevented them from meeting the inspection team attendance measure. However, officials said the staff absence did not affect the inspection team's ability to perform an inspection and determine facility deficiencies, given that relevant engineering staff was present.

Furthermore, we have previously reported that VHA needs to strengthen aspects of the environment of care inspection process to ensure more complete and accurate data on medical center compliance with environment of care standards, and provide better oversight of the system.[24]

VHA Has Not Established Outcome-Oriented Performance Goals, Objectives, and Related Measures

VHA has not defined program goals and objectives and related performance measures, and is therefore limited in its ability to determine how well program activities, including the environment of care inspection process, are supporting the agency's broader policy of providing a clean, safe, and functional environment. VHA's current performance measures are not tied to specific performance goals for the Environment of Care Program, as such goals have not yet been created. Nor do these performance measures provide useful information on the actual condition of facilities or desired outcomes. As a result, these metrics provide VHA with limited information on how to better manage the program to ensure clean, safe, and functional medical facilities that, at a minimum, meet the Joint Commission standards. Without clearly defined and outcome-oriented goals, it will be challenging for VHA to determine what type of evaluative information it will need to monitor the progress of the Environment of Care Program, identify how system-wide challenges such as staffing shortages are affecting outcomes, and improve medical center conditions.

[24]See GAO, *VA Health Care: Improved Monitoring Needed for Effective Oversight of Care for Women Veterans*, GAO-17-52 (Washington, D.C.: Dec. 2, 2016).

VHA has stated it intends to create goals and objectives for the Environment of Care Program, along with performance measures to assess whether the goals and objectives are being achieved, but it has not yet done so. The VHA directive from 2016 that created the Environment of Care Program directed program officials to establish a steering committee, whose responsibilities would include, among other things, developing goals, objectives, and related performance measures for the program. According to a VHA official, VHA formed this committee in January 2018, following delays caused by leadership vacancies and competing demands within the agency. In June 2018, the committee finalized its charter, which states that the scope of the committee's activities is to include defining goals, objectives, performance metrics, and targets for the Environment of Care Program. VHA officials do not have a timeline in place for when they expect to complete the steps they defined in the charter.

Conclusions

To provide quality care for the nation's veterans, medical centers must be clean, safe, and functional. This standard can be a challenge given the substantial capital repair and improvement needs in many of these facilities. The Environment of Care Program is an important part of VHA's efforts to ensure medical centers are maintained in accordance with accreditation requirements. However, absent clear goals, objectives, and performance measures, and a timeline for developing them, VHA will continue to be limited in its ability to assess how effective the program is at ensuring a safe, clean, and functional environment. Setting outcome-oriented program goals and objectives provides structure to then reevaluate existing performance measures or set new ones, all of which would improve oversight, help VHA determine the effectiveness of the program, and target areas in need of improvement.

Recommendation for Agency Action

We are making the following recommendation to VHA:

The Undersecretary for Health should set a timeline for defining goals, objectives, and outcome-oriented performance measures for the Environment of Care Program. (Recommendation 1)

Agency Comments and Our Evaluation

We provided a draft of this product to VA for comment. In its written comments, reproduced in appendix I, VA stated it concurred with our recommendation. VA also provided technical comments, which we incorporated as appropriate.

Additionally, VA provided general comments on our report. In those general comments, VA questioned how we characterized the Environment of Care Program in the context of Facility Condition Assessments, the age of its buildings, and software interoperability, and stated that responsibility for a successful Environment of Care Program lies at the medical center. We agree it is important to have a strong Environment of Care Program that is facilitated by leadership at the medical center and VISN-levels. However, even with strong leadership and a robust Environment of Care Program, underlying facility condition issues—impacted by the age of the facility—can affect the kind of deficiencies found during inspections. These challenges impacted elements of the Environment of Care Program at all of the medical centers in our review.

VA also stated that the report did not adequately reflect the significance of the environment of care committees at each medical center, and that performance measures at the national level are measures of compliance, not a measure of success. We have made relevant revisions in the report to reflect the role these committees play as a part of the inspections process. We also agree with VA that the metrics established nationally are not a measure of success for the various medical centers' Environment of Care Programs. While the primary responsibility for the Environment of Care Program and its inspections is at the medical center and VISN-level, it is still important for VA to have national level performance measures. Without them, gauging national level performance and analyzing trends across medical centers is difficult. In concurring with our recommendation, VA has positioned itself to create and implement measures to support medical centers and the Environment of Care Program.

VA also made comments related to the non-recurring maintenance approval and funding process, and highlighted a pilot to test a tool to replace its current facility condition assessment. We have made revisions to footnotes and relevant report sections as appropriate to address the changes noted by VA to the non-recurring maintenance approval and funding process, and added a footnote acknowledging the pilot.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Veterans Affairs, the Undersecretary of Veterans Affairs for Health, and other interested parties. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff members have any questions regarding this report, please contact Andrew Von Ah at (202) 512-2834 or vonaha@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix III.

Sincerely yours,

Andrew Von Ah
Director, Physical Infrastructure Issues

Appendix I: Comments from the Department of Veterans Affairs

THE SECRETARY OF VETERANS AFFAIRS
WASHINGTON

October 25, 2018

Mr. Andrew Von Ah
Director
Physical Infrastructure Issues
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Von Ah:

The Department of Veterans Affairs (VA) has reviewed the Government Accountability Office (GAO) draft report: ***"VA MEDICAL CENTERS: VA Should Establish Goals and Measures to Enable Improved Oversight of Facility Conditions"*** (GAO-19-21).

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

VA appreciates the opportunity to comment on your draft report.

Sincerely,

Robert L. Wilkie

Enclosure

Enclosure

Department of Veterans Affairs Comments to
Government Accountability Office Draft Report
"VA MEDICAL CENTERS: VA Should Establish Goals and Measures to Enable Improved Oversight of Facility Conditions"
(GAO-19-21)

General Comment:

Throughout the report it seems as if the Government Accountability Office mixed services together. Assumptions were made based on other parts of the Department of Veterans Affairs (VA) as a contributing factor such as Facility Condition Assessment (FCA) and age of buildings; interoperability of the Performance Logic product with VistA. In fact, the responsibility of a successful Environment of Care (EOC) program starts at the Associate Director level and filters down throughout the organization. While various Veterans Health Administration (VHA) facilities have different challenges, the EOC program itself should be strong at the medical center due to facility leadership and oversight.

The report did not mention the significance each facility EOC committee has on each EOC program. Facility EOC committees are tasked to monitor deficiencies and to ensure that they are closed out in a reasonable/realistic timespan. A highly functional EOC committee will track all action items to completion and will keep an effective tracking system to manage pending items. The report only looked at the metrics that are established nationally, which are not a measure of success but a measure of compliance.

When reading this report it portrays a scenario where any capital type initiative above $25,000 requires VA headquarters-level approval, which is not accurate as these initiatives fall within the authority of the Veterans Integrated Service Network (VISN) and VA medical center. Separately, each VISN has prioritized the Non-Recurring Maintenance projects from the Strategic Capital Investment Plan process to afford VHA more agility and timeliness in addressing identified FCA and EOC deficiencies.

VHA is currently conducting a pilot of the Department of Defense Builder facility condition tool as a potential replacement for the VA FCA. The pilot is expected to conclude in Spring 2019, with a VHA decision to be made shortly thereafter.

Enclosure

Department of Veterans Affairs Comments to
Government Accountability Office Draft Report
"VA MEDICAL CENTERS: VA Should Establish Goals and Measures to Enable Improved Oversight of Facility Conditions"
(GAO-19-21)

GAO Recommendation: The Undersecretary for Health should set a timeline for defining goals, objectives, and outcome-oriented performance measures for the environment of care program.

VA Comment: Concur. VHA will set a timeline for defining goals, objectives, and outcome-oriented performance measures for the EOC program by the end of December 2018. This timeline will be set by the EOC Steering Committee and vetted through various VHA governing bodies.

To demonstrate completion of the recommendation, VHA will provide a timeline for defining goals, objectives, and outcome-oriented performance measures for the environment of care program. The target completion date is December 2018.

Appendix II: Inspections Related to the Condition of Veterans Health Administration's (VHA) Facilities

Table 4: Relevant Inspections Related to VHA Facilities' Condition

Inspection type	Purpose	Frequency
Facility Condition Assessment	The Facility Condition Assessment evaluates all buildings and major systems at a medical facility and identifies needed repairs and replacements. This inspection gives a graded score from A to F for VHA facilities.	Facility Condition Assessments are done on a rotating basis, with each Veterans Integrated Service Network (VISN) being evaluated every 3 years. The information gathered during each Facility Condition Assessment is put into a Facility Condition Assessment database for each facility identified by building, system, and condition. Each system has an associated cost for identified repairs and replacements. These data allow for planning and expenditure of resources within the VISNs. This information enables the VISN to plan, manage, and direct capital resources against identified needs in a consistently managed approach across the VA system.
Green Environmental Management System	Green Environmental Management System ensures VHA compliance with relevant federal, state and local environmental statutes and regulations; increases the efficiency of energy, water and other resource usage; helps reduce regulated air emissions; utilizes pollution prevention principles; incorporates environmentally preferable practices for the design, construction and operation of buildings; and ensures that VHA facilities are good neighbors in the local communities.	Green Environmental Management System inspections are done annually.
Annual Workplace Evaluation	The primary purpose and intent of the Annual Workplace Evaluation is to ensure occupational safety and health evaluations of all worksites are completed and comply with Occupational Safety and Health Administration and agency requirements. The objective is to evaluate Occupational Safety and Health Administration compliance, current building conditions, work practices, and Occupational Safety and Health Administration program implementation throughout the facility and at offsite campuses such as rented office buildings, clinics, labs, etc.	Annual Workplace Evaluations are required to be performed at least once every fiscal year. The Annual Workplace Evaluation must be scheduled at least once during a 12-month period +/- 3 months from the start date of the previous Annual Workplace Evaluation.

Source: GAO analysis of VA documents. | GAO-19-21

Appendix III: GAO Contacts and Staff Acknowledgements

GAO Contact

Andrew Von Ah at (202) 512-2834 or VonAhA@gao.gov

Staff Acknowledgments

In addition to the contact named above, Heather J. Halliwell (Assistant Director), Betsey Ward-Jenks (Analyst-in-Charge), Dwayne Curry, and Colleen A. Taylor made key contributions to this report. Also contributing were Kelly Rubin, Michelle Weathers, and Crystal Wesco.