



October 2017

# VETERANS HEALTH ADMINISTRATION

## Better Data and Evaluation Could Help Improve Physician Staffing, Recruitment, and Retention Strategies

Accessible Version

# GAO Highlights

Highlights of [GAO-18-124](#), a report to congressional addressees

## Why GAO Did This Study

Physicians serve an integral role in VHA's mission of providing care to the nation's veterans. VHA hires more than 2,800 mission-critical physicians annually. Yet, physicians have consistently been identified by VHA as a critical staffing priority due to recruitment and retention concerns.

The explanatory statement accompanying the Consolidated Appropriations Act of 2016 directed GAO to review VHA's physician workforce. This report addresses: for the mission-critical physicians, (1) VHA data on how many physicians provide care, and (2) the extent VHA measures physician workload and productivity; and for all physicians, (3) what evaluations have been done on the effectiveness of its recruitment and retention strategies. GAO reviewed VHA documentation, such as policies and guidance, personnel data and workload measures. GAO interviewed officials from VHA Central Office, and six VAMCs and their corresponding regional offices. GAO selected the VAMCs for variation in location, facility complexity, and physician staffing levels.

## What GAO Recommends

GAO makes five recommendations, including that VA develop a process to count all physicians, provide guidance on productivity measurement, and evaluate its physician recruitment and retention strategies. VA concurred with four of the five recommendations, but not with the one to accurately count all physicians, stating that its workforce assessment tools are sufficient. However, GAO maintains that this is essential for effective workforce planning, as described in the report.

View [GAO-18-124](#). For more information, contact Debra A. Draper at (202) 512-7114 or [draperd@gao.gov](mailto:draperd@gao.gov).

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### Better Data and Evaluation Could Help Improve Physician Staffing, Recruitment, and Retention Strategies

#### What GAO Found

The Veterans Health Administration (VHA), within the U.S. Department of Veterans Affairs (VA), has opportunities to improve staffing, recruitment, and retention strategies for physicians that it identified as a priority for staffing, or mission-critical. For 2016, the top five physician mission-critical occupations were primary care, mental health, gastroenterology, orthopedic surgery, and emergency medicine. Specifically, GAO identified the following issues:

**Incomplete information on number of physicians.** VHA is unable to accurately count the total number of physicians who provide care in its VA medical centers (VAMC). VHA has data on the number of mission-critical physicians it employs (more than 11,000) and that provide services on a fee-basis (about 2,800). However, VHA lacks data on the number of contract physicians and physician trainees. Five of the six VAMCs in GAO's review used contract physicians or physician trainees to meet their staffing needs, but VHA has no information on the extent to which VAMCs nationwide use these arrangements.

**VAMCs' Use of Contract Physicians, Fee-Basis Physicians, and Physician Trainees for Mission-Critical Physician Occupations at the Six VAMCs We Reviewed, as of March 31, 2017**

Facility	Contract physicians	Fee-basis physicians	Physician trainees
A			
B			
C			
D			
E			
F			

Facility uses arrangement      Facility does not use arrangement

Source: GAO analysis of Department of Veterans Affairs Medical Centers' (VAMC) data. | [GAO-18-124](#)

**Inconsistent productivity data.** VHA measures productivity for some mission-critical physician occupations; however, mental health departments receive conflicting sets of productivity metrics from two VHA offices—the Office of Productivity, Efficiency, and Staffing and the Office of Mental Health Operations. VHA officials told us the two offices use differing data to serve different purposes, and acknowledged that while information on how to interpret the two sets of productivity data is available, VAMC officials may find the data confusing.

**Lack of a comprehensive evaluation of its recruitment and retention strategies.** VHA has not evaluated the effectiveness of its physician recruitment and retention strategies. One such strategy—hiring physician trainees—is weakened by ineffectual hiring practices, such as delaying employment offers until graduation. VHA's strategies could be strengthened by comprehensively evaluating the causes of recruitment and retention difficulties and identifying effective solutions.

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**Abbreviations**

EDRP	Education Debt Reduction Program
EPROM	Enhanced Physician Recruitment and Onboarding Model
FTE	Full Time Equivalent
HRSA	Health Resources and Services Administration
HR	human resources
OIG	Office of the Inspector General
OMHO	Office of Mental Health Operations
OPES	Office of Productivity, Efficiency, and Staffing
VA	Department of Veterans Affairs
VAMC	Department of Veterans Affairs medical centers
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Networks
wRVU	work relative value unit

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October 19, 2017

Congressional Addressees

A strong clinical workforce capable of providing quality and timely care to our nation’s veterans is critical for the success of the Veterans Health Administration (VHA), within the Department of Veterans Affairs (VA). In particular, there is a growing nationwide gap between the supply of and demand for physicians, so attracting, hiring, and retaining physicians is especially critical for VHA. VHA operates one of the largest health care systems in the United States, providing care at 1,252 facilities, including 170 Veterans Affairs medical centers (VAMC).<sup>1</sup> Within these facilities, VHA physicians provide and supervise a broad range of care, including primary care and specialty care services such as mental health, gastroenterology, surgery, and emergency medicine. The demand for VHA’s services has grown in recent years, a trend that is expected to continue in coming years, due in part to the growing needs of an aging veteran population and an increasing number of servicemembers who served in Afghanistan and Iraq separating from military service. As such, the demand for physicians is also likely to increase.

Over the past two decades, we and others have expressed concern about VHA’s ability to ensure that it has the appropriate clinical workforce to meet the current and future needs of veterans.<sup>2</sup> VHA recruits and hires more than 2,800 physicians annually.<sup>3</sup> However, in 2016, we found that VHA’s physician losses—the number of physicians who leave VHA each

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<sup>1</sup>In addition to the 170 VAMCs, VHA also operates 1,082 outpatient sites of care, such as health care centers and community-based outpatient clinics.

<sup>2</sup>We and the VA Office of the Inspector General have issued at least 16 reports between 1981 and 2017 that raise a variety of concerns about VHA’s workforce. Specific concerns have included whether or not VHA (1) has sufficient numbers of certain types of clinical employees; (2) is using reliable data to measure workload and productivity; and (3) has sufficient oversight of recruitment and retention incentives for nurses and performance pay for physicians.

<sup>3</sup>According to VA officials, at the height of VHA’s Choice Act Hiring Initiative, the department hired almost 3,400 physicians within a one-year time period.

year—has steadily increased over the past five years.<sup>4</sup> A 2015 independent assessment found that if VHA does not increase its total number of clinical employees, including physicians, it will be difficult for it to meet the projected demand for services.<sup>5</sup> Further, this assessment found that if VHA did not make substantial improvements in clinical productivity, it would not be able to produce enough health care services to meet the projected demand. VHA generally hires more physicians than it loses and increased its number of physicians by 3.1 percent in fiscal year 2016. However, concerns about VHA’s clinical workforce remain.

VHA officials also have expressed concern with the agency’s ability to recruit and retain an adequate physician workforce. As a result of the time frames for VHA’s hiring process, a limited supply of candidates, and competition for candidates, among other factors, VHA indicated that physicians occupy a top spot on VHA’s annual list of mission-critical occupations.<sup>6</sup> Within the physician category, VHA also identifies the top five physician occupations that are the hardest to recruit and retain. We will use the term “mission-critical physician occupations” to refer to the top five physician occupations VHA identified in fiscal year 2016 as most in

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<sup>4</sup>VHA’s physician loss rates are similar to the average loss rates across all of VHA’s occupations. According to VHA officials, its current loss rates are similar to those VHA experienced prior to the fiscal year 2008 economic downturn. Reasons for physician losses include retirement, involuntary separations, terminations, and death. See GAO, *Veterans Health Administration: Personnel Data Show Losses Increased for Clinical Occupations from Fiscal Year 2011 through 2015, Driven by Voluntary Resignations and Retirements*, [GAO-16-666R](#) (Washington, D.C.: July 29, 2016).

<sup>5</sup>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 this independent assessment. Parts of the assessment were subcontracted to other organizations, including McKinsey & Company and the RAND Corporation. See Centers for Medicare & Medicaid Services’ Alliance to Modernize Healthcare Federally Funded Research and Development Center, *Assessment B (Health Care Capabilities)*, (Sept. 1, 2015).

VHA has increased the number of physicians it employs by an average of 4 percent annually, according to VHA officials.

<sup>6</sup>VHA obtains data from its Veterans Integrated Service Networks and VAMCs on which occupations are the highest priority for recruitment and retention based on known recruitment and retention concerns, among other factors. VHA then consolidates this data to identify the nationwide top 10 mission-critical occupations and top 5 mission-critical physician occupations. In fiscal year 2016, the ten mission-critical clinical occupations were physician, registered nurse, human resource manager, physical therapist, physician assistant, psychologist, medical technologist, occupational therapist, diagnostic radiologic technologist, and pharmacist. See U.S. Department of Veterans Affairs, Veterans Health Administration, *Mission Critical Occupation Report* (2016).

need of staffing: primary care, mental health, gastroenterology, orthopedic surgery, and emergency medicine.

The explanatory statement accompanying the Consolidated Appropriations Act, 2016 incorporated language for GAO to review physician staffing, workload measurement, and recruitment and retention at VHA.<sup>7</sup> This report assesses,

(1) for the mission-critical physician occupations, VHA data on how many physicians provide care at VHA medical centers and how the agency determines its physician staffing needs,

(2) for the mission-critical physician occupations, to what extent does VHA measure physician workload and productivity, and,

(3) for all physicians, the strategies VHA uses to support the recruitment and retention of physicians at its medical centers, and how VHA has evaluated these strategies to determine their effectiveness.

For all three objectives, we reviewed relevant VHA documentation describing its processes for collecting and using workforce information, including information on its human resources (HR) processes, workforce strategic planning processes and reports, and evaluations of its recruitment and retention efforts. We also reviewed our prior work and work of the VA Office of Inspector General (OIG) that described staffing shortages and issues with the retention of clinical employees.<sup>8</sup>

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<sup>7</sup>H.R. 2029, 114<sup>th</sup> Cong. (as amended by S. Amdt. 2763, 161 Cong. Rec. S7823 (daily ed. Nov. 5, 2015) (statement of Sen. Kirk), (as amended by S. Amdt. 2786, 161 Cong. Rec. S7878, S7879 (daily ed. Nov. 10, 2015) (statement of Sen. Kirk))), as incorporated by the explanatory statement, 161 Cong. Rec. H10162, 10395 (daily ed. Dec. 17, 2015) (statement of Rep. Rogers, Chairman, House Comm. on Appropriations) specifically referenced in section 4 of the Consolidated Appropriations Act, 2016, Pub. L. No. 114-113, § 4, 129 Stat. 2242, 2244 (2015).

<sup>8</sup>See GAO, *Veterans Health Administration: Personnel Data Show Losses Increased for Clinical Occupations from Fiscal Year 2011 through 2015, Driven by Voluntary Resignations and Retirements*, [GAO-16-666R](#) (Washington, D.C.: July 29, 2016); *VA Health Care: Oversight Improvements Needed for Nurse Recruitment and Retention Initiatives*, [GAO-15-794](#) (Washington, D.C.: Sept. 30, 2015); *VA Health Care: Actions Needed to Ensure Adequate and Qualified Nurse Staffing*, [GAO-15-61](#) (Washington, D.C.: Oct. 16, 2014). See also U.S. Department of Veterans Affairs Office of the Inspector General, *Veterans Health Administration: Audit of Physician Staffing Levels for Specialty Care Services*, 11-01827-36 (Dec. 27, 2012); and *OIG Determination of Veterans Health Administration's Occupational Staffing Shortages*, 16-00351-453 (Sept. 28, 2016).

Additionally, we interviewed officials from several VHA offices, including its Office of Workforce Management and Consulting and its various programs, such as the National Healthcare Recruitment Program, Office of Productivity, Efficiency, and Staffing (OPES), Office of Academic Affiliations, and the national program offices and directors that oversee each of the mission-critical physician occupations.<sup>9</sup> We compared VHA's activities to relevant federal standards for internal control.<sup>10</sup>

Further, for all three objectives, we reviewed documents and interviewed officials from six VAMCs located in (1) Philadelphia, Pennsylvania; (2) Erie, Pennsylvania; (3) Columbia, Missouri; (4) Marion, Illinois; (5) Seattle, Washington; and (6) Portland, Oregon. We selected these VAMCs for variation in geographic location, facility complexity level, and number of physicians in each of the mission-critical physician occupations providing care within the VAMC.<sup>11</sup> We also interviewed officials in the Veterans Integrated Service Networks (VISN)—regional network offices—who oversee the medical centers we reviewed.<sup>12</sup> Information from these VAMCs cannot be generalized to all VHA facilities.

Additionally, we obtained and reviewed additional information specific to each objective. For the first objective, we obtained and reviewed data on the number of physicians in each of the mission-critical physician occupations that provide care at VAMCs. These data were from VHA's two personnel data systems: (1) Personnel and Accounting Integrated Data, and (2) HR Smart. These databases include information on each employee's occupational category, such as physician, and also subcategory, such as primary care physician, psychiatrist, or

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<sup>9</sup>OPES is an office within VA Central Office responsible for developing VA's clinical productivity metrics and efficiency models.

<sup>10</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014). Internal control is a process affected by an entity's oversight body, management, and other personnel that provides reasonable assurance that the objectives of an entity will be achieved.

<sup>11</sup>VHA categorizes VAMCs according to complexity level, which is determined on the basis of the characteristics of the patient population, clinical services offered, educational and research missions, and administrative complexity. There are three complexity levels with level 1 representing the most complex facilities and level 3 the least complex. Level 1 is further subdivided into categories 1a, 1b, and 1c. Therefore, VAMCs that are categorized as Level 1a would offer the most advanced and complex medical treatment within VHA's medical care system.

<sup>12</sup>Each of VHA's 18 VISNs is responsible for managing and overseeing VA medical centers within a defined geographic area.

gastroenterologist, among others. We also obtained the number of unique patients at each VAMC from VHA's Office of Primary Care Services, and OPES. For the second objective, we obtained and reviewed workload and productivity data for mission-critical physician occupations from OPES and VHA's Office of Mental Health Operations (OMHO).<sup>13</sup> For the third objective, we obtained and reviewed information on the strategies VHA uses to support the recruitment and retention of physicians at its VAMCs from VHA's Central Office. We also conducted interviews about private sector physician recruitment and retention practices with representatives of organizations involved in physician recruitment, including a private physician recruiting firm and the Association of Staff Physician Recruiters to gain additional insights.

For all data sources, we reviewed relevant VHA documentation that described how the data were collected and used. We assessed the reliability of these data in several ways, including reviewing each data source for reasonableness and consistency with other published reports that used the same data, conducting internal checks for missing or erroneous data, and interviewing VHA officials knowledgeable about the data's reliability. Based on these activities, we determined that the data we used were sufficiently reliable for the purposes of our reporting objectives.

We conducted this performance audit from March 2016 to October 2017 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.

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## Background

The Health Resources and Services Administration (HRSA) anticipates that by 2025 the national demand for physician services will exceed supply, including for primary care, mental health, and medical and surgical specialists such as gastroenterologists and orthopedic

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<sup>13</sup>OMHO is the national program office that sets program and policy guidance for mental health services provided throughout VHA.

surgeons.<sup>14</sup> Specifically, HRSA projects shortages of more than 23,000 primary care physicians, 6,000 psychiatrists, 1,000 gastroenterologists, and 5,000 orthopedic surgeons.<sup>15</sup> Further, HRSA's Office of Rural Health Policy has reported that these shortages are currently exacerbated in rural areas, where communities struggle to attract and keep well-trained providers.<sup>16</sup> This difficulty poses a particular challenge for VHA as at least 26 percent of its VAMCs are located in rural areas.

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## VHA Arrangements to Obtain Physician Services at VAMCs

Most physicians providing care at VAMCs are employed by VHA.<sup>17</sup> VHA's hiring authority for these physicians is found in Title 38 of the United States Code (U.S. Code).<sup>18</sup> VHA uses a different hiring authority, found in

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<sup>14</sup>HRSA is the primary federal agency for improving access to health care services for people who are uninsured, isolated or medically vulnerable. It developed workforce projections for 2025, using data from 2013 as the baseline. In 2016, HRSA issued several reports detailing its workforce projections for a number of clinical occupations. See, for example, Department of Health and Human Services, Health Resources and Services Administration, *National and Regional Projections of Supply and Demand for Primary Care Practitioners: 2013-2025*, November 2016; *National and Regional Projections of Supply and Demand for Selected Behavioral Health Practitioners: 2013-2025*, November 2016; and *National and Regional Projections of Supply and Demand for Surgical Specialty Practitioners: 2013-2025*, December 2016.

<sup>15</sup>In 2017, HRSA data showed that approximately 59 percent of current primary care health professional shortage areas and 53 percent of mental health professional shortage areas are in rural locations. A health professional shortage area is an area designated by HRSA as having shortages of primary care, dental care, or mental health providers and may be geographic (a county or service area), a population (e.g., low income or Medicaid eligible) or a facility (e.g., federally qualified health centers, or state or federal prisons).

<sup>16</sup>Department of Health and Human Services, Health Resources and Services Administration, *Designated Health Professional Shortage Areas Statistic*, HRSA Data Warehouse, accessed May 31, 2017.

<sup>17</sup>In this report, for ease of comprehension, we refer to the respective personnel systems by the terms VA uses, which generally correspond to the applicable codification in the United States Code (U.S. Code) which authorizes those personnel systems.

<sup>18</sup>Hiring authority is the law, executive order, or regulation that allows an agency to hire a person into the federal civil service. Amongst other roles, hiring authorities determine the rules (or a subset of rules within a broader set) that agencies must follow throughout the hiring process. These rules may include whether a vacancy must be announced, who is eligible to apply, how the applicant will be assessed, whether veterans' preference applies, and how long the employee may stay in federal service.

Title 5 of the U.S. Code, for other personnel, such as its police officers and accountants.<sup>19</sup> Each of the personnel systems under these authorities have different requirements (and flexibilities) related to recruitment and hiring, performance management, and other areas served by VHA's HR staff. For example, Title 5 governs the competitive examining process requirements for hiring for traditional federal competitive service positions. It requires that agencies notify the public that the government will accept applications for a job, screen applications against minimum qualification standards, apply selection priorities such as veterans' preference, and assess applicants' relative competencies or knowledge, skills, and abilities against job-related criteria to identify the most qualified applicants. Title 38 does not contain the same competitive examining process requirements for hiring physicians. Instead, hiring decisions are based on a physician's qualifications and professional attainments.

VHA also supplements the capacity of its employed physician staff by acquiring additional physician services through fee-basis arrangements or contracts. Under fee-basis arrangements providers are paid a pre-agreed-upon amount for each service provided. Under contracts, physician services may be obtained on a short-term basis through sole-source contracts with academic affiliates or locums tenens agreements.<sup>20</sup> VAMCs may also use physicians who volunteer their time, who are referred to as work-without-compensation providers.

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In this report, "Title 38" refers to Title 38 of the U.S. Code which provides for veterans benefits and includes certain VHA personnel management laws. Specifically, VHA hires its physician employees under the authority of 38 U.S.C. § 7401.

<sup>19</sup>In this report, "Title 5" refers to title 5 of the U.S. Code, the government-wide personnel management laws and related provisions generally applicable to federal employment. The majority of federal government employees are hired under Title 5 authority.

<sup>20</sup>The term academic affiliate describes any of the following three entities in a partnership with a VAMC: (1) a university medical school, (2) a university hospital, or (3) a university affiliated physician practice group. If VA requires health care resources—such as physician services, medical equipment usage, or clinical space—and intends to acquire these resources from its affiliate due to its connection with a residency program, VA can enter into a non-competitive contract with that affiliate. See 38 U.S.C. § 8153(a)(3)(A).

These sole source contracts are available only to VAMCs and their affiliates and allow a VAMC to obtain physician services directly from the affiliate without competition if those services are necessary to support learning opportunities for physicians during their residency training in VAMCs. See Department of Veterans Affairs, *Health Care Resources Contracting—Buying, Title 38 U.S.C. 8153*, VA Directive 1663 (Aug. 10, 2006).

In addition to VHA-employed, contract, and fee-basis physicians, VAMCs often supplement their capacity by using physician trainees, who include medical residents and advanced fellows.<sup>21</sup> In 2016, 135 of the 170 VAMCs had active physician training programs. According to VHA officials, there were 43,768 medical residents trained at a VAMC in 2016. VHA is expanding its physician training program, as directed by the Veterans Access, Choice, and Accountability Act of 2014, as amended.<sup>22</sup> In 2017, VHA added 175 physician trainee positions broadly across VAMCs nationwide, including three VAMCs that did not have physician trainees prior to this expansion. VHA's objective is to add 953 additional physician trainee positions to its medical centers by 2025 in order to improve access and hire additional physicians. Further, VHA officials told us they want to continue to add new positions that would eventually allow all VAMCs access to physician trainees.

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## VHA Productivity Metrics

VHA has developed metrics to assess physicians' clinical productivity, one of multiple factors used to decide whether a VAMC needs additional physicians in a given department. Two VHA offices, OPES and OMHO, measure productivity. OPES measures productivity for individual physicians across VHA, and then aggregates the data to measure the average productivity for each type of physician. OMHO measures productivity for all mental health service providers, including individual physicians, and then it aggregates the data by program type, such as inpatient vs. outpatient mental health, and by provider type, such as psychiatrist vs. social worker.

VHA's productivity metrics have two components: (1) work-relative value units (wRVU)—numerical values assigned to procedures based on the time, mental effort, and judgment; technical skill and effort; and stress involved in providing them, and (2) the time physicians allocate to clinical

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<sup>21</sup>A medical resident or fellow is a physician who practices medicine under the direct or indirect supervision of an attending physician. Successful completion of a residency program is a requirement to obtaining an unrestricted license to practice medicine. Advanced fellows are individuals who have completed all desired residency training (including fellowships) and have stayed in VHA for additional training.

<sup>22</sup>Pub. L. No. 113-146, § 301(b)(2), 128 Stat. 1754, 1785 (2014), as amended by Pub. L. No. 114-315, § 617(a), 113 Stat. 1536, 1577 (2016) (codified at 38 U.S.C. § 7302 note).

work.<sup>23</sup> To calculate productivity, VHA divides the number of wRVUs a physician generates by a physician's clinical work time (see figure 1).<sup>24</sup> The Centers for Medicare & Medicaid Services first developed wRVUs in 1992 to determine payment rates for Medicare physicians' services, and they are currently used throughout the health care industry to measure productivity. At VHA, wRVU data are automatically calculated based on the procedures that physicians record in patients' electronic medical records, and the data are captured in a national database.

**Figure 1: Veterans Health Administration (VHA) Calculation of Physician Productivity Metric**



Source: GAO analysis of Veterans Health Administration information. | GAO-18-124

Note: A wRVU is a numerical value that is assigned to a procedure based on the time, mental effort and judgment, technical skill and effort, and stress involved in delivering that health care procedure. These values are calculated for individual providers and aggregated by program or physician type at Veterans Affairs medical centers.

## VHA Lacks Complete Information on Mission-Critical Physicians and Sufficient Guidance for Determining Some Staffing Needs

VHA has data on the number of physicians in mission-critical physician occupations it employs, but it does not have data on the number of physicians who provide care at VAMCs through some other

<sup>23</sup>For instance, in 2016, a typical outpatient office visit was 1.42 wRVU, while a colonoscopy was 3.82 wRVU.

<sup>24</sup>Physicians' clinical time is measured as the amount of full-time employee equivalent time spent on clinical work, as distinct from research, education, and administrative workload. For example, a full-time physician, who performs clinical work 4 days per week and research duties 1 day per week, would be counted as 0.8 full-time employee equivalents.

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arrangements, such as through contracts.<sup>25</sup> Although VHA provides guidance to VAMCs on determining staffing needs for some of its mission-critical physician occupations—primary care, mental health, and emergency medicine—it lacks sufficient guidance on how VAMCs should determine their needs in the others—gastroenterology and orthopedic surgery.

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### VHA Has Data on the Number of Mission-Critical Physicians It Employs, but Lacks Similar Data on Those with Some Other Arrangements

VHA's personnel database showed that about 45 percent of employed physicians (11,276 of the total 25,010) were in mission-critical physician occupations at VAMCs nationwide as of March 2017. (See Appendix I for the number of these physicians at each VAMC, and Appendix II for the number of unique patients seen at each VAMC in the mission-critical departments.)<sup>26</sup> According to VHA officials, VHA's data show that VAMCs have fee-basis arrangements with about 2,842 mission-critical physicians, and that an average of 1,316 provide care in any given pay period.<sup>27</sup> However, VHA data generally underestimates the total number of physicians providing care at VHA facilities because VHA lacks data on contract physicians.<sup>28</sup> Additionally, its data on physician trainees is limited, because only a small fraction of trainees are included in VHA's personnel database. Further, VHA does not generally include the data on fee-basis providers in its assessments or reports on the physician

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<sup>25</sup>All physicians are considered by VHA to be mission-critical. Within the physician category, VHA also identifies the top five physician occupations that have the most critical staffing needs each year. We use the term "mission-critical physician occupations" to refer to the top five physician occupations VHA identified in fiscal year 2016 as most in need of staffing: primary care, mental health, gastroenterology, orthopedic surgery, and emergency medicine.

<sup>26</sup>These mission-critical physicians filled 10,224.3 FTE positions at VAMCs nationwide as of March 31, 2017.

<sup>27</sup>According to officials, fee-basis physicians are compensated through VHA's payroll system and, therefore, are included in VHA's personnel database. Fee-basis physicians' compensation is based on the number and type of medical services provided. Therefore, VHA does not have data on the number of FTE positions filled by fee-basis physicians. VHA officials told us they can use encounter data—the number of professional contacts between a patient and provider—to estimate the FTE contribution of fee-basis physicians.

<sup>28</sup>According to VAMC HR officials, contract physicians are not compensated through VHA's payroll system and, therefore, are not included in VHA's personnel database.

workforce. Historically, VHA officials have excluded fee-basis physicians from their workforce analysis because the full-time equivalent (FTE) contribution of fee-basis physicians could not be calculated. In response to our report, VHA officials from the Office of Workforce and Management Consulting told us they are planning to work with OPES to combine their information and possibly include these numbers in future workforce reports.

All six VAMCs included in our review used at least one type of arrangement other than employment for physicians and five of the six used contract physicians or physician trainees (see figure 2). On average, contract and fee-basis physicians made up 5 to 40 percent of the physicians in a given mission-critical physician occupation at each VAMC in our review.<sup>29</sup> For example, officials from a large, highly complex VAMC told us that, in March 2017, they augmented the 86 employed primary care physicians with 8 contract and 3 fee-basis physicians, which represented about 16 percent of their primary care physician workforce.<sup>30</sup> Further, this VAMC also had about 64 primary care physician trainees providing certain medical services under the supervision of a senior physician.

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<sup>29</sup>One of the six VAMCs we reviewed told us that they used both contract and fee-basis physicians, but they were not able to determine if these physicians worked in mission-critical physician occupations. Also, because physicians who are compensated on a fee-basis do not have an assigned FTE, we were unable to calculate the percentage of FTE that contract and fee-basis physicians contribute to a VAMC. VAMC officials told us that, in order to ensure a physician is on-call 24 hours a day, 7 days a week, they may have a number of physicians on contract that only provide a limited amount of care.

<sup>30</sup>The contract and fee-basis physicians constituted approximately 6 percent of the VAMC's primary care FTE positions, which is lower because contract primary care physicians were often used on a part-time basis. Officials from this VAMC told us that employed primary care physicians filled 85 FTE positions, while contract physicians filled 3, and fee-basis physicians covered about 1 FTE.

**Figure 2: VAMCs' Use of Contract Physicians, Fee-Basis Physicians, and Physician Trainees for Mission-Critical Physician Occupations at the Six VAMCs We Reviewed, as of March 31, 2017**

Facility	Contract physicians	Fee-basis physicians	Physician trainees
A			
B			
C			
D			
E			
F			

-  Facility uses arrangement
-  Facility does not use arrangement

Source: GAO analysis of Department of Veterans Affairs Medical Centers' (VAMC) data. | GAO-18-124

A complete accounting of all physicians is not available in VHA's personnel database nor is it available through VAMC-specific personnel databases. VHA officials told us that its personnel databases are designed to manage VHA's payroll systems and do not currently contain information on contract physicians or physician trainees.<sup>31</sup> VHA officials told us they are working to include information on physician trainees in HR Smart—a new HR database implemented in 2017—however they were not aware of plans to add information on contract physicians. Instead, VAMC leaders may use locally devised methods to identify and track these physicians. Officials from the VAMCs we reviewed tracked the total number of physicians, both employed and those under other arrangements, in different ways. For example, one VAMC used a locally maintained spreadsheet to track its physicians under arrangements other than employment, while another VAMC asked department leaders to

<sup>31</sup>VHA currently has two personnel databases—the Personnel and Accounting Integrated Data and HR Smart. VHA is in the process of retiring the Personnel and Accounting Integrated Data database which was written in Common Business Oriented Language—a programming language developed in the 1950s and 1960s—and runs on IBM mainframe. VHA has implemented its new system—HR Smart—at all VAMCs. According to VHA officials, they are still working to ensure the accuracy of data that was transferred into the system when it was implemented. As such, they continue to use the Personnel and Accounting Integrated Data database to obtain data for VHA-wide assessments and reports.

identify how many of these physicians provided care within their respective departments. At each of the VAMCs in our review, department leaders were generally knowledgeable about the total number of physicians that provided care within the departments they managed. However, this locally maintained information is not readily accessible by VHA officials.

Additionally, information VHA collects from VAMCs for workforce planning purposes does not include physicians who are not employed by VHA. Specifically, VAMCs report annually through a web-based planning tool that aggregates data to the national level for system-wide workforce succession planning. To help VAMCs estimate the number of physicians needed to meet local demand, the tool provides historical information for each VAMC on the number of VHA employees and local loss rates. However, this tool does not collect information on the number of contract physicians, fee-basis physicians, or physician trainees, all of whom help VAMCs to meet demand. As a result, each VAMC's workforce strategic planning report, which is generated through VHA's planning tool, may not consider physicians who provide care through arrangements other than employment, even when that VAMC uses these physicians in mission-critical occupations.

Federal standards for internal control state that management should ensure that relevant information is available, through its data systems and communications, to facilitate decision-making and monitoring program performance.<sup>32</sup> An official from the Workforce Management and Consulting Office told us they are planning to work with OPES to consolidate available information on VHA's physician workforce from various sources. The lack of ready access to complete information on all types of physicians, including physicians who provide care under arrangements other than employment, means VHA is not fully informed of its total physician workforce, including the extent to which its VAMCs are relying on physicians under these other arrangements. As such, VHA cannot ensure that its workforce planning process sufficiently addresses gaps in physician staffing, including whether staffing is appropriately allocated across VAMCs and departments, which may affect veterans' access to care, among other issues. For example, officials from all six of the VAMCs in our review told us that while these other arrangements

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<sup>32</sup>See GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

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sometimes served as an economical way to cover availability requirements; they generally prefer to use VHA employees to provide the majority of care because they have greater control over both the costs and quality of care provided.

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### VHA Gives Responsibility for Determining Staff Needs to its VAMCs, but Lacks Sufficient Guidance for Some Occupations

VHA gives responsibility for determining staffing needs to its VAMCs and provides, through policies and directives, VAMCs with guidance on how to determine the number of physicians and support staff needed in some mission-critical physician occupations. Specifically, VHA provides this guidance for primary care, mental health, and emergency medicine. However, VHA lacks sufficient guidance for its medical and surgical specialties, including mission-critical occupations such as gastroenterology and orthopedic surgery. For these occupations, VHA only provides guidance on the minimum number of physicians and does not provide information on how to make decisions on appropriate staffing for physicians or support staff based on the need for care.

**Primary Care:** VHA established a baseline panel size of 1,200 veterans per full-time primary care physician.<sup>33</sup> Panel size refers to the number of veterans for whom, at any given time, a physician is responsible for providing care.<sup>34</sup> VHA guidance indicates that VAMCs should determine primary care physician staffing needs using the baseline panel size, making adjustments based on the number of physicians and other providers, support staff, and exam rooms; projections of the average

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<sup>33</sup>Veterans Health Administration, *Patient Aligned Care Team (PACT) Handbook*, VHA Handbook 1101.10 (February 5, 2014).

<sup>34</sup>Primary care services are delivered through patient aligned care teams consisting of a primary care provider, which may be a physician, nurse practitioner, or physician assistant, and support staff, such as a nurse care manager, clinical associate, and administrative clerk. Some teams also include a mental health provider, such as a psychologist, who provides mental health services within primary care clinics. Teams led by other types of providers, such as nurse practitioners and physician assistants, are generally assigned a panel size that is 75 percent of a physician's panel size. Our prior work in this area noted that VHA's baseline panel size is likely considerably smaller than primary care panels in the private sector. See GAO, *Primary Care: Improved Oversight Needed to Better Ensure Timely Access and Efficient Delivery of Care*. [GAO-16-83](#) (Washington, D.C.: Oct 8, 2015).

number of primary care visits; and patient characteristics, such as the proportion of patients with chronic conditions.

**Mental Health:** In 2012, VHA recommended that all VAMCs have an overall staffing level of at least 1.22 FTE psychiatrists for every 1,000 mental health patients. VHA also recommends that VAMCs have an overall outpatient clinical mental health staffing level of at least 7.72 FTEs per 1,000 mental health patients. This includes all mental health staff, such as psychiatrists, psychologists, and licensed social workers, among others that provide clinical care.<sup>35</sup> In addition, VHA provides guidance to VAMCs on staffing primary care mental health integration. Specifically, VHA recommends VAMCs have at least 0.67 mental health FTE per primary care team. Further, VHA's guidance encourages VAMCs to also consider the productivity, the area's veteran population, the needs of the population served, and types of services provided when determining its mental health staffing needs.

**Emergency Medicine:** VHA's emergency medicine guidance states that VAMCs are to meet a minimum staffing requirement of one physician and two registered nurses 24 hours a day, 7 days a week.<sup>36</sup> To determine when additional emergency staff might be needed, VHA directs VAMCs to use information on the emergency department's volume, complexity, availability of equipment and support services, and patient flow—defined as the amount of time patients spend in the various stages of an emergency department encounter. For example, a VAMC may adjust its staffing levels on weekdays or weekends to account for differences in patient volume.

**Gastroenterology and Orthopedic Surgery:** VHA guidance sets a minimum requirement that VAMCs of a certain complexity level have at least one gastroenterologist and one orthopedic surgeon that is available within 15 minutes by phone or 60 minutes in person 24 hours a day, 7 days a week.<sup>37</sup> VHA guidance does not include information on how to use

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<sup>35</sup>VHA recommends that the 7.72 FTEs only include the time dedicated to clinical care, not administrative, education, or research time.

<sup>36</sup>U.S. Department of Veterans Affairs, Veterans Health Administration, *Emergency Medicine*, VHA Directive 1101.05(2) (Sept. 2, 2016).

<sup>37</sup>U.S. Department of Veterans Affairs, Veterans Health Administration, *Facility Infrastructure Requirements to Perform Standard, Intermediate, or Complex Surgical Procedures*, VHA Directive 2010-018 (May 6, 2010).

workload data to manage the demand for care or help inform staffing levels in these physician occupations. Officials from four of the six VAMCs we reviewed told us that because they lacked (a) guidance on how to determine the number of physicians and support staff needed and (b) data on how their staffing levels compared with those of similar VAMCs, they were sometimes unsure whether their staffing levels were adequate.

In 2016, VHA established a specialty physician staffing workgroup which examined the relationships between staffing levels, provider workload and productivity, veterans' access, and cost across VAMCs, for its medical and surgical specialties, including gastroenterology and orthopedic surgery.<sup>38</sup> This group's work culminated with a January 2017 report that noted VHA was unable to assess and report on the staffing at each VAMC, as required by the Veterans Access, Choice, and Accountability Act of 2014, because a staffing model for specialty care had not been established and applied across VAMCs.<sup>39</sup> The 2017 report made a number of recommendations, including that VHA provide guidance to its VAMCs on what level of staffing is appropriate for these mission-critical physician occupations. However, VHA leadership has not yet taken steps to develop such staffing guidance. According to a VHA official, other priorities are taking precedence and continued work in this area has not yet been approved by VHA leadership. Although VHA officials agree further steps should be taken, they did not indicate when these will occur. Until VHA issues guidance on staffing levels for certain physicians that provide specialty care to veterans, there will continue to be ambiguity for VAMCs on how to determine appropriate staffing levels.

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<sup>38</sup>On January 14, 2016, VA's Under Secretary for Health chartered the Staffing Model for the Delivery of Specialty Care Work Group.

<sup>39</sup>The Veterans Access, Choice, and Accountability Act of 2014 was enacted in response to the health care access issues facing VHA. This act provides new authorities, funding, and other tools to help support and reform VHA. It also requires VHA to report out on certain topics, such as the physician staffing level at each VAMC.

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## VHA Measures Workload for All Mission-Critical Physician Occupations, but Problematic Data Prevent Effective Productivity Measurement

VHA measures workload for all mission-critical physician occupations using measures of volume, namely the number of patients and number of encounters.<sup>40</sup> VHA also measures productivity for most mission-critical occupations, but problematic data prevent effective productivity measurement for some mission-critical physician occupations.

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### VHA Measures Workload Using Patient and Encounter Volume for All Mission-Critical Physician Occupations

To assess workload for mission-critical physician occupations, VHA measures the number of patients and encounters, and provides this workload data to VAMCs. According to VHA officials, VAMCs then use this data to help manage the demand for care and inform staffing levels. VAMCs may also use supplemental information to measure workload, though the type of supplemental information varies by physician occupation (see figure 3). For example,

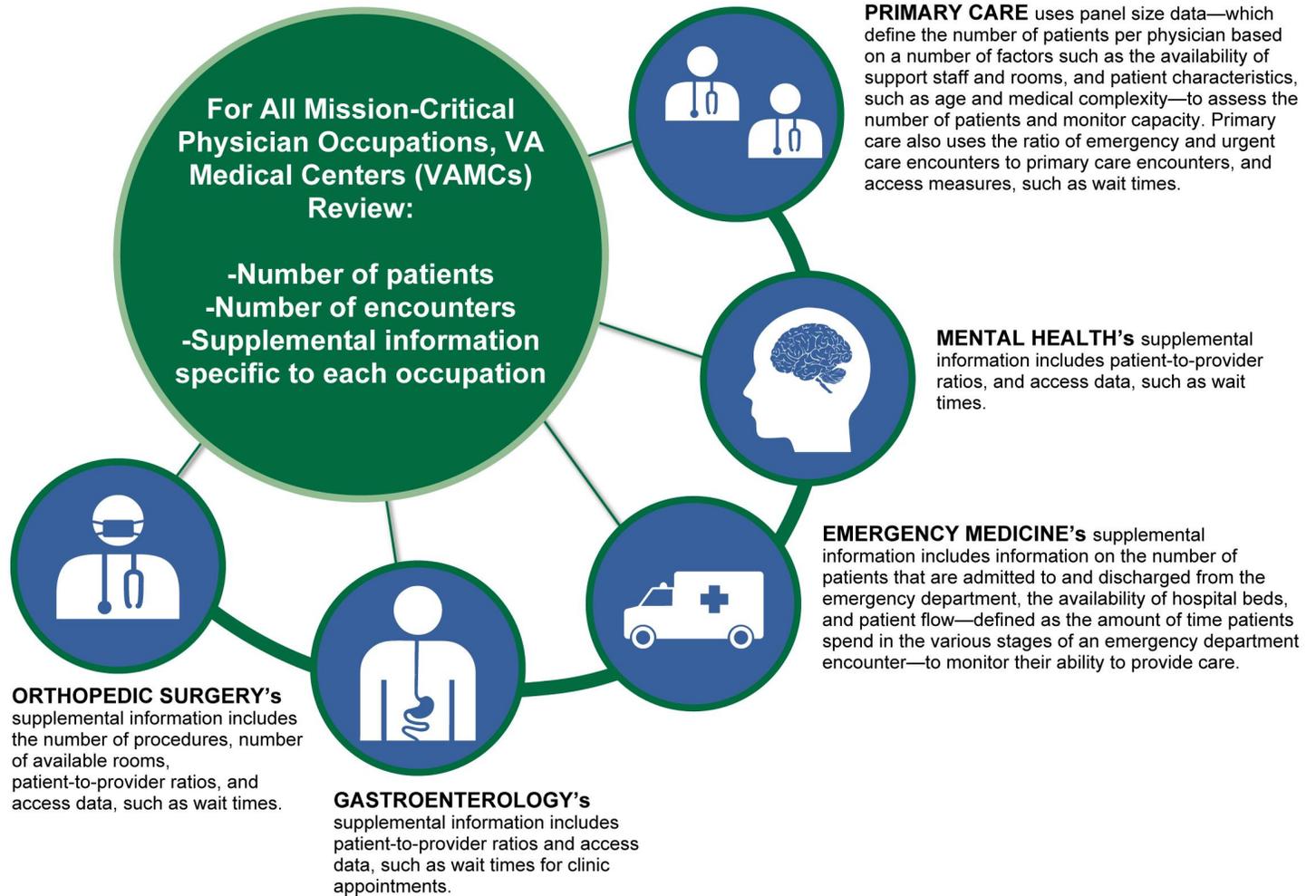
- primary care departments use panel size data to assess the number of patients and monitor whether each panel is full or has available capacity. Further, primary care management tools allow departments to look at the number and type of encounters, such as the ratio of emergency and urgent care to primary care encounters, and access measures, such as wait times.
- emergency medicine departments use information on the number of patients that are admitted to and discharged from the emergency department, the availability of hospital beds, and patient flow—defined as the amount of time patients spend in the various stages of an

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<sup>40</sup>An encounter is defined as a professional contact between a patient and a provider vested with responsibility for diagnosing, evaluating, and treating the patient's condition. Encounters occur in both the outpatient and inpatient setting.

emergency department encounter—to monitor their ability to provide care.

**Figure 3: Workload Measurement for Mission-Critical Physician Occupations**



Source: Veterans Health Administration (VHA). | GAO-18-124

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## Problematic Data Prevent Effective Measurements of Productivity for Some Mission-Critical Physician Occupations

VHA's OPES calculates productivity for 32 physician occupations, including mental health, gastroenterology, and orthopedic surgery, but the data are not always complete or accurate.<sup>41</sup> As a result, VHA is limited in its ability to assess whether a VAMC's resources are used effectively or whether staff are appropriately allocated.<sup>42</sup> Specifically, the data were incomplete because they did not include all types of physicians or care provided. For example, the data did not include work done by physicians who are not employed by VHA, such as those working under contract or trainees. Additionally, the data did not include the work of physicians who provide certain types of care, such as evaluating and managing hospitalized patients. Further, according to VHA internal audits, inaccuracies in the data underlying OPES' productivity metrics due to inconsistent coding of clinical procedures and time by physicians may also affect the quality of the data. Inconsistent coding can result in two different wRVUs being assigned for the same procedure done by two different physicians.<sup>43</sup>

Officials in mental health, gastroenterology, and orthopedic surgery at the VAMCs included in our review told us that the data problems cause them to spend a significant amount of time trying to understand physician productivity assessments and providing interpretations to help inform management decisions. In May 2017, we reported on these problems and recommended that VHA include data on all providers of care, including

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<sup>41</sup>VHA does not use metrics to assess levels of productivity in primary care or emergency medicine. According to officials, VHA has determined that metrics which credit completed procedures do not accurately reflect a primary care physician's productivity. VHA does collect data for emergency medicine, but has not established standards to assess productivity nor does it use this information to manage physicians' workload or inform staffing decisions.

<sup>42</sup>Our findings concerning VHA's productivity metrics are similar to those of the independent assessment of VA's health care delivery systems and management processes issued in September 2015, which also identified concerns about the completeness and accuracy of these metrics. See RAND Corporation. *Assessment B (Health Care Capabilities)*, (Santa Monica, CA: Sept. 1, 2015).

<sup>43</sup>Inconsistent coding of clinical procedures and time by physicians also may occur in non-VA settings.

contract physicians, and develop training on coding clinical procedures.<sup>44</sup> VHA generally agreed with our recommendations and stated that it would reissue existing policies on coding practices and continue to provide relevant training for providers.

Mental health departments also may face particular difficulties in assessing productivity because they receive conflicting sets of productivity metrics from OPES and OMHO. According to VHA officials, this is the result of the two offices using different methodologies to determine what data is included in their productivity calculations. For example, OMHO assigns a wRVU value for some types of work that are not credited by OPES, such as time spent on case management. Conversely, OPES includes some exams that OMHO excludes from its calculation, such as veterans' benefit exams—exams used to determine whether or not a veteran is eligible for benefits.<sup>45</sup>

As a result, the two sets of productivity metrics can differ substantially for a single VAMC. Specifically, OPES's productivity metrics for psychiatrists showed that the vast majority (about 90 percent) of VAMCs nationwide were more productive than what OMHO's results for psychiatrists showed. For most VAMCs, OPES's productivity metrics show psychiatrists to be between 10 and 35 percent more productive than OMHO's results for psychiatrists.<sup>46</sup> Similarly, all six VAMCs in our review showed higher productivity when using OPES data (see figure 4).

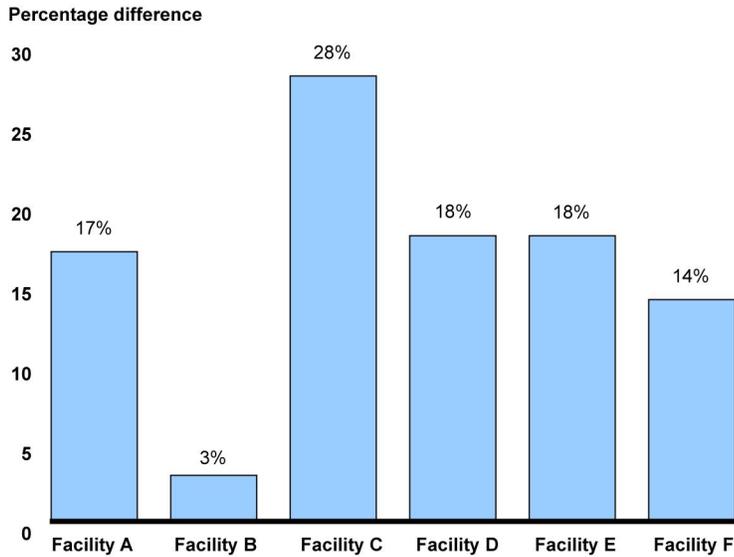
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<sup>44</sup>See GAO, *VA Health Care: Improvements Needed in Data and Monitoring of Clinical Productivity and Efficiency*, [GAO-17-480](#) (Washington, D.C.: May 24, 2017).

<sup>45</sup>VA requires veterans applying for service-connected disability compensation to undergo a physical exam, known as a compensation and pension exam, in order to determine the degree of their disability.

<sup>46</sup>Although the OPES productivity metrics were higher than the OMHO productivity metrics for most VAMCs, there were four VAMCs where the two metrics were equal and 11 VAMCs where OPES's productivity metrics were lower than OMHO's results.

**Figure 4: Percentage by Which VHA Office of Productivity, Efficiency, and Staffing (OPES) Productivity Metrics Exceed Office of Mental Health Operations (OMHO) Productivity Metrics for Psychiatrists at the Six Veterans Affairs medical centers (VAMC) We Reviewed, as of Fiscal Year 2016**



Source: Veterans Health Administration (VHA). | GAO-18-124

In technical comments that VHA submitted on a draft of this report, VHA stated that it provides training and guidance to clarify how to use both the OPES and OMHO productivity metrics, and that it provides technical assistance and data support to VAMCs that request help interpreting their productivity data. However, officials from two of the six VAMCs we reviewed told us that they did not have the necessary information to appropriately interpret the results and effectively inform decision-making processes. VHA officials acknowledged that although clarifying information and technical assistance are available through internal OMHO websites, not all VAMC officials may be using these resources and, as a result, they may find the data confusing and misunderstand their results.

These problems with productivity data are inconsistent with federal internal control standards, which state that management should use and communicate quality information—that is information that is appropriate, current, complete, accurate, accessible, and provided on a timely basis—to make informed decisions and evaluate an agency’s performance in achieving key objectives and addressing risks. Communication of quality

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information should occur across all organizational levels in order to enable personnel to perform key roles and achieve mission objectives.<sup>47</sup>

VHA officials noted that OPES productivity values tend to be higher than OMHO values, particularly for psychiatrists, because OPES looks at productivity both within and outside of mental health settings.<sup>48</sup> According to officials, OPES productivity metrics are designed to be more inclusive so they may be used to benchmark VAMCs against non-VA benchmarks, such as those used by the Medical Group Management Association.<sup>49</sup> OMHO productivity metrics focus on productivity within mental health settings, and thus are designed to guide the internal management of a mental health department.

VHA officials said that these two measures are not intended to match, as they are used for different purposes. However, officials from two of the six VAMCs in our review told us that they do not understand how to interpret or use the information when it is contradictory. For example, an official at a VAMC we reviewed told us they were required to develop an action plan to show how they would improve below-average productivity measured using OPES metrics, while the OMHO metrics showed the facility as performing well. In another example, OMHO officials described a VAMC in which the OMHO productivity metrics showed the facility as being understaffed, while OPES data indicated that additional staffing was not needed. Such inconsistencies not only can create uncertainty for VAMC leadership on how best to use the metrics to inform decision-making processes, but also can lead to clinicians taking time away from other responsibilities to reconcile the different metrics.

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## VHA Uses Multiple Strategies for Physician Recruitment and Retention, but Has Not

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<sup>47</sup>See GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

<sup>48</sup>Mental health settings include inpatient and outpatient mental health clinics. Non-mental health settings include services provided in other clinics, such as medical exams used to determine eligibility for VA benefits (referred to as compensation and pension exams).

<sup>49</sup>The Medical Group Management Association is an association of medical group practices, both academic and non-academic, that surveys its membership annually to produce external benchmarking information on productivity, among other things.

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## Comprehensively Evaluated Them to Address Difficulties

VHA uses various strategies to support the recruitment and retention of its physician workforce. VAMCs have experienced difficulties using these strategies, and VHA has taken some actions to mitigate the problems. However, VHA has not undertaken a comprehensive evaluation of its strategies to identify the underlying causes of the difficulties.

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### VHA Uses Multiple Strategies to Support Physician Recruitment and Retention

VHA uses several strategies to recruit and retain physicians, primarily by providing: assistance recruiting for mission-critical physician occupations; policies and guidance; financial incentives to enhance hiring and retention offers; and, a national physician training program.

**Providing assistance recruiting for mission-critical physician occupations:** VHA's National Healthcare Recruitment Service, a division of VHA's Workforce Management and Consulting Office, operates the National Recruitment Program that provides direct physician recruitment services to VAMCs for hard-to-recruit positions.<sup>50</sup> According to program officials, this program, which became fully operational in 2012, had 19 physician recruiters assigned to VHA's 18 VISNs as of May 2017. The program uses private-sector recruiting techniques, including representing VHA at medical conferences, screening résumés, and reviewing social media and professional message boards. In fiscal year 2016, these recruiters referred 2,200 physician candidates to VAMCs, which resulted in 325 physicians hired, according to VHA officials. The National Healthcare Recruitment Service provides additional support by developing media materials for VAMCs to use when marketing and announcing job opportunities for hard-to-recruit clinicians. Officials from this office also conduct training for VISN and VAMC staff on VHA recruitment and best practices.

**Policies and guidance:** VHA—largely through its Workforce Management and Consulting Office—is responsible for administering the

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<sup>50</sup>Annually, each VAMC identifies a list of hard-to-recruit positions for the facility, which may include VHA's mission-critical physician occupations.

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policies and guidance developed by VA that provide the basic policy framework for hiring, paying, promoting, and retaining physicians. Using in-person and webcast sessions, VHA also provides basic and advanced training to VHA staff on personnel policies.

**Financial incentives:** VHA provides financial incentives to strengthen efforts to recruit and retain physicians (see Table 1). Officials at the VAMCs in our review told us that financial incentives are important to physician recruitment and retention because they may help to narrow the differences between VHA salary offers and those of private sector employers. VAMCs adjust market pay, one component of physician compensation, to reflect a physician's training, experience, and prevailing pay levels in the local medical community. Additionally, on a biennial basis, VHA revises the pay ranges that VAMCs use to determine the compensation and bonuses of individual physicians in different physician occupations.

**Table 1: Veterans Health Administration’s (VHA) Financial Incentives Used for Physician Recruitment and Retention**

Financial Incentives	Description
Market-based salaries	VHA physician compensation includes three components: basic, market, and performance pay. Market pay, when combined with basic pay, is meant to reflect the recruitment and retention needs of the Veterans Affairs medical center. Market pay is determined through professional standards board, which considers a candidate’s experience and qualifications.
Education Debt Reduction Program (EDRP)	VHA reimburses qualifying education loan debt for employees, including physicians, in hard-to-recruit positions. Physicians apply directly to the Veterans Affairs medical center, and applications are approved by VHA. Funding for EDRP increased from \$10.5 million in fiscal year 2015 to \$22.2 million in fiscal year 2016. According to a VHA official, VHA made 458 new EDRP awards to physicians in fiscal year 2016; these awards averaged \$111,049 each.
Recruitment, retention, and relocation incentives	VHA may provide additional pay for prospective or current VHA employees, including physicians in hard-to-recruit or hard-to-retain positions. Recruitment and relocation incentives may be up to 25 percent of annual base pay multiplied by the number of years in the employee’s service agreement, up to 4 years. Retention incentives may be up to 25 percent of annual base pay, subject to annual recertification. According to VHA officials, in fiscal year 2016, VHA paid \$22,927,570 in recruitment incentives to 1,293 physicians; \$7,108,486 in retention incentives to 384 physicians; and \$5,818,922 in relocation incentives to 267 physicians. <sup>a</sup>
Continuing medical education funds (CME)	VHA reimburses full-time, board certified physicians up to \$1,000 per year for continuing professional education expenses. Physicians may use this funding to participate in approved continuing education activities.

Source: VHA | GAO-18-124

<sup>a</sup>In fiscal year 2016, recruitment, relocation, and retention incentives totaled \$70,220,815 for all VHA employees, according to VHA officials. Due to caps imposed by the Comprehensive Addiction and Recovery Act of 2016, VHA will limit these incentives for all VHA employees (including physicians) to \$71,709,828 in fiscal year 2017. See. Pub. L. No. 114-198, § 951, 130 Stat. 695, 778 (2016).

**Physician training program:** VHA’s physician training program provides VAMC officials with the ability to regularly interact with trainees and identify top-performing physicians who would be a “good fit” for permanent employment. According to officials from the four VAMCs in our review that had physician training programs, access to this pool of potential hires serves as an important recruitment resource. Additionally, officials reported that physician training programs provide current physicians with teaching opportunities that also bolster recruitment and retention.

### VAMCs Experience Difficulties When Using VHA’s Physician Recruitment and Retention Strategies

VAMCs experience difficulties using some of VHA’s physician recruitment and retention strategies. Although VHA has taken some actions to address these difficulties, problems persist.

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Difficulties recruiting and retaining physicians for mission-critical physician occupations

At all six VAMCs in our review, officials reported difficulty recruiting and retaining hard-to-recruit physicians, which are the focus of the National Recruitment Program. VHA and VAMC officials told us that the difficulty recruiting and retaining physicians may be attributed to national physician shortages, highly competitive markets, physicians' reluctance to practice in rural or geographically remote areas, and steady physician turnover that requires ongoing recruitment efforts. Some VAMCs in our review had mixed results with the national recruiters. Some VAMC officials told us that the national recruiters were able to refer quality candidates they would not otherwise have been able to identify, but others said that their recruiters did not send high-quality candidates or did not understand their rural markets.

Officials from a national physician recruitment organization stated that private healthcare organizations use proportionately more physician recruiters than VHA. They noted that one member university health system, which includes three hospitals, employs 7 physician recruiters. In contrast, VHA has 19 national recruiters for its 170 VAMCs. Officials from VHA's Workforce Management and Consulting Office told us that they consider the National Recruiter Program to be understaffed and, as a result, its recruiters may not be able to engage with all potential candidates or fully understand important aspects of the markets in their VISNs.

Difficulties interpreting VHA policies

We found differences between VAMC officials' understanding of some of VHA's recruitment and hiring policies, which contributed to lengthy recruitment and hiring processes for physicians. VAMC officials we interviewed reported that it can take up to 12 months to fill a physician vacancy, and, for some hard-to-recruit positions, it could take even longer if they were ever filled at all. Similarly, a VHA review of recruitment and hiring practices in 2014 found that differences in policy interpretation across VAMCs were a factor in physician vacancies and lengthy hiring

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processes.<sup>51</sup> During our review, we found that some differences in policy interpretations persist. For example, officials from some VAMCs told us that VHA policy requires them to post physician job announcements online—such as on USAJobs—to offer financial recruitment incentives, but others correctly noted VAMC directors have the authority to waive the external job posting requirement.

To address differences in policy interpretation, strengthen overall physician recruitment at VAMCs, and shorten hiring processing time, VHA issued its Enhanced Physician Recruiting and Onboarding Model (EPROM) in 2015. EPROM contained 30 recommendations and best practices to improve physician recruitment and streamline hiring, including suggestions that VAMCs conduct some recruitment activities concurrently and that they use the flexibilities allowed under Title 38. Additionally, EPROM recommended that VAMC human resource departments employ a dedicated physician recruiter to work in tandem with VHA's national recruiters.

VHA officials told us that implementation of EPROM recommendations has been limited. For example, VAMCs did not have the resources to implement a component of the recommendations – a VAMC-based dedicated physician recruiter. HR staff at each of the VAMCs in our review told us that they were understaffed and not able to have one of their team serve as a dedicated physician recruiter, as recommended in EPROM. As of May 2017, 155 of VHA's 170 VAMCs did not have dedicated physician recruiters. According to VHA officials, no additional funding was provided for implementing EPROM recommendations and VAMC officials told us that VAMCs could not afford hiring a dedicated physician recruiter. Additionally, VAMCs were not required to implement EPROM and consequently, EPROM's recommendations were sometimes ignored or only partially implemented. Further, according to VHA officials, the extent of EPROM implementation was not monitored by VHA central offices—a situation that is consistent with our prior work, which found that a general lack of oversight by VHA over VAMC HR offices has limited the

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<sup>51</sup>After discovering significant problems with recruitment and credentialing at the Phoenix VAMC, including HR policy misunderstandings and problematic practices that lead to unfilled medical provider vacancies, a team of officials from VHA's Workforce Management and Consulting Office and Quality, Safety, and Value Office expanded its review to include additional VAMCs. The review found similar practices in a sample of VAMCs it subsequently reviewed. VHA's Workforce Management and Consulting Office distributed the findings of this review through an internal report in June 2015.

department's ability to institute improvements to HR processes.<sup>52</sup> As a result, VAMCs that have not adopted more effective recruitment practices are likely to continue to experience delays and challenges in physician hiring.

### Difficulties with VHA's financial incentives

According to officials from all six VAMCs in our review, VHA's financial incentives for recruitment and retention do not always result in competitive salary packages, and funding for incentives was often inadequate at the VAMC level. Officials from all organizational levels of VHA told us the salaries offered by VAMCs were often below those offered by local private sector, academic, and some state government employers. For example, officials at one VAMC we reviewed told us that their chief of cardiac surgery, whose salary was close to \$395,000 left to work for a private hospital in the community where his salary was close to \$700,000.

To address difficulties associated with low salary levels, VHA increased its physician pay ranges effective November 2016.<sup>53</sup> These increases significantly raised the maximum potential salary for some specialties. For example, the upper salary range for staff-level emergency medicine physicians rose from \$240,000 to \$348,000. (See Appendix III for recent changes in pay ranges for mission-critical physician occupations.) However, not all facilities benefitted from the increased pay ranges. Officials from most of the VAMCs in our review told us that they were not able to leverage the full increased pay ranges to recruit or retain physicians, either because such an increase would create pay gaps between new and existing physicians, or because they did not have additional funds in their budgets to accommodate such increases. At the VAMCs in our review, department officials reacted in various ways to the new pay ranges. Officials at two VAMC departments in our review decided not to raise any salaries, while another offered higher salaries only to newly recruited physicians. One VAMC raised all physician

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<sup>52</sup>See GAO, *Veterans Health Administration, Management Attention Is Needed to Address Systemic, Long-standing Human Capital Challenges*, [GAO-17-30](#) (Washington, D.C., Dec. 23, 2016).

<sup>53</sup>VHA is required to prescribe maximum and minimum amounts of annual pay for physicians at least biennially. VHA may review and adjust these amounts more frequently, if needed.

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salaries in a department that had difficulty recruiting and retaining its staff, which officials acknowledged decreased other departments' budgets.

Additionally, VHA's other financial incentives were not always available for physician recruitment and retention. For example, prior to fiscal year 2015, VHA set the maximum award amount for debt reduction under EDRP at \$60,000 per person over a 5-year period. To enhance this incentive, the Veterans Access, Choice, and Accountability Act of 2014 increased the maximum EDRP award amount to \$120,000 over 5 years.<sup>54</sup> However, some VAMC officials told us that their EDRP program funding was insufficient, given that both the number of applicants and the amount awarded to individual physicians increased significantly, and that they depleted their EDRP budgets early in the fiscal year. As a result, some VAMCs we reviewed would not commit to providing EDRP during the recruitment process. Instead, officials routinely told candidates that they would consider EDRP eligibility if funding was available.

#### Difficulties recruiting physician trainees

Despite VHA's large and expanding graduate medical training program, VAMCs experience difficulties hiring physicians who receive training through its residency and fellowship programs. VHA does not track the number of physician trainees who are hired following graduation, but officials told us that the number is small in comparison to the almost 44,000 physician trainees educated at VAMCs each year.

Delays in VAMCs' hiring offers to graduates were among the factors that hampered recruitment of physician trainees, as identified by VAMC officials. Specifically, officials from the four VAMCs in our review with physician training programs told us VAMCs cannot make employment offers to trainees until they have completed their training programs. Competitors often make hiring offers as early as trainees' second year of residency, according to VAMC officials. However, VHA officials said other VAMCs use existing policy flexibilities to recruit trainees more proactively by making early hiring offers that are contingent on the trainee meeting certain conditions, such as completing training, and that these actions improve the likelihood of successful recruitment.

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<sup>54</sup> Pub. L. No. 113-146, § 301(b), 128 Stat. 1754, 1788 (2014), (codified at 38 U.S.C. § 7683(d)).

Additionally, VHA does not share information on graduating physician trainees for recruitment purposes with VAMCs across the system. VHA officials told us that recruitment efforts could be improved by developing and maintaining a database of physician trainees, but said that VHA has no such database. For instance, a database of trainee information could improve the information available to officials at a geographically remote VAMC in our review, whose officials told us that they had neither a residency program nor information about residents graduating from other VAMCs. Also, according to VHA officials, information sharing could help VAMCs identify trainees who want to work at VHA after graduating, but who received no offers from the VAMC they trained at due to the lack of vacancies in their specialty. In its 2016 workforce strategic plan, VHA reported that the ability to register and track physician trainees could enhance VAMCs' ability to recruit physicians, but that this tracking system does not currently exist.<sup>55</sup> The ability to share trainee information and to monitor the percentage of trainees hired by VAMCs could contribute to VHA hiring more physicians, which is one of the reasons for expanding the physician training program, as well as help VHA evaluate its physician trainee recruitment efforts. Developing a shared database of physician trainees for VAMCs would also be consistent with federal internal control standards, which state that organizations should communicate internally the information necessary to achieve their objectives.

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## VHA Has Not Conducted a Comprehensive Evaluation of Its Physician Recruitment and Retention Strategies

VHA has not comprehensively evaluated the overall effectiveness of its physician recruitment strategies to identify the underlying causes of difficulties, although it has taken limited steps to evaluate specific recruitment and retention issues, according to VHA officials. For example, VHA employees are surveyed to obtain feedback on specific programs, which may reveal aspects of a particular recruitment or retention issue. After concerns were raised about physician retention, VHA created a work group in 2013 to review this issue—but a member of this group told us that no reports or recommendations resulted from this effort. Similarly, in 2015, VHA collected information on workforce priorities from the field to gauge barriers that VAMCs face offering certain recruitment and retention strategies, such as EDRP. This survey provided feedback to VHA on certain aspects of the EDRP strategy; however, an official in this program

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<sup>55</sup>VHA: *VHA Workforce and Succession Strategic Plan, 2016.*

acknowledged that VHA lacks evaluative data to determine what effect, if any, EDRP has on physician recruitment and retention.

The lack of in-depth evaluation is inconsistent with federal internal control standards, which stipulate that an agency should determine if its management strategies are effectively supporting its objectives and also should develop information needed for corrective action, if necessary. In addition, federal internal control standards call for effective and ongoing monitoring to assess the effectiveness of management strategies, make needed corrections if shortcomings are identified, and determine if corrective actions are achieving desired outcomes.<sup>56</sup> Evaluation of performance and ongoing monitoring provides managers with information needed to cope with difficulties, such as those that VHA is experiencing in physician recruitment and retention.

VHA officials told us that a comprehensive evaluation of their various recruitment and retention strategies would likely enable them to provide better support to VAMCs. An official stated that undertaking such an evaluation could be challenging, as VHA is often focused on examining individual recruitment priorities, such as financial incentives, and it may not have data on all aspects of physician recruitment and retention. However, an evaluation could provide VHA with the information necessary to gauge whether, individually and collectively, its recruitment and retention strategies are meeting the agency's objectives of having a robust physician workforce to meet veterans' health care needs. Another VHA official noted that not evaluating and monitoring the overall effectiveness of VHA's strategies may negatively affect its ability to make improvements. Ultimately, this could affect VAMCs' success in recruiting and retaining quality physicians.

Further, a comprehensive evaluation of physician recruitment and retention could determine the extent to which VHA's program offices and managers are communicating, coordinating, and collaborating effectively as specified in VHA policy.<sup>57</sup> Officials at each organizational level of VHA said that overall collaboration and communication between the different levels of VHA on physician recruitment is problematic. For example, one official said that while VHA officials may consult with VAMCs on using

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<sup>56</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

<sup>57</sup> VHA Directive 1075, "Strategic Planning Process," March 10, 2014.

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VHA policies and financial incentives, the determination of whether or not to use the available recruitment and retention strategies is largely made at the VAMC level and is not necessarily coordinated across the system.

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## Conclusions

Maintaining a physician workforce that is adequate in size to meet the health care needs of veterans is critical to VHA's mission. Doing so depends on sound decision-making that is driven by reliable data and information. VHA's leaders and managers at every organizational level need information on key issues, such as the total number of physicians who provide care at VHA medical facilities, these physicians' workloads, and the effectiveness of strategies being used to recruit and retain physicians. Currently, however, VHA faces several notable information-related shortcomings. For example, VHA's inability to accurately count the total number of physicians who provide health care in its VAMCs means that it cannot sufficiently identify and address gaps in physician staffing. A major cause of this difficulty is VHA's reliance on information from outdated data systems that were designed for other purposes, such as managing VHA's payroll. Another cause is that VHA officials have not yet developed reports that consolidate physician workforce data from different sources. In addition, VHA's lack of guidance to VAMCs on how to determine physician staffing needs for certain mission-critical specialties means that local leadership may not be accurately determining whether or not VAMC staffing levels are appropriate, which could lead to insufficient staffing to meet veterans' needs.

VHA's productivity metrics have the potential to provide all organizational levels—VHA, VISN, and VAMC—with important information to maximize the use of its resources and provide necessary health care access and services to veterans. We found, however, that these productivity metrics may be compromised in ways that undermine the usability of the information. To help address these problems, we previously recommended that VHA include data on physicians working under all types of arrangements, including contract physicians and physician trainees, and develop training on coding clinical procedures; VHA generally agreed. In addition to these problems, VAMC mental health departments receive two sets of productivity metrics which may conflict with each other which may contribute to a high administrative burden on clinical providers. Further, without more reliable productivity data, VHA, VISNs, and VAMCs are limited in their ability to make evidence-based management decisions.

Limited information also can reduce the effectiveness of VHA's strategies for recruiting and retaining physicians. For example, the potential to increase hiring of physician trainees, a particularly promising opportunity because trainees have already worked within VAMCs, is hindered by the lack of a system-wide database or other method of sharing information among VAMCs regarding graduating trainees. Also, because VHA has not comprehensively evaluated its process for recruiting and retaining physicians, it cannot fully understand why it continues to face difficulties implementing the strategies it uses to support physician recruitment and retention, such as education debt reduction and increases in physician pay. Without such an evaluation, VHA lacks information needed to improve its strategies, implement improvements, and ensure coordination across VHA offices, which can negatively affect its success in recruiting and retaining quality physicians.

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## Recommendations for Executive Action

We are making the following five recommendations to VHA:

The Undersecretary for Health should develop and implement a process to accurately count all physicians providing care at each medical center, including physicians who are not employed by VHA. (Recommendation 1)

The Undersecretary for Health should develop and issue guidance to the VAMCs on determining appropriate staffing levels for all mission-critical physician occupations. (Recommendation 2)

The Undersecretary for Health should ensure that when multiple offices issue similar productivity data on physician occupations, any methodological differences are clearly communicated and guidance is provided on how to interpret and reconcile the data. (Recommendation 3)

The Undersecretary for Health should establish a system-wide method to share information about physician trainees to help fill vacancies across VAMCs. (Recommendation 4)

The Undersecretary for Health should conduct a comprehensive, system-wide evaluation of the physician recruitment and retention strategies used by VAMCs to determine their overall effectiveness, identify and implement improvements, ensure coordination across VHA offices, and establish an ongoing monitoring process. (Recommendation 5)

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## Agency Comments and Our Evaluation

VA provided comments on a draft of this report, which are reproduced in app. IV. In its comments, VA noted that VHA is strongly committed to developing long-term solutions that mitigate risks to the timeliness, cost-effectiveness, quality, and safety of the VA health care system. As such, VA indicated that it plans to use our findings to continue making improvements related to physician recruitment and retention. In addition, VA provided technical comments, which we have incorporated as appropriate.

VA concurred with four of our five recommendations and provided information on its plans to address them. It did not concur with our recommendation to implement a process to accurately count all physicians providing care at each VAMC, including physicians who are not employed by VHA. In its comments, VA said that it has highly reliable systems to identify its physicians. VA added that it assesses and projects workload demand using veteran population demographics and that the ability to count physicians does not drive or impact its efforts to assess workload. To fully understand VA's written comments, in late September 2017, we spoke to an official in VHA's Office of Workforce Management and Consulting and officials from two of the VAMCs we reviewed. These officials acknowledged that data sources used for workforce planning may not include all types of contract physicians or work-without-compensation physicians who volunteer their time. Further, the VHA official acknowledged that some data, such as FTE estimates for fee-basis providers, are not currently included in VHA's workforce planning reports, although these data are available in other systems and may provide a more complete view of VHA's physician workforce.

However, as described in our report, we do not believe that VA has a systematic or consistent way to identify all physicians providing care at its VAMCs. Implementing such a process would eliminate the need for individual VAMCs to use their own mechanisms, such as a locally developed and maintained spreadsheet used at one of the VAMCs in our review, to track their physician workforce. Such mechanisms may not be readily accessible to VHA officials engaged in workforce planning. We therefore reiterate the importance of VHA having a systematic and consistent way to account for all physicians who provide care across VAMCs, including physicians not employed by VA. Ensuring access to relevant information, such as a complete count of all physicians, is a fundamental element of federal internal control standards and effective

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workforce planning that may help to ensure that gaps in physician staffing are sufficiently addressed and that staffing is appropriately allocated across VAMCs.

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

If you or your staffs have any questions about this report, please contact me at (202) 512-7114 or at [DraperD@gao.gov](mailto: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 V.



Debra A. Draper  
Director, Health Care

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*List of Congressional Addressees*

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

The Honorable Charlie Dent  
Chairman  
The Honorable Debbie Wasserman Schultz  
Ranking Member  
Subcommittee on Military Construction,  
Veterans Affairs, and Related Agencies  
Committee on Appropriations  
House of Representatives

The Honorable Johnny Isakson  
Chairman  
The Honorable John Tester  
Ranking Member  
Committee on Veterans' Affairs  
United States Senate

The Honorable Dean Heller  
United States Senate

## Appendix I: Number and Full Time Equivalent (FTE) Physicians Employed by the Veterans Health Administration (VHA)

The following table describes the number and FTE of VHA-employed physicians serving in a mission-critical physician occupation.

We cannot provide a reliable physician to veteran ratio for each mission-critical physician occupation for two reasons: (1) VHA data on the number of physicians does not include physicians who are not employed by VHA but who provide care within VHA under other compensation arrangements, such as those working under contract. Therefore, the data underestimates the total number of physicians, (2) VHA data on the number of veterans who received care includes veterans treated by physicians employed by VHA, as well as physicians under other compensation arrangements.

**Table 2: Number and Full Time Equivalent (FTE) of VHA-Employed Physicians in the Mission-Critical Physician Occupations, by Veteran Affairs Medical Center (VAMC) as of March 31, 2017**

	VAMC City	Primary Care		Mental Health		Gastroenterology		Orthopedic Surgery		Emergency Medicine		All Types of Physicians	
		Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE
AL	Birmingham	79	64.1	23	23.0	5	3.1	5	2.1	6	4.4	291	210.2
	Montgomery	38	37.1	13	13.0	0	0.0	1	1.0	4	4.0	94	85.7
	Tuscaloosa	8	8.0	12	12.0	0	0.0	0	0.0	0	0.0	31	34.5
AK	Anchorage	13	12.8	7	6.4	0	0.0	0	0.0	1	0.9	26	25.2
AZ	Phoenix	67	65.3	46	43.3	8	8.0	6	5.5	19	19.0	271	253.5
	Prescott	35	33.7	5	5.0	0	0.0	0	0.0	0	0.0	60	56.7
	Tucson	44	42.8	23	22.3	1	0.5	3	3.0	8	8.0	181	166.9
AR	Fayetteville	51	48.2	17	17.0	2	2.0	1	1.0	7	7.0	106	101.6
	Little Rock	52	48.4	32	30.7	7	4.9	11	7.6	13	13.0	267	234.7
CA	Fresno	31	29.3	11	11.0	2	2.0	2	2.0	5	5.0	103	96.4
	Loma Linda	47	39.7	25	24.0	8	7.2	8	4.4	8	7.9	251	209.1
	Long Beach	37	35.7	35	31.0	7	6.0	10	3.0	1	1.0	259	206.3
	Palo Alto	106	96.2	48	45.8	8	6.1	6	4.9	12	8.8	387	341.8

**Appendix I: Number and Full Time Equivalent  
(FTE) Physicians Employed by the Veterans  
Health Administration (VHA)**

VAMC City	Primary Care		Mental Health		Gastroenterology		Orthopedic Surgery		Emergency Medicine		All Types of Physicians	
	Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE
Sacramento	87	82.5	35	33.9	13	10.6	13	5.8	11	10.5	342	281.8
San Diego	64	58.6	44	36.2	15	6.8	8	6.4	14	12.5	375	269.2
San Francisco	77	67.4	41	36.7	7	5.5	7	4.8	1	0.5	313	244.8
West Los Angeles	84	80.2	75	66.8	15	10.4	7	4.2	9	9.0	460	394.0
CO Denver	79	69.7	41	36.7	7	5.1	6	6.0	11	6.4	327	270.0
Grand Junction	12	11.6	6	6.0	0	0.0	2	2.0	0	0.0	45	39.7
CN West Haven	80	68.5	55	43.2	11	8.9	4	2.0	13	10.6	360	271.1
DE Wilmington	23	20.5	14	14.0	2	2.0	0	0.0	7	5.0	88	66.8
FL Bay Pines	93	92.6	41	41.0	9	9.0	5	4.0	20	16.5	335	324.4
Gainesville	155	150.1	63	57.0	13	12.1	9	9.0	28	28.0	490	453.1
Orlando	121	117.1	43	40.1	8	8.0	11	10.9	9	9.0	361	314.1
Miami	53	49.7	49	48.5	4	3.6	4	2.8	9	8.0	271	229.9
Tampa	90	86.5	53	52.0	11	10.4	6	6.0	19	18.5	432	384.1
West Palm Beach	49	48.5	27	26.1	5	5.0	4	4.0	13	12.1	208	203.6
GA Atlanta	110	102.0	77	71.8	10	7.8	6	3.8	20	17.0	434	358.7
Augusta	35	31.0	16	16.0	5	3.6	4	3.0	5	5.0	170	138.4
Dublin	37	36.6	11	11.0	1	1.0	0	0.0	3	3.0	81	71.4
HI Honolulu	47	45.9	20	20.0	2	2.0	2	2.0	0	0.0	97	95.2
ID Boise	36	34.3	13	12.1	1	0.3	3	2.3	8	7.1	96	87.1
IL Chicago	50	45.6	35	32.0	11	4.7	5	2.0	14	8.1	298	202.9
Danville	22	22.0	10	9.7	1	1.0	2	1.5	0	0.0	61	57.2
Hines	52	48.6	39	36.5	11	7.7	12	4.5	13	13.0	361	277.0
Marion	37	36.4	15	13.4	3	0.7	3	2.6	5	4.5	115	100.0
North Chicago	32	29.9	22	20.4	4	2.6	5	3.6	10	10.0	142	133.1
IN Indianapolis	45	42.4	16	12.9	11	7.1	3	2.1	12	10.8	235	185.4
Marion	26	24.7	8	8.0	2	2.0	0	0.0	6	5.8	80	67.9
<b>IO Iowa</b>												
Des Moines	22	21.2	3	2.5	0	0.0	0	0.0	8	7.2	70	66.1
Iowa City	46	38.1	20	16.7	8	4.9	9	2.4	4	3.4	228	138.0
KA Topeka	21	21.0	19	17.6	3	2.3	1	0.3	12	12.0	108	104.6
Wichita	24	19.6	8	8.0	2	1.0	4	4.0	8	6.3	73	64.1
KY Lexington	28	27.0	11	10.4	6	2.4	0	0.0	13	11.4	169	131.4
Louisville	32	32.0	20	18.8	9	5.0	2	1.6	10	10.0	156	126.6
LA Alexandria	29	28.4	7	7.0	0	0.0	1	1.0	5	5.0	61	60.3

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VAMC City	Primary Care		Mental Health		Gastroenterology		Orthopedic Surgery		Emergency Medicine		All Types of Physicians		
	Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE	
New Orleans	54	49.5	20	18.6	6	3.8	5	1.8	8	4.8	215	163.9	
	Shreveport	33	31.0	10	9.0	5	5.0	2	0.4	7	3.2	130	112.3
MD	Togus	34	32.7	10	10.0	2	1.5	5	4.7	8	8.0	127	121.9
MD	Baltimore	64	59.8	36	29.9	7	4.4	0	0.0	1	1.0	282	223.0
MA	Bedford	18	17.3	20	19.0	0	0.0	0	0.0	0	0.0	53	49.8
	Northampton	30	28.6	11	10.8	0	0.0	0	0.0	0	0.0	52	49.8
	Boston	54	45.8	44	42.4	9	8.1	5	5.0	7	6.4	326	277.1
MI	Ann Arbor	72	55.4	23	20.0	14	8.9	3	1.9	5	5.0	307	206.7
	Battle Creek	32	32.0	18	18.0	1	1.0	0	0.0	1	1.0	63	60.4
	Detroit	34	33.0	19	17.7	5	4.2	5	1.9	9	8.5	175	139.3
	Iron Mountain	13	11.0	3	2.0	0	0.0	0	0.0	2	2.0	30	23.8
	Saginaw	25	24.3	10	8.9	2	0.8	0	0.0	2	1.2	62	49.5
MN	Minneapolis	66	62.3	39	32.8	10	9.5	5	3.4	8	7.6	319	282.1
	St. Cloud	25	22.4	9	8.0	0	0.0	2	1.8	0	0.0	62	49.5
MS	Biloxi	43	43.0	17	16.5	2	2.0	3	3.0	1	1.0	135	133.3
	Jackson	24	23.7	10	10.0	1	1.0	4	3.1	2	2.0	151	120.4
MO	Columbia	32	30.9	8	7.8	0	0.0	2	1.5	4	3.4	123	100.1
	Kansas City	32	31.1	14	13.8	6	5.2	3	2.2	7	7.0	144	133.5
	Poplar Bluff	20	19.6	4	4.0	2	2.0	0	0.0	0	0.0	35	33.8
	St. Louis	44	42.1	29	26.0	8	8.0	5	2.4	6	6.0	256	208.9
MN	Fort Harrison	41	38.1	5	3.1	2	1.5	4	1.6	8	5.8	81	70.0
NE	Omaha	32	29.5	18	17.6	0	0.0	3	0.9	5	5.0	154	117.3
NV	Las Vegas	49	45.2	17	16.6	3	3.0	4	4.0	13	11.5	213	203.4
	Reno	33	32.0	11	11.0	0	0.0	3	3.0	5	3.3	104	100.2
NH	Manchester	22	21.6	8	7.4	2	2.0	1	1.0	0	0.0	54	51.6
NJ	East Orange	52	50.5	39	39.0	4	4.0	2	1.4	10	8.8	202	189.7
NM	Albuquerque	54	51.4	25	23.8	7	6.6	7	5.8	11	9.1	202	186.8
NY	Albany	14	13.4	8	7.7	2	2.0	2	2.0	7	7.0	119	101.2
	Bath	10	9.4	3	3.0	0	0.0	0	0.0	1	1.0	19	17.9
	Bronx	39	29.3	24	21.5	3	3.0	6	2.4	7	6.5	218	170.3
	Buffalo	23	19.7	18	16.0	3	2.5	5	2.3	0	0.0	156	121.4
	Canandaigua	16	13.5	7	6.3	0	0.0	0	0.0	0	0.0	29	23.4
	New York	67	60.9	41	36.7	9	6.7	4	3.0	20	19.0	313	260.3
	Montrose	23	23.0	22	21.4	1	1.0	1	1.0	1	1.0	85	83.6
	Northport	28	28.0	20	19.0	4	3.5	3	3.0	2	2.0	152	128.2

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	VAMC City	Primary Care		Mental Health		Gastroenterology		Orthopedic Surgery		Emergency Medicine		All Types of Physicians	
		Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE
NC	Syracuse	26	25.1	21	17.5	2	2.0	3	3.0	7	4.8	142	116.3
	Asheville	43	42.5	17	15.9	3	3.0	6	6.0	9	9.0	153	149.1
	Durham	50	43.3	49	40.0	15	9.0	10	5.0	14	9.1	414	250.9
	Fayetteville	43	42.5	25	24.4	2	2.0	1	1.0	2	2.0	142	132.1
	Salisbury	74	72.8	32	28.5	10	5.9	5	3.9	12	11.6	271	230.3
ND	Fargo	22	20.7	8	8.0	1	0.2	1	1.0	7	7.0	78	72.2
OH	Chillicothe	16	15.4	9	9.0	2	1.6	0	0.0	4	4.0	58	53.2
	Cincinnati	42	39.5	30	25.5	3	2.3	5	3.3	7	6.6	209	158.6
	Cleveland	88	81.8	44	41.3	11	6.8	6	3.0	1	0.1	338	284.2
	Columbus	41	35.8	16	15.8	4	4.0	2	2.0	3	3.0	119	107.4
	Dayton	38	35.7	12	10.9	2	2.0	1	1.0	7	7.0	138	114.6
OK	Muskogee	28	28.0	17	16.0	1	1.0	3	3.0	3	3.0	102	96.1
	Oklahoma City	59	56.5	21	18.8	9	5.3	6	5.3	13	8.6	229	177.6
OR	Portland	96	89.9	39	35.9	8	7.9	7	5.5	12	11.3	368	325.0
	Roseburg	20	20.0	8	8.0	1	1.0	3	2.8	2	2.0	52	48.9
	White City	17	16.6	5	4.4	0	0.0	0	0.0	0	0.0	24	22.0
PA	Altoona	10	9.7	4	4.0	0	0.0	0	0.0	0	0.0	27	26.2
	Butler	8	8.0	2	2.0	0	0.0	0	0.0	0	0.0	17	16.0
	Coatesville	22	21.3	11	10.2	0	0.0	0	0.0	1	1.0	40	39.5
	Erie	19	17.5	6	6.0	1	0.2	1	1.0	1	1.0	43	40.5
	Lebanon	24	24.0	12	12.0	4	4.0	3	3.0	12	10.9	111	98.7
	Philadelphia	45	39.8	43	34.3	8	7.0	10	4.3	12	10.9	335	230.3
	Pittsburgh	44	40.1	35	28.6	8	6.5	5	3.8	12	9.9	267	221.8
	Wilkes-Barre	28	28.0	6	6.0	3	2.1	3	2.5	6	6.0	97	90.4
RI	Providence	45	42.4	23	19.3	4	3.1	2	1.4	11	5.1	159	116.7
SC	Charleston	60	58.1	50	46.7	4	2.5	7	3.8	12	11.1	281	211.0
	Columbia	51	49.9	24	23.8	9	8.9	4	3.4	11	11.0	194	174.5
SD	Fort Meade	9	8.2	5	5.0	0	0.0	2	2.0	0	0.0	38	33.5
	Sioux Falls	19	18.4	7	6.2	1	0.4	2	1.4	7	4.3	68	55.9
TN	Memphis	36	34.5	21	19.6	6	5.6	1	0.5	13	13.0	176	161.9
	Mountain Home	46	43.0	24	23.6	7	3.0	6	4.0	4	3.0	178	145.1
	Nashville	76	67.6	55	52.1	16	9.9	6	5.1	32	10.0	472	317.9
TX	Amarillo	19	14.5	6	6.0	0	0.0	2	2.0	6	6.0	64	52.5
	Big Spring	15	15.0	5	5.0	0	0.0	0	0.0	0	0.0	27	27.0
	Dallas	93	91.8	61	57.5	12	11.6	4	2.8	11	11.0	367	345.5

**Appendix I: Number and Full Time Equivalent (FTE) Physicians Employed by the Veterans Health Administration (VHA)**

VAMC City	Primary Care		Mental Health		Gastroenterology		Orthopedic Surgery		Emergency Medicine		All Types of Physicians	
	Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE
El Paso	19	19.0	10	8.5	0	0.0	1	1.0	0	0.0	73	70.4
Harlingen	20	20.0	11	10.2	1	1.0	1	1.0	0	0.0	65	64.2
Houston	90	86.2	67	64.1	13	11.0	9	4.8	1	1.0	453	390.6
San Antonio	60	57.9	42	40.6	8	7.5	7	3.1	4	4.0	316	280.3
Temple	80	78.8	39	37.3	10	10.0	6	5.1	10	10.0	305	286.8
UT Salt Lake City	23	19.2	28	25.0	12	5.3	12	4.2	0	0.0	304	176.4
VE White River Junction	31	27.3	18	17.2	4	4.0	3	2.3	0	0.0	121	104.8
VA Hampton	36	36.0	23	22.8	1	1.0	4	3.5	1	1.0	121	105.4
Richmond	69	63.8	35	31.5	10	9.9	7	4.4	12	11.4	345	274.0
Salem	31	28.8	27	26.9	4	3.2	3	3.0	7	7.0	143	133.7
WA Seattle	62	57.3	54	53.4	11	11.0	4	3.3	12	10.6	346	320.7
Spokane	18	17.6	8	7.5	0	0.0	0	0.0	0	0.0	61	58.7
Walla Walla	10	9.6	3	2.9	1	1.0	0	0.0	0	0.0	15	14.5
WV Beckley	8	8.0	4	4.0	1	1.0	1	1.0	7	6.3	38	33.8
Clarksburg	30	28.6	9	9.0	1	1.0	0	0.0	7	7.0	72	58.0
Huntington	34	33.1	7	7.0	0	0.0	2	1.5	7	7.0	104	96.6
Martinsburg	34	34.0	18	14.3	3	3.0	2	2.0	5	5.0	127	111.4
WI Madison	39	32.1	15	12.4	6	2.8	1	0.8	9	2.3	209	124.7
Milwaukee	68	54.4	35	29.2	14	6.8	7	4.0	10	6.6	333	206.2
Tomah	16	15.3	8	7.4	0	0.0	0	0.0	0	0.0	32	31.2
WY Cheyenne	18	16.5	7	6.5	2	2.0	3	3.0	2	2.0	53	49.7
Sheridan	7	6.8	4	4.0	0	0.0	0	0.0	0	0.0	16	15.0
Other District of Columbia	69	67.0	27	26.5	7	6.2	9	4.6	0	0.0	237	217.1
Manila, Philippines	0	0.0	2	1.0	0	0.0	0	0.0	0	0.0	9	5.0
San Juan, Puerto Rico	89	89.0	63	58.6	12	8.0	9	4.4	15	15.0	397	351.0
<b>Total</b>	<b>5,991</b>	<b>5,617</b>	<b>3,191</b>	<b>2,958</b>	<b>656</b>	<b>509</b>	<b>503</b>	<b>347</b>	<b>935</b>	<b>813</b>	<b>25,010</b>	<b>20,923</b>

Source: Veterans Health Administration (VHA) | GAO-18-124

Note: VHA delivers health care services at a number of locations across the United States and abroad. Although VHA has 170 individual medical centers, it reports data at the "parent" medical center level. There are 141 parent medical centers, which can be further divided into other supporting health care delivery sites, such as community-based outpatient clinics.

## Appendix II: Number of Unique Patients Seen at Each Veterans Affairs Medical Center (VAMC) in Mission-Critical Departments

The following table describes the number of unique patients who were seen by a primary care provider or by a mission-critical physician—psychiatrist, gastroenterologist, orthopedic surgeon, or emergency medicine physician—at each VAMC. Physicians in these departments may be employed by the Veterans Health Administration (VHA) or under a different arrangement.

We cannot provide a reliable physician-to-patient ratio for each mission-critical physician occupation for two reasons: (1) VHA data on the number of physicians underestimates the total number of physicians because it does not include physicians not employed by VHA who provide care under other arrangements, such as those working under contract, (2) VHA data on the number of patients who received care includes veterans treated by both employed physicians and physicians under other arrangements.

**Table 3: Number of Unique Patients Seen at Each Veterans Affairs Medical Center (VAMC) in the Mission-Critical Departments, September 2016 through April 2017**

	VAMC City	Primary Care physician <sup>a</sup>	Psychiatrist <sup>b</sup>	Gastroenterologist <sup>b</sup>	Orthopedic surgeon <sup>b</sup>	Emergency medicine physician <sup>b</sup>
<b>Alabama</b>	Birmingham	56,415	11,126	2,652	1,409	3,086
	Montgomery	41,289	7,256	0	1,999	2,701
	Tuscaloosa	11,459	3,264	0	0	0
<b>Alaska</b>	Anchorage	10,131	1,436	0	0	0
<b>Arizona</b>	Phoenix	67,823	11,925	4,994	3,689	9,924
	Prescott	23,819	1,116	355	0	2,417
	Tucson	34,364	6,938	2,738	1,988	9,192
	Arkansas					
	Fayetteville	39,253	5,844	649	1,154	3,653
	Little Rock	37,294	8,544	2,315	2,481	7,891
<b>California</b>	Fresno	29,380	3,564	1,376	541	1,214

**Appendix II: Number of Unique Patients Seen  
at Each Veterans Affairs Medical Center  
(VAMC) in Mission-Critical Departments**

<b>VAMC City</b>	<b>Primary Care physician<sup>a</sup></b>	<b>Psychiatrist<sup>b</sup></b>	<b>Gastroenterologist<sup>b</sup></b>	<b>Orthopedic surgeon<sup>b</sup></b>	<b>Emergency medicine physician<sup>b</sup></b>
Loma Linda	47,849	7,598	7,170	2,429	7,369
Long Beach	37,986	8,371	2,992	2,080	6,082
Palo Alto	44,629	8,356	3,315	2,247	5,966
Sacramento	64,986	9,713	3,871	3,844	6,880
San Diego	50,193	8,953	3,306	4,343	11,172
San Francisco	32,539	4,656	2,122	1,753	4,359
West Los Angeles	75,505	15,359	4,261	2,204	9,277
<b>Colorado</b>					
Denver	63,080	9,560	2,067	2,390	7,538
Grand Junction	9,184	1,064	0	905	920
<b>Connecticut</b>					
West Haven	51,710	6,660	3,490	1,155	7,226
<b>Delaware</b>					
Wilmington	23,767	4,197	1,115	255	2,253
<b>Florida</b>					
Bay Pines	86,483	13,188	5,166	3,735	8,117
Gainesville	106,817	16,144	5,867	4,598	13,269
Orlando	96,457	15,958	4,729	4,123	7,191
Miami	44,729	11,791	2,971	1,755	4,318
Tampa	78,821	14,724	6,860	5,045	13,606
West Palm Beach	50,814	6,370	2,960	2,112	8,209
<b>Georgia</b>					
Atlanta	86,213	14,832	4,081	2,614	7,216
Augusta	30,888	6,325	2,522	2,238	8,338
Dublin	30,576	4,247	633	0	1,760
<b>Hawaii</b>					
Honolulu	28,670	4,489	949	1,027	0
<b>Idaho</b>					
Boise	26,373	2,797	1,682	1,199	3,771
<b>Illinois</b>					
Chicago	34,348	6,951	3,250	1,075	6,559
Danville	24,764	3,513	527	869	1,681
Hines	46,488	9,631	3,503	2,509	7,374
Marion	34,714	4,468	858	1,635	1,744
North Chicago	17,427	4,969	1,720	2,541	6,176
<b>Indiana</b>					
Indianapolis	42,773	3,214	3,948	1,109	7,763
Marion	34,467	4,000	1,165	342	1,773
<b>Iowa</b>					
Des Moines	21,978	1,872	524	467	3,248
Iowa City	34,449	3,408	1,777	594	2,152
<b>Kansas</b>					
Topeka	24,559	5,472	959	531	4,065
Wichita	20,334	1,764	560	1,611	2,321
<b>Kentucky</b>					
Lexington	27,287	3,512	2,267	1,155	5,711
Louisville	44,292	4,753	2,981	1,610	7,256

**Appendix II: Number of Unique Patients Seen  
at Each Veterans Affairs Medical Center  
(VAMC) in Mission-Critical Departments**

VAMC City	Primary Care physician <sup>a</sup>	Psychiatrist <sup>b</sup>	Gastroenterologist <sup>b</sup>	Orthopedic surgeon <sup>b</sup>	Emergency medicine physician <sup>b</sup>	
<b>Louisiana</b>						
Alexandria	25,779	2,743	0	794	651	
New Orleans	30,605	7,533	1,560	2,348	5,283	
Shreveport	30,311	2,978	2,847	499	2,605	
<b>Maine</b>	Togus	37,021	3,575	1,705	1,500	2,638
<b>Maryland</b>	Baltimore	47,440	5,741	2,279	3,409	7,731
<b>Massachusetts</b>	Bedford	14,233	3,308	173	0	77
	Northampton	21,769	3,377	0	0	0
	Boston	29,897	6,880	2,746	2,182	8,298
<b>Michigan</b>	Ann Arbor	45,450	5,990	3,753	577	5,026
	Battle Creek	35,338	6,753	757	0	0
	Detroit	32,191	5,548	2,095	264	6,044
	Iron Mountain	18,588	1,097	0	476	309
	Saginaw	26,396	3,499	375	0	1,114
<b>Minnesota</b>	Minneapolis	66,793	8,488	3,179	3,203	1,296
	St. Cloud	28,712	2,820	0	1,220	0
<b>Mississippi</b>	Biloxi	52,748	5,772	991	1,875	3,759
	Jackson	33,745	2,820	878	1,893	3,824
<b>Missouri</b>	Columbia	34,798	3,499	1,137	822	2,167
	Kansas City	30,678	5,395	2,331	1,272	6,075
	Poplar Bluff	18,944	2,227	407	0	1,984
	St. Louis	44,610	7,223	3,729	1,955	6,305
<b>Montana</b>	Fort Harrison	30,144	1,417	1,051	1,308	544
<b>Nebraska</b>	Omaha	51,121	4,613	1,475	1,284	3,272
<b>Nevada</b>	Las Vegas	54,988	7,365	2,174	1,905	9,924
	Reno	26,218	3,559	1,114	1,182	3,822
<b>New Hampshire</b>	Manchester	20,750	1,742	1,111	797	1,549
<b>New Jersey</b>	East Orange	43,414	9,649	2,626	907	2,732
<b>New Mexico</b>	Albuquerque	44,754	6,417	2,728	2,839	4,501
<b>New York</b>	Albany	23,472	2,802	1,336	1,050	3,312
	Bath	7,782	956	12	605	1,700
	Bronx	16,976	3,785	1,850	943	4,110
	Buffalo	30,623	4,850	2,204	891	3,910
	Canandaigua	16,522	1,981	31	548	0
	New York	34,499	7,450	3,705	2,188	6,674

**Appendix II: Number of Unique Patients Seen  
at Each Veterans Affairs Medical Center  
(VAMC) in Mission-Critical Departments**

	<b>VAMC City</b>	<b>Primary Care physician<sup>a</sup></b>	<b>Psychiatrist<sup>b</sup></b>	<b>Gastroenterologi st<sup>b</sup></b>	<b>Orthopedic surgeon<sup>b</sup></b>	<b>Emergency medicine physician<sup>b</sup></b>
	Montrose	17,750	4,049	902	1,169	552
	Northport	26,108	5,019	1,266	1,922	1,865
	Syracuse	36,752	4,401	1,089	1,087	4,449
<b>North Carolina</b>	Asheville	32,146	4,476	2,093	2,411	6,687
	Durham	50,867	11,357	3,809	1,833	5,946
	Fayetteville	59,695	7,701	1,452	989	6,541
	Salisbury	57,579	10,400	3,840	2,132	3,801
<b>North Dakota</b>	Fargo	27,031	2,429	153	739	1,649
<b>Ohio</b>	Chillicothe	18,343	3,516	970	0	1,937
	Cincinnati	31,100	5,465	2,677	1,786	7,928
	Cleveland	97,482	10,572	4,373	2,124	3,275
	Columbus	35,972	5,851	2,473	2,028	2,124
	Dayton	28,165	3,115	1,621	872	3,018
<b>Oklahoma</b>	Muskogee	28,548	4,698	752	1,200	2,596
	Oklahoma City	42,992	6,597	1,862	1,755	2,795
<b>Oregon</b>	Portland	59,820	7,753	3,658	1,127	9,239
	Roseburg	22,484	1,759	1,429	1,151	3,164
	White City	5,730	1,487	0	59	0
<b>Pennsylvan ia</b>	Altoona	20,100	1,459	0	0	365
	Butler	13,947	827	0	0	0
	Coatesville	12,203	3,422	0	239	0
	Erie	17,628	2,035	68	617	1,364
	Lebanon	39,442	4,642	1,600	1,184	4,191
	Philadelphia	41,550	10,635	2,327	991	6,008
	Pittsburgh	41,451	6,042	3,919	2,145	6,390
	Wilkes-Barre	32,514	3,496	1,669	1,794	3,004
<b>Rhode Island</b>	Providence	28,684	4,921	2,419	1,081	2,890
<b>South Carolina</b>	Charleston	53,201	11,958	2,890	1,217	7,018
	Columbia	59,705	10,285	4,632	1,714	3,048
<b>South Dakota</b>	Fort Meade	15,858	1,220	0	1,052	49
	Sioux Falls	22,104	2,055	852	1,826	2,330
<b>Tennessee</b>	Memphis	31,871	5,243	3,671	1,590	1,221
<b>Texas</b>	Mountain Home	53,751	7,284	2,262	1,961	4,843
	Nashville	70,679	11,641	3,927	2,476	10,138

**Appendix II: Number of Unique Patients Seen  
at Each Veterans Affairs Medical Center  
(VAMC) in Mission-Critical Departments**

VAMC City	Primary Care physician <sup>a</sup>	Psychiatrist <sup>b</sup>	Gastroenterologist <sup>b</sup>	Orthopedic surgeon <sup>b</sup>	Emergency medicine physician <sup>b</sup>	
Amarillo	15,153	2,531	997	484	3,585	
Big Spring	14,333	2,358	0	0	0	
Dallas	103,093	20,660	5,774	1,115	10,122	
El Paso	24,952	4,230	0	1,331	2	
Harlingen	27,685	4,665	569	2	0	
Houston	92,506	19,054	5,383	5,237	12,831	
San Antonio	64,549	14,131	4,233	2,681	8,060	
Temple	92,052	14,614	4,245	3,510	7,431	
<b>Utah</b>	Salt Lake City	32,137	4,466	2,291	1,889	5,360
<b>Vermont</b>	White River Junction	25,192	2,651	880	1,504	331
<b>Virginia</b>	Hampton	38,082	8,340	1,076	1,404	7,733
	Richmond	54,108	8,516	4,953	978	7,872
	Salem	31,606	6,090	1,805	1,571	4,783
<b>Washington</b>	Seattle	69,103	10,239	3,654	1,323	7,027
	Spokane	18,507	1,866	161	378	2,084
	Walla Walla	15,903	1,166	473	0	0
<b>West Virginia</b>	Beckley	15,212	1,004	661	644	3,134
	Clarksburg	23,298	3,151	713	549	2,373
	Huntington	30,396	3,103	0	1,015	4,574
	Martinsburg	32,748	5,736	1,653	1,001	3,021
<b>Wisconsin</b>	Madison	33,559	3,519	2,136	999	2,461
	Milwaukee	55,446	8,247	3,032	2,833	3,673
	Tomah	21,538	1,823	198	0	1
<b>Wyoming</b>	Cheyenne	14,813	1,816	1,020	1,490	1,558
	Sheridan	10,355	1,249	0	0	0
<b>Other</b>	District of Columbia	36,881	9,193	2,992	2,884	8,705
	Manila, Philippines	4,165	1,160	1,591	622	0
	San Juan, Puerto Rico	71,127	16,120	5,581	2,407	6,306
<b>Total</b>	<b>Total</b>	<b>5,336,436</b>	<b>837,252</b>	<b>284,332</b>	<b>204,218</b>	<b>587,426</b>

Source: Veterans Health Administration (VHA) | GAO-18-124

Notes: VHA delivers health care services at a number of locations across the United States and abroad. Although VHA has 170 individual medical centers, it reports data at the “parent” medical center level. There are 141 parent medical centers, which can be further divided into other supporting health care delivery sites, such as community-based outpatient clinics.

The sum of columns for veterans seen by primary care, mental health, gastroenterology, orthopedic surgery, and emergency medicine may not sum to total because veterans may be seen in more than one area.

<sup>a</sup>This column provides the number of unique patients seen by a primary care provider between October 1, 2016 through April 30, 2017.

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**Appendix II: Number of Unique Patients Seen  
at Each Veterans Affairs Medical Center  
(VAMC) in Mission-Critical Departments**

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<sup>b</sup>This column provides the number of unique patients seen by a mission-critical physician (psychiatrist, gastroenterologist, orthopedic surgeon, or emergency medicine physician) between September 18, 2016 through April 15, 2017.

## Appendix III: Pay Ranges for Mission-Critical Physicians at the Veterans Health Administration (VHA), Fiscal Years 2015 and 2017

**Table 4: Pay range changes for VHA mission-critical physicians, Fiscal Year 2015 and Fiscal Year 2017**

Occupation	Pay range FY 2015	Pay range FY 2017
Primary care physician	\$98,967 to \$215,000	\$100,957 to \$225,000
Psychiatrist	\$98,967 to \$240,000	\$100,957 to \$264,000
Gastroenterologist	\$98,967 to \$300,000	\$100,957 to \$400,000
Orthopedic surgeon	\$98,967 to \$375,000	\$100,957 to \$400,000
Emergency medicine physician	\$98,967 to \$240,000	\$100,957 to \$348,000

Source: Veterans Health Administration (VHA) | GAO-18-124

Note: Pay ranges are those given for staff-level physicians—which VHA refers to as Tier I physicians—as of November 2014 and November 2016. Total VHA physician compensation cannot exceed the salary of the U.S. President, which is \$400,000 annually. 38 U.S.C. § 7431(e)(4).

## Appendix IV: Department of Veterans Affairs Affairs Comments



DEPARTMENT OF VETERANS AFFAIRS  
Washington DC 20420

September 6, 2017

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's (GAO) draft report, "**VETERANS HEALTH ADMINISTRATION: Better Data and Evaluation Could Help Improve Physician Staffing, Recruitment, and Retention Strategies**" (GAO-17-736).

The enclosure provides general and technical comments, and information on actions taken to address the GAO draft report recommendations.

VA appreciates the opportunity to comment on your draft report.

Sincerely,

  
Vivieca Wright Simpson  
Chief of Staff

Enclosure

Enclosure

Department of Veterans Affairs (VA) Comments to  
Government Accountability Office (GAO) Draft Report  
**VETERANS HEALTH ADMINISTRATION: Better Data and Evaluation Could Help  
Improve Physician Staffing, Recruitment, and Retention Strategies**  
(GAO-17-736)

General Comments

The Veterans Health Administration (VHA) is strongly committed to developing long-term solutions that mitigate risks to the timeliness, cost-effectiveness, quality and safety of the VA health care system. We will use your findings to continue to make improvements and fulfill our mission of honoring America's Veterans by providing exceptional health care that improves their health and well-being.

VHA would like to provide the following context on physician loss rates and respectfully requests GAO consider adding these facts in the paragraph beginning on page 2 of the draft report and continuing on page 3:

- While the physician loss rate has increased over the last 5 years, historical loss rates in VHA dropped to a 10-year low in fiscal year (FY) 2008 as a result of the economic downturn in the United States, and have since returned to pre-downturn levels. Voluntary quit rates for physicians are actually lower than the FY 2008 levels.
- VHA has increased the number of physicians by 3.1 percent in FY 2016. VHA's growth rate for all occupations was 2.7 percent.
- VHA's loss rates for physicians are very similar to VHA's average loss rates for all occupations. VHA's physicians are not leaving VHA at a higher rate compared to other employees.

VHA appreciates GAO's acknowledgement of the national shortage of physicians projected by the Health Resources Services Administration on page 7 and the impact this shortage has on VHA's recruitment and retention capabilities.

VHA would like to submit the following general comments related to physician productivity:

Non-VA PAID physicians (In-House Fee Basis, Contract and Without Compensation (WOC)) are included in the physician productivity cube by individual, as is their workload (encounters, unique patients treated and Relative Value Units (wRVUs)). A standardized method to estimate the full-time equivalents (FTE) of this workforce has been adopted by the VHA Office of Productivity, Efficiency and Staffing (OPES). OPES reviews the work output in wRVUs and divides this by the average productivity of the specialty specific VA PAID provider. For example, if a non-VA PAID Cardiologist generated 2,500 wRVUs and the average for productivity of a VA PAID Cardiologist was 5,000, we would estimate that the non-VA PAID FTE is 0.5.

Enclosure

Department of Veterans Affairs (VA) Comments to  
Government Accountability Office (GAO) Draft Report  
***“VETERANS HEALTH ADMINISTRATION: Better Data and Evaluation Could Help  
Improve Physician Staffing, Recruitment, and Retention Strategies”***  
(GAO-17-736)

OPES does not consider the trainees to be part of the workforce in VHA’s reporting of productivity. We do display in our reporting resident counts so that sites can see the size of the teaching program. For labor mapping purposes, time spent of our physicians with residents (clinical supervision) is considered direct clinical time. The workload of residents is ascribed to the attending physician listed on the encounter as per the Data Capture directive. In analysis, OPES has found that the presence of residents enhances productivity and, therefore, in our VA medical centers (VAMCs) with large teaching programs, we have higher productivity expectations/targets.

Enclosure

Department of Veterans Affairs (VA) Comments to  
Government Accountability Office (GAO) Draft Report  
***“VETERANS HEALTH ADMINISTRATION: Better Data and Evaluation Could Help  
Improve Physician Staffing, Recruitment, and Retention Strategies”***  
(GAO-17-736)

**GAO Recommendation 1: The Under Secretary for Health should develop and implement a process to accurately count all physicians providing care at each medical center, including physicians who are not employed by VHA.**

**VA Comment:** Non-concur. VHA appreciates the GAO recommendation and affirms the benefits of accurate workforce data. VHA has highly reliable systems to identify all VA-employed physicians and fee basis, contract, and without compensation providers. VHA is able to identify an onboard “head count” and capture workload for all physicians providing care at VAMCs.

VHA assesses and projects workload demand using previous workload demand plus anticipated health care needs based on Veteran population demographics. Each VAMC retains the necessary flexibility to meet Veterans' health care needs using a combination of VA care, fee basis or contract care, and care in the community. VHA care includes appropriate care provided by mid-level providers such as physician assistants, nurse practitioners and advanced practice registered nurses. The ability to count physicians does not drive or impact VHA's ability to assess workload. VAMCs determine the anticipated care Veterans will need, and then use a variety of workload, productivity, and capacity assessment tools to determine the best way to provide care, whether within VHA or using care in the community. VHA uses FTE measures to assess physician capacity, not onboard counts.

**GAO Recommendation 2: The Under Secretary for Health should develop and issue guidance to its VAMCs on determining appropriate staffing levels for all mission-critical physician occupations.**

**VA Comment:** Concur. VHA will develop and evaluate staffing models for gastroenterology, orthopedics, and emergency medicine. VHA has established and implemented staffing models for primary care and mental health.

Guidance on gastroenterology, orthopedics, and emergency medicine staffing models will be released to the VAMCs once developed. VHA will provide VAMCs information on the expected and observed implementation of the staffing models during the annual workforce planning cycle in the spring of 2018 to assess implementation. Target Completion Date: October 2018.

Enclosure

Department of Veterans Affairs (VA) Comments to  
Government Accountability Office (GAO) Draft Report  
***“VETERANS HEALTH ADMINISTRATION: Better Data and Evaluation Could Help  
Improve Physician Staffing, Recruitment, and Retention Strategies”***  
(GAO-17-736)

**GAO Recommendation 3:** The Under Secretary for Health should ensure that when multiple offices issue similar productivity data on physician occupations, any methodological differences are clearly communicated and guidance is provided on how to interpret and reconcile the data.

**VA Comment:** Concur. Moving forward, OPES will be the official and sole source issuing productivity data for physician occupations. Internal documentation and communications will be developed to share this decision throughout VHA. Target Completion Date: December 2017.

**Recommendation 4:** The Under Secretary for Health should establish a system-wide method to share information about physician trainees to help fill vacancies across VAMCs.

**VA Comment:** Concur. VA currently does not have a system-wide method to share information about physician trainees to help fill vacancies across VAMCs. However, at the request of the Office of Academic Affiliations, VA Office of Human Resources and Administration (HR&A) is already enhancing the HR-SMART system to allow “Without Compensation” employees, including Graduate Medical Education trainees to be added. The USA Staffing-HR-Smart integration will also be necessary for full success in this recommendation, as this interconnection allows trainees to directly enter data into the USA Staffing Onboarding Manager that is then imported into HR-Smart.

Milestones and requirements for this new capability have already been established. HR&A expects to have the interface constructed by Quarter 3, FY18. Pilot projects at various sites will be performed, with full application to the trainee onboarding to be determined upon completion of pilots. Target Completion Date: Q4, FY19.

**Recommendation 5:** The Under Secretary for Health should conduct a comprehensive, system-wide evaluation of the physician recruitment and retention strategies used by VAMCs to determine their overall effectiveness, identify and implement improvements, ensure coordination across VHA offices, and establish an ongoing monitoring process.

**VA Comment:** Concur. The VHA Office of Workforce Management and Consulting (WMC) has already taken steps to complete a comprehensive, system-wide evaluation of the physician recruitment and retention strategies. WMC is in the process of completing a review of physician recruitment, relocation, and retention incentives by specialty as well as a comparison of salary data for local markets. WMC plans to partner with the internal Partnered Evidence-based Policy Resource Center to evaluate and recommend a systematic approach to allocating workforce management resources

Enclosure

Department of Veterans Affairs (VA) Comments to  
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Improve Physician Staffing, Recruitment, and Retention Strategies”***  
(GAO-17-736)

such as the Education Debt Reduction Program and incentive utilization. Target  
Completion Date: September 2018.

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## Appendix V: GAO Contact and Staff Acknowledgments

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### GAO Contact:

Debra A. Draper, (202) 512-7114 or [draperd@gao.gov](mailto:draperd@gao.gov)

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### Staff Acknowledgments:

In addition to the named above, key contributors to this report were: Lori Achman, Assistant Director; Sarah Harvey, Analyst-In-Charge; Jennie Apter; Muriel Brown; Frederick Caison; Michelle Duren; Vikki Porter; and Jennifer Whitworth.

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## Appendix VI: Accessible Data

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### Agency Comments

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#### Text of Appendix IV: Department of Veterans Affairs Comments

##### Page 1

September 6, 2017

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's (GAO) draft report, "11 VETERANS HEALTH ADMINISTRATION: Better Data and Evaluation Could Help Improve Physician Staffing, Recruitment, and Retention Strategies" (GAO-17-736).

The enclosure provides general and technical comments, and information on actions taken to address the GAO draft report recommendations.

VA appreciates the opportunity to comment on your draft report.

Sincerely,

Vivieca Wright Simpson

Chief of Staff

Enclosure

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**General Comments**

The Veterans Health Administration (VHA) is strongly committed to developing long-term solutions that mitigate risks to the timeliness, cost-effectiveness, quality and safety of the VA health care system. We will use your findings to continue to make improvements and fulfill our mission of honoring America's Veterans by providing exceptional health care that improves their health and well-being.

VHA would like to provide the following context on physician loss rates and respectfully requests GAO consider adding these facts in the paragraph beginning on page 2 of the draft report and continuing on page 3:

- While the physician loss rate has increased over the last 5 years, historical loss rates in VHA dropped to a 10-year low in fiscal year (FY) 2008 as a result of the economic downturn in the United States, and have since returned to pre-downturn levels. Voluntary quit rates for physicians are actually lower than the FY 2008 levels.
- VHA has increased the number of physicians by 3.1 percent in FY 2016. VHA's growth rate for all occupations was 2.7 percent.
- VHA's loss rates for physicians are very similar to VHA's average loss rates for all occupations. VHA's physicians are not leaving VHA at a higher rate compared to other employees.

VHA appreciates GAO's acknowledgement of the national shortage of physicians projected by the Health Resources Services Administration on page 7 and the impact this shortage has on VHA's recruitment and retention capabilities.

VHA would like to submit the following general comments related to physician productivity:

Non-VA PAID physicians (In-House Fee Basis, Contract and Without Compensation (WOC)) are included in the physician productivity cube by individual, as is their workload (encounters, unique patients treated and Relative Value Units (wRVUs)). A standardized method to estimate the full-time equivalents (FTE) of this workforce has been adopted by the VHA Office of Productivity, Efficiency and Staffing (OPES). OPES reviews

the work output in wRVUs and divides this by the average productivity of the specialty specific VA PAID provider. For example, if a non-VA PAID Cardiologist generated 2,500 wRVUs and the average for productivity of a VA PAID Cardiologist was 5,000, we would estimate that the non-VA PAID FTE is 0.5.

### Page 3

OPES does not consider the trainees to be part of the workforce in VHA's reporting of productivity. We do display in our reporting resident counts so that sites can see the size of the teaching program. For labor mapping purposes, time spent of our physicians with residents (clinical supervision) is considered direct clinical time. The workload of residents is ascribed to the attending physician listed on the encounter as per the Data Capture directive. In analysis, OPES has found that the presence of residents enhances productivity and, therefore, in our VA medical centers (VAMCs) with large teaching programs, we have higher productivity expectations/targets.

### Page 4

#### **GAO Recommendation 1:**

The Under Secretary for Health should develop and implement a process to accurately count all physicians providing care at each medical center, including physicians who are not employed by VHA.

#### **VA Comment: Non-concur.**

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**GAO Recommendation 2:**

The Under Secretary for Health should develop and issue guidance to its VAMCs on determining appropriate staffing levels for all mission critical physician occupations.

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Page 5

**GAO Recommendation 3:**

The Under Secretary for Health should ensure that when multiple offices issue similar productivity data on physician occupations, any methodological differences are clearly communicated and guidance is provided on how to interpret and reconcile the data.

**VA Comment: Concur.**

Moving forward, OPES will be the official and sole source issuing productivity data for physician occupations. Internal documentation and communications will be developed to share this decision throughout VHA. Target Completion Date: December 2017.

**Recommendation 4.**

The Under Secretary for Health should establish a system-wide method to share information about physician trainees to help fill vacancies across VAMCs.

**VA Comment: Concur.**

VA currently does not have a system-wide method to share information about physician trainees to help fill vacancies across VAMCs. However, at the request of the Office of Academic Affiliations, VA Office of Human Resources and Administration (HR&A) is already enhancing the HR-SMART system to allow "Without Compensation" employees, including Graduate Medical Education trainees to be added. The USA Staffing-HR-Smart integration will also be necessary for full success in this recommendation, as this interconnection allows trainees to directly enter data into the USA Staffing Onboarding Manager that is then imported into HR-Smart.

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The Under Secretary for Health should conduct a comprehensive, system-wide evaluation of the physician recruitment and retention strategies used by VAMCs to determine their overall effectiveness, identify and implement improvements, ensure coordination across VHA offices, and establish an ongoing monitoring process.

**VA Comment: Concur.**

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such as the Education Debt Reduction Program and incentive utilization.  
Target Completion Date: September 2018.

## Related GAO Products

*VA Health Care: Improvements Needed in Data and Monitoring of Clinical Productivity and Efficiency*, [GAO-17-480](#) (Washington, D.C.: May 24, 2017)

*Veterans Health Care: Improvements Needed in Operationalizing Strategic Goals and Objectives*, [GAO-17-50](#) (Washington, D.C.: October 21, 2016)

*Veterans Health Administration, Management Attention Is Needed to Address Systemic, Long-standing Human Capital Challenges*, [GAO-17-30](#) (Washington, D.C., Dec. 23, 2016)

*Veterans Health Administration: Personnel Data Show Losses Increased for Clinical Occupations from Fiscal Year 2011 through 2015, Driven by Voluntary Resignations and Retirements*, [GAO-16-666R](#) (Washington, D.C.: July 29, 2016)

*VA Health Care: Improvements Needed for Management and Oversight of Sole-Source Affiliate Contract Development*. [GAO-16-426](#) (Washington, D.C.: May 6, 2016)

*VA Health Care: Actions Needed to Improve Newly Enrolled Veterans' Access to Primary Care*. [GAO-16-328](#) (Washington, D.C.: March 18, 2016)

*VA Primary Care: Improved Oversight Needed to Better Ensure Timely Access and Efficient Delivery of Care*. [GAO-16-83](#) (Washington, D.C.: October 8, 2015)

*VA Mental Health: Clearer Guidance on Access Policies and Wait-Time Data Needed*. [GAO-16-24](#) (Washington, D.C.: October 28, 2015)

*VA Health Care: Actions Needed to Ensure Adequate and Qualified Nurse Staffing*, [GAO-15-61](#) (Washington, D.C.: October 16, 2014)

*VA Health Care: Oversight Improvements Needed for Nurse Recruitment and Retention Initiatives*, [GAO-15-794](#) (Washington, D.C.: September 30, 2015)

*VA Health Care: Management and Oversight of Consult Process Need Improvement to Help Ensure Veterans Receive Timely Outpatient Specialty Care.* [GAO-14-808](#) (Washington, D.C.: September 30, 2014)

*VA Health Care: Additional Guidance, Training, and Oversight Needed to Improve Clinical Contract Monitoring.* [GAO-14-54](#) (Washington, D.C.: October 31, 2013)

*VA Health Care: Actions Needed to Improve Administration of the Provider Performance Pay and Award Systems.* [GAO-13-536](#) (Washington, D.C.: July 24, 2013)

*VA Health Care: Reporting of Spending and Workload for Mental Health Services Could Be Improved,* [GAO-10-570](#) (Washington, D.C.: May 28, 2010)

*VA Needs a Single System to Measure Hospital Productivity,* [AFMD-81-23](#) (Washington, D.C.: March 24, 1981)

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