



Report to the Chairman, Subcommittee on Oversight & Investigations, Committee on Veterans' Affairs, House of Representatives

October 2014

### VA HEALTH CARE

## Actions Needed to Ensure Adequate and Qualified Nurse Staffing

# **GAO Highlights**

Highlights of GAO-15-61, a report to the Chairman, Subcommittee on Oversight & Investigations, Committee on Veterans' Affairs, House of Representatives

#### Why GAO Did This Study

GAO and others have raised prior concerns about the adequacy and qualifications of VHA's nurse staffing. In part to address these concerns, VHA issued a directive in 2010 requiring all VAMCs to implement a standardized methodology for determining an adequate and qualified nurse workforce, which includes developing and executing nurse staffing plans. It also requires VAMCs to use the methodology on an ongoing basis to evaluate staffing plans.

GAO was asked to provide information on nurse staffing at VAMCs. This report reviews the extent to which (1) VAMCs have implemented VHA's nurse staffing methodology, and (2) VHA oversees VAMCs' implementation and ongoing administration of the methodology. GAO reviewed documents and interviewed officials from VHA, seven VAMCs selected to ensure variation in factors such as geographic location, and regional offices for these VAMCs. GAO used federal internal control standards to evaluate VHA's oversight. GAO also interviewed representatives of veterans service organizations, nursing organizations, and unions.

#### What GAO Recommends

GAO recommends VA: (1) assess VAMCs' ability to implement the methodology, (2) monitor VAMCs' ongoing compliance with the methodology, (3) complete timely evaluations, (4) improve the timeliness of communication with VAMCs, and (5) define areas of responsibility and reporting within VA's management structure. VA concurred with the recommendations.

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### Actions Needed to Ensure Adequate and Qualified Nurse Staffing

#### What GAO Found

The seven Department of Veterans Affairs medical centers (VAMC) in GAO's review implemented the Veterans Health Administration's (VHA) nurse staffing methodology, experienced problems developing and executing the related nurse staffing plans, and some reported improvements in nurse staffing. Specifically, GAO found that each of the seven VAMCs had developed a facility-wide staffing plan—which outlines initiatives needed to ensure appropriate unit-level nurse staffing and skill mix—and taken steps to execute it. However, VAMCs experienced problems—such as lack of data resources and difficulties with training—in both the development and execution of their staffing plans. Some VAMC staff reported improvements in the adequacy and qualifications of their units' nursing staff when nurse staffing plan initiatives were executed. For example, at two VAMCs where the number of nurses was increased or where support services for nurses were put in place, such as a designated group of staff to assist in transporting patients to and from appointments off the unit, unit staff said the adequacy of the nursing staff had improved. However, some VAMC unit staff reported that unit nurse staffing continued to be inadequate and that nurse unit assignments and job duties were not always appropriate for their qualifications.

VHA's oversight is limited for ensuring its nurse staffing methodology is implemented and administered appropriately. GAO found the following internal controls were limited in VHA's oversight process:

- Environmental assessment. VHA did not comprehensively assess each
  VAMC to ensure preparedness for implementing the methodology, including
  having the necessary technical support and resources, prior to the issuance
  of the directive requiring each VAMC to implement the methodology.
- Monitoring compliance. VHA does not have a plan for monitoring VAMCs to ensure compliance with the implementation and ongoing administration of the methodology.
- **Evaluation.** VHA has conducted limited evaluations of the methodology, and at least one of these evaluations has been significantly delayed.
- Timeliness of communication. VHA's protracted timeline for communicating methodology-related information may have hindered the ability of VAMCs to appropriately develop their staffing plans and to execute the initiatives contained in those plans.
- Organizational accountability. VHA did not define areas of responsibility or establish the appropriate line of reporting within VA's management structure for oversight of the implementation and ongoing administration of the methodology.

Without these internal controls in place, VHA cannot ensure its methodology meets department goals, such as establishing a standardized methodology for determining an adequate and qualified nurse workforce at VAMCs, and ultimately, having nurse staffing that is adequate to meet veterans' growing and increasingly complex health care needs.

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#### **Abbreviations**

FY fiscal year

LPN licensed practical nurse

NA nursing assistant

NDNQI National Database of Nursing Quality Indicators

NHPPD nursing hours per patient day
OIG Office of Inspector General
ONS Office of Nursing Services

RN registered nurse

VA Department of Veterans Affairs

VAMC VA medical center

VHA Veterans Health Administration

VISN Veterans Integrated Service Network

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October 16, 2014

The Honorable Mike Coffman Chairman Subcommittee on Oversight & Investigations Committee on Veterans' Affairs House of Representatives

Dear Mr. Chairman:

The Department of Veterans Affairs' (VA) Veterans Health Administration (VHA) provides medical care to millions of veterans each year. Nurses play an essential role in the medical care that veterans receive, and it is critical that VHA has an adequate and qualified nursing staff to meet veterans' needs. Studies have shown that better care is provided when facilities have both an adequate number of nurses, and nurses that are appropriately qualified for the jobs to which they are assigned. According to VHA, it employs more than 80,000 nurses, making it the largest employer of nurses in the country. The number of veterans receiving care at VA medical centers (VAMC) increased from 5.2 million in fiscal year (FY) 2009 to 5.8 million in FY 2013, and VHA estimates that it will serve close to 8.8 million veterans by 2020. Furthermore, more intensive nursing care is being required by a growing number of veterans returning from military operations in Afghanistan and Iraq, and by aging veterans from prior eras of service.

For more than 10 years, concerns have been raised that VHA might not have an adequate and qualified nursing staff to care for the increasing number of veterans requiring more complex care. In 2002, Congress passed legislation requiring VA to develop a nationwide policy on staffing levels for the operation of VAMCs.<sup>2</sup> Specifically, the law required VA to establish a nationwide policy on the staffing of VAMCs to ensure they have adequate staff, taking into account staffing levels and the mixture of

<sup>&</sup>lt;sup>1</sup>See, for example, R.L. Kane et al., *Nurse Staffing and Quality of Patient Care*, Pub. No. 07-E005, March 2007, Agency for Healthcare Research and Quality; and Kaiser Permanente Institute for Health Policy, *Nurse Staffing and Care Delivery Models: A Review of the Evidence* (Menlo Park, Calif.: March 2002).

<sup>&</sup>lt;sup>2</sup>Pub. L. No. 107-135, Title I, § 124, 115 Stat. 2446, 2452 (Jan. 23, 2002).

staff skills required for providing care to veterans. The need for a new nurse staffing policy was highlighted in 2004 when VA's Office of Inspector General (OIG) issued a report raising concerns about the adequacy of nurse staffing levels in VAMCs' inpatient units. 3 By 2008, however, no national policy on nurse staffing had been implemented. In October 2008, we issued a report raising concerns about the adequacy of nurse staffing, specifically for registered nurses (RN) in inpatient units, and the need to expeditiously proceed with developing and implementing a new nurse staffing system, among other issues.4 We recommended that VHA develop a detailed plan for implementing a new nurse staffing system and ensure it provided accurate nurse staffing estimates. In part to address these concerns, in 2010, VHA issued a directive requiring each VAMC to implement a nationally standardized methodology for determining an adequate and qualified nurse workforce, which includes the development and execution of nurse staffing plans. The staffing plans outline initiatives needed to ensure appropriate nurse staffing levels and skill mix in units to support high-quality patient care in the most effective manner possible. The directive also requires VAMCs to use the methodology on an ongoing basis to evaluate staffing plans at least annually.

You expressed interest in obtaining information on nurse staffing at VAMCs. In this report, we review the extent to which (1) VAMCs have implemented VHA's nurse staffing methodology, and (2) VHA oversees VAMCs' implementation and ongoing administration of its nurse staffing methodology.

To determine the extent to which VAMCs have implemented VHA's nurse staffing methodology, we reviewed documents and interviewed officials from VHA. Specifically, we reviewed information and interviewed officials from VHA's Office of Nursing Services (ONS)—the VHA office responsible for providing national policies, guidelines, and oversight for all VAMC nursing personnel—on the extent to which VAMCs have implemented the methodology in inpatient units (Phase I); VAMCs have

<sup>&</sup>lt;sup>3</sup>See Department of Veterans Affairs, Office of the Inspector General, *Healthcare Inspection: Evaluation of Nurse Staffing in Veterans Health Administration Facilities*, 03-00079-183 (Washington, D.C.: Aug. 13, 2004).

<sup>&</sup>lt;sup>4</sup>See GAO, VA Health Care: Improved Staffing Methods and Greater Availability of Alternate and Flexible Work Schedules Could Enhance the Recruitment and Retention of Inpatient Nurses, GAO-09-17 (Washington, D.C.: Oct. 24, 2008).

piloted the methodology in operating room, emergency department, and spinal cord injury units (Phase II); and VHA has developed plans for an automatic staffing system (Phase III). We interviewed officials and nursing staff from seven VAMCs located in: (1) Battle Creek, Michigan; (2) Bronx, New York; (3) Columbia, South Carolina; (4) Dallas, Texas, (5) Fort Harrison, Montana; (6) San Diego, California; and (7) Tampa, Florida about their experiences implementing VHA's nurse staffing methodology. These VAMCs were selected to ensure variation in factors such as geographic location, rural versus urban location, complexity, <sup>5</sup> RN turnover rate, and Magnet status. 6 We did not independently assess the extent to which the VAMCs' implementation of the staffing methodology contributed to an adequate and qualified workforce. Furthermore, the results of our review of the seven VAMCs are not generalizable across all VAMCs. We reviewed literature and interviewed researchers who have published in the area of nurse staffing, representatives of selected veterans service organizations, and representatives of selected nursing organizations and unions<sup>8</sup> to gain their perspectives about the current environment for nurse staffing, nurse staffing methodologies in general, and VHA's nurse staffing methodology.

To determine the extent to which VHA oversees VAMCs' implementation and ongoing administration of its nurse staffing methodology, we reviewed documents and interviewed officials from VHA. Specifically, we

<sup>&</sup>lt;sup>5</sup>VA assigns each VAMC a complexity score derived from multiple variables to measure facility complexity arrayed along four categories, namely: patient population served, clinical services offered, education and research complexity, and administrative complexity.

<sup>&</sup>lt;sup>6</sup>Magnet status is a designation of the Magnet Recognition Program®—a nationwide program developed by the American Nurses Credentialing Center, a subsidiary of the American Nurses Association, to recognize health care organizations for quality patient care, nursing excellence, and innovations in professional nursing practice. To attain Magnet status, hospitals must meet certain requirements, related to areas including staffing practices and quality monitoring.

<sup>&</sup>lt;sup>7</sup>We spoke with officials from the Disabled American Veterans and Paralyzed Veterans of America who are knowledgeable about nurse staffing methodologies in VAMC inpatient units, such as spinal cord injury units.

<sup>&</sup>lt;sup>8</sup>We interviewed officials from the American Nurses Association. We also contacted each of the nursing organizations that VHA officials told us work with VA nurses: American Federation of Government Employees, National Nurses United, National Association of Government Employees, National Federation of Federal Employees, and Nurses Organization of Veterans Affairs.

reviewed VHA documents, such as national directives, policies, and evaluation plans, to determine the extent to which VHA has provided VAMCs guidance regarding the implementation and ongoing administration of the staffing methodology. We interviewed officials from ONS, the seven VAMCs in our review, and the regional Veterans Integrated Service Networks (VISN)<sup>9</sup> for these seven VAMCs regarding their oversight of VAMCs' implementation of the staffing methodology. We also interviewed ONS officials and VAMC officials and staff about the extent to which VAMCs' implementation of the staffing methodology contributes to an adequate and qualified nurse workforce. To determine whether VHA applied appropriate internal controls in its oversight of the nurse staffing methodology, we used relevant criteria from federal internal control standards. We also used relevant strategic planning and performance measures from the Government Performance and Results Act as enhanced by the Government Performance and Results Modernization Act of 2010, as incorporated in GAO's guidance on assessing performance. 10

We conducted this performance audit from September 2013 to October 2014 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.

<sup>&</sup>lt;sup>9</sup>Each of VA's 21 VISNs is responsible for managing and overseeing VAMCs within a defined geographic area.

<sup>&</sup>lt;sup>10</sup>GAO, Managing For Results: GPRA Modernization Act Implementation Provides Important Opportunities to Address Government Challenges, GAO-11-617T (Washington, D.C.: May 10, 2011); Executive Guide: Effectively Implementing the Government Performance and Results Act, GAO/GGD-96-118 (Washington, D.C.: June 1996); Standards for Internal Control in the Federal Government, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999); Internal Control Management and Evaluation Tool, GAO-01-1008G (Washington, D.C.: August 2001); VA Dialysis Pilot: Increased Attention to Planning, Implementation, and Performance Measurement Needed to Help Achieve Goals, GAO-12-584 (Washington, D.C.: May 23, 2012); Managing For Results: Executive Branch Should More Fully Implement the GPRA Modernization Act to Address Pressing Governance Challenges, GAO-13-518 (Washington, D.C.: June 26, 2013).

#### Background

Nurse staffing is a critical part of health care because of the effects it can have on patient outcomes and nurse job satisfaction. According to VHA, its staffing methodology aims to maximize nurses' productivity and efficiency, while providing safe patient care by ensuring appropriate nurse staffing levels and skill mix.

#### VHA Nurse Workforce

VHA's nurse workforce is primarily composed of RNs, <sup>11</sup> licensed practical nurses (LPN), <sup>12</sup> and nursing assistants (NA). These nurses provide care—ranging from primary care to complex specialty care—in inpatient, outpatient, and residential care settings at 151 VAMCs across the country. <sup>13</sup> In addition to the size of the nursing workforce, the nursing skill mix—i.e., the share of each type of nurse (RNs, LPNs, or NAs) of the total—is an important component of nurse staffing. Units vary in their nursing skill mix, depending on the needs of their patients. For example, intensive care units require higher intensity nursing, and may have a skill mix that is primarily composed of RNs compared to other types of nursing units that may provide less complex care. (See table 1 for a general description of the types of nursing staff position, responsibilities, and educational requirements.)

<sup>&</sup>lt;sup>11</sup>According to VHA, the workforce data for RNs also include RNs with advanced degrees such as nurse practitioners.

<sup>&</sup>lt;sup>12</sup>LPNs and licensed vocational nurses have the same level of education and patient care responsibilities. For the purposes of this report, when we refer to LPNs, we are referring to both LPNs and licensed vocational nurses.

<sup>&</sup>lt;sup>13</sup>VHA also employs nurses to work outside VAMCs, such as those employed within its administrative offices. These nurses were not included in our review.

Position type	Responsibilities	Educational requirements	
Registered nurse	Assesses and provides care to patients, administers	Highest educational requirements:	
(RN)	medications; documents patients' medical conditions, including admissions and discharges; analyzes test results; establishes treatment plans; and operates medical equipment.	Has completed a nursing education program, met state licensing requirements, and passed a nurse licensing examination to obtain an RN license.	
Licensed practical nurse (LPN) <sup>a</sup>	Takes patient vital signs, provides basic care, and	Fewer educational requirements than RNs:	
	administers medications, but generally does not provide certain complex patient care services such as patient assessments or administration of intravenous medications.	Has a high school diploma or its equivalent and passed a licensing examination upon completion of a state-approved program available at technical schools and community colleges, typically lasting 1 year.	
Nursing assistant	Attends to basic patient needs such as providing personal care to patients (e.g., assistance with bathing,	Less extensive educational requirements than RNs and LPNs:	
	dressing, and personal hygiene), carries out non- specialized duties (e.g., measure blood pressure), and supports other nursing staff.	Has registered as a nursing assistant with their state health department, and passed a written competency examination upon completion of a state-approved training program, generally lasting 3 to 12 weeks.	

Source: VHA, nursing organizations, and literature. I GAO-15-61

<sup>a</sup>LPNs and licensed vocational nurses have the same level of education and patient care responsibilities. In this table, when we refer to LPNs, we are referring to both LPNs and licensed vocational nurses.

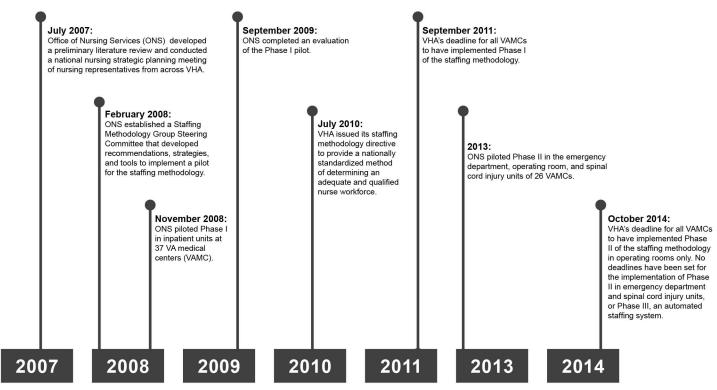
Although the number of nurses at VAMCs increased from FY 2009 to FY 2013, VHA ranked nurses as the second most challenging occupation to recruit and retain. Specifically, the total number of nurses at VAMCs increased 13 percent from 72,542 in FY 2009 to 81,940 in FY 2013, with similarly proportionate increases within each position type—RN, LPN, and NA. During the same time period, the annual nurse turnover rate at VAMCs—the percentage of nurses who left VHA through retirement, death, termination, or voluntary separation—increased from 6.6 percent to 8.0 percent. Although RNs had the lowest turnover rate among nurses, VHA noted particular difficulty recruiting and retaining for the position, particularly for RNs with advanced professional skills, knowledge, and experience, such as RNs that provide services in medical and surgical care units. VHA projects that approximately 40,000 new nurses will be needed through FY 2018 to maintain current staffing levels and to meet the needs of veterans.

<sup>&</sup>lt;sup>14</sup>See Department of Veterans Affairs, Veterans Health Administration, 2013 *Workforce Succession Strategic Plan* (Washington, D.C.: 2013).

#### VHA's Nurse Staffing Methodology

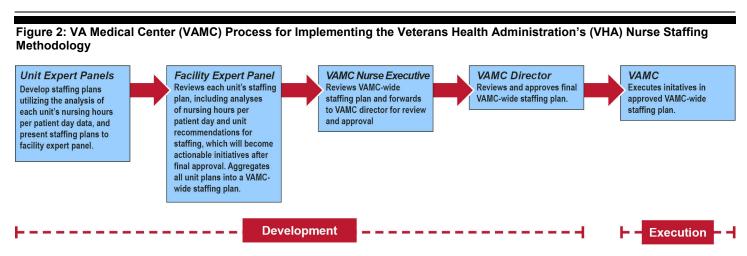
To help ensure adequate and qualified nurse staffing at VAMCs, in July 2010, VHA issued VHA Directive 2010-034: Staffing Methodology for VHA Nursing Personnel. ONS, the VHA office responsible for providing national policies and guidelines for all VHA nursing personnel, led the development of the nurse staffing methodology, which began in 2007. (See fig. 1.)

Figure 1: Timeline for Development and Implementation of the Veterans Health Administration's (VHA) Nurse Staffing Methodology



Source: VHA. | GAO-15-61

To implement the methodology, each VAMC is required to (1) develop a VAMC-wide staffing plan for its nurse workforce, comprised of individual unit-level staffing plans, and (2) execute that plan. (See figure 2 for an outline of the process for implementing VHA's nurse staffing methodology.)



Source: VHA. | GAO-15-61

Each VAMC unit is to develop a staffing plan outlining recommendations on the appropriate nurse staffing levels and skill mix needed in that unit to support high-quality patient care in the most effective manner possible. Specifically, staffing plans are to be developed using expert panels and a data-driven analysis of nursing hours per patient day (NHPPD). VAMC nurse executives—members of senior management within each VAMC—are responsible for implementing the staffing methodology in their respective VAMCs.

- Expert panels: advisory groups—at the unit and facility level—of
  VAMC staff with in-depth knowledge of nurse staffing needs. The use
  of expert panels is intended to apply principles of shared governance,
  which allows nurses to have influence over the delivery of patient care
  and involves stakeholders from across the VAMC. VAMC nurse
  executives are responsible for ensuring that the unit-based expert
  panels represent all nursing types (RN, LPN, NA) and developing the
  VAMC's facility expert panel.
- <u>Data-driven analysis of NHPPD</u>: involves determining the number and skill mix of nurses needed for each unit by calculating the number of direct patient care nursing hours provided for all patients on that unit during a 24-hour period. <sup>15</sup> The use of NHPPD represents a move

<sup>&</sup>lt;sup>15</sup>VHA's directive defines direct patient care as all patient- or resident-centered nursing activities performed by staff assigned to the unit. These activities include nursing assessments, admission and discharge activities, and patient teaching and communication.

away from the more traditional nurse-to-patient ratios that assign a certain number of patients to each nurse. Some research suggests that NHPPD can better capture changes in nurses' workloads and case mix resulting from admissions and discharges, as well as patient acuity levels, which can impact the amount of time nurses spend with each patient.<sup>16</sup>

After developing the staffing plan, each unit-based expert panel presents its plan, which includes staffing recommendations, to the VAMC's facility expert panel. Those staffing recommendations may include, for example, initiatives to change the number and skill mix of nurses needed for each shift; change the number of nurses required for coverage during predicted absences, such as annual and sick leave; and develop support services for nurses, such as designated individuals to transport patients to other areas of the facility as needed. The facility expert panel—comprised of staff from across the VAMC—reviews each unit-based panel's staffing plan and aggregates all of the unit plans into one VAMC-wide staffing plan. The VAMC nurse executive reviews the VAMC-wide staffing plan and forwards it to the VAMC director for review and approval. Once approved, the VAMC then begins execution of the initiatives outlined in the VAMC-wide staffing plan. The directive requires each VAMC to conduct an ongoing staffing analysis to evaluate staffing plans annually, at a minimum, and for VAMC directors to incorporate projected staffing needs into their annual budget review.

The staffing methodology is being implemented in three phases.

- In Phase I, VAMCs were to implement the staffing methodology in all inpatient units no later than September 30, 2011.
- In Phase II, VAMCs are to implement the staffing methodology for all other units, including the operating room, emergency department, and spinal cord injury units.<sup>17</sup> ONS has completed the Phase II pilot for

<sup>&</sup>lt;sup>16</sup>J. Spetz et al., "How Many Nurses Per Patient?" Health Services Research, vol. 43 (October 2008):1674-1692; Carayon, P. and A. Gurses, "Nursing Workload and Patient Safety in Intensive Care Units: A Human Factors Engineering Evaluation of the Literature," Intensive and Critical Care Nursing, vol. 21 (2005): 284-301; and American Association of Critical-Care Nurses, Standards for Establishing and Sustaining Healthy Work Environments (Aliso Viejo, Calif.: American Association of Critical-Care Nurses, 2005).

<sup>&</sup>lt;sup>17</sup>According to ONS officials, the staffing methodology for these units were to be implemented separately from those included in Phase I because of the potential need to modify the methodology to align with the special services these units provide.

operating room units, and VAMCs are expected to implement the methodology in their operating room units by October 1, 2014. Deadlines for the implementation in other Phase II units have not been set.

 In Phase III, VAMCs are to use an automated system developed by VHA that (1) merges VHA staffing data used in the staffing methodology and other VHA data, such as human resource data, into one data system, and (2) incorporates the data into staffing-related reports, such as quality-of-care reports. A deadline for Phase III implementation has not been set.

In May 2014, the VA OIG found that VAMCs in its review varied in their implementation of the staffing methodology. Specifically, the VA OIG reported that 8 of the 28 VAMCs reviewed had not fully implemented all components of the staffing methodology by September 2013, 2 years past the implementation date required by the VHA directive. <sup>18</sup> As these findings were similar to those of its April 2013 report, <sup>19</sup> the VA OIG stated in its 2014 report, "We re-emphasize the need for all facilities to fully implement the methodology and accurately address patient needs with safe and adequate staffing."

## Impact of Nurse Staffing on Patient Outcomes and Nurse Job Satisfaction

Adequate and qualified nurse staffing at VAMCs is required to provide effective and continuous patient care and to maintain a stable and engaged workplace. The importance of nurse staffing on patient outcomes and nurse job satisfaction has been emphasized by various entities, including The Joint Commission;<sup>20</sup> American Nurses Association;<sup>21</sup> Institute of Medicine;<sup>22</sup> and Agency for Healthcare

<sup>&</sup>lt;sup>18</sup>See Department of Veterans Affairs, Office of the Inspector General, *Combined Assessment Program Summary Report: Evaluation of Nurse Staffing in Veterans Health Administration Facilities April – September 2013*, Report No. 14-01072-140 (Washington, D.C.: May 12, 2014).

<sup>&</sup>lt;sup>19</sup>See Department of Veterans Affairs, Office of the Inspector General, *Combined Assessment Program Summary Report: Evaluation of Nurse Staffing in Veterans Health Administration Facilities*, Report No. 13-01744-187 (Washington, D.C.: April 30, 2013).

<sup>&</sup>lt;sup>20</sup>Joint Commission on Accreditation of Healthcare Organizations, *Health Care at the Crossroads: Strategies for Addressing the Evolving Nursing Crisis* (Chicago, Ill.: Joint Commission on Accreditation of Healthcare Organizations, 2002).

<sup>&</sup>lt;sup>21</sup>See American Nurses Association, *Principles for Nurse Staffing, Second Edition* (Silver Spring, Md.: American Nurses Association, 2012).

Research and Quality.<sup>23</sup> Additionally, research has linked the adequacy and qualifications of nurse staffing to patient outcomes and nurse job satisfaction. For example, studies have shown:

- A link between the adequacy of nurse staffing and patient outcomes, particularly in inpatient units, such as intensive care and surgical units. For example, medication errors, pressure ulcers, hospital acquired infections, pneumonia, longer-than-expected stays, and higher mortality rates each have been associated with inadequate nurse staffing.<sup>24</sup>
- A link between the qualifications of nursing staff and patient outcomes. For example, one study found that patients cared for in units utilizing more licensed and experienced nursing staff (RNs and LPNs) and fewer unlicensed aides (NAs) had shorter lengths of stay.<sup>25</sup> Other studies linked baccalaureate-prepared nurses to lower mortality rates.<sup>26</sup>
- A link between nurse staffing and job satisfaction. For example, some studies have linked low job satisfaction to heavy workloads and an

<sup>&</sup>lt;sup>22</sup>Institute of Medicine, *The Future of Nursing: Leading Change, Advancing Health* (Washington, D.C.: The National Academies Press, 2011).

<sup>&</sup>lt;sup>23</sup>See R.L. Kane et al., *Nurse Staffing and Quality of Patient Care*, Pub. No. 07-E005, March 2007, Agency for Healthcare Research and Quality; and "Hospital Nurse Staffing and Quality of Care," *Agency for Healthcare Research and Quality, Research in Action*, Issue 14, Pub. No. 04-0029 (Rockville, Md.: 2004).

<sup>&</sup>lt;sup>24</sup>M.A. Blegen et al., "Nurse Staffing Effects on Patient Outcomes: Safety-Net and Non-Safety-Net Hospitals," *Medical Care*, vol. 49, issue 2 (April 2011), 406–414; J. Needleman et al., "Nurse Staffing and Inpatient Hospital Mortality," *New England Journal of Medicine*, vol. 364, issue 11 (March 2011), 1037-1045; L.H. Aiken et al., "Implications of the California Nurse Staffing Mandate for Other States," *Health Services Research*, vol. 45, issue 4 (April 2010), 904–921; and P.W. Stone et al., "Nurse Working Conditions and Patient Safety Outcomes," *Medical Care*, vol. 45, issue 6 (June 2007), 571-578.

<sup>&</sup>lt;sup>25</sup>A.P. Bartel et al., "Human Capital and Productivity in a Team Environment: Evidence from the Healthcare Sector," *American Economic Journal: Applied Economics*, vol. 6, issue 2 (2014), 231-259.

<sup>&</sup>lt;sup>26</sup>A. Kutney-Lee, D.M. Sloane, and L.H. Aiken, "An Increase In The Number Of Nurses with Baccalaureate Degrees Is Linked To Lower Rates Of Postsurgery Mortality," *Health Affairs*, vol. 32, issue. 3 (March 2013), 579-586; L.H. Aiken et al., "Effects of Hospital Care Environment on Patient Mortality and Nurse Outcomes," *Journal of Nursing Administration*, vol. 38, issue 5 (May 2008), 223-229; and C.R. Friese et al., "Hospital Nurse Practice Environments and Outcomes for Surgical Oncology Patients," *Health Services Research*, vol. 43, issue 4 (August 2008), 1145-1163.

inability to ensure patient safety.<sup>27</sup> Other studies found that improving nurse staffing and working conditions may simultaneously reduce nurses' burnout, risk of turnover, and the likelihood of medical errors, while increasing patients' satisfaction with their care.<sup>28</sup>

Non-VA health care organizations use various approaches to ensure effective nurse staffing. For example, some use fixed nurse-to-patient ratios while others use adjustable, unit-specific minimum staffing levels, <sup>29</sup> and there have been several efforts to address nurse staffing using these different approaches. <sup>30</sup> For example, California has enacted legislation requiring regulations that mandate specific nurse-to-patient ratios that limit the number of patients cared for by an individual nurse. Other states have passed legislation or adopted regulations addressing nurse staffing without mandating specific ratios or staffing levels. For example, some states require hospitals to have committees responsible for developing unit staffing plans or require public reporting of staffing.

<sup>&</sup>lt;sup>27</sup>J. Spetz, "Nurse Satisfaction and the Implementation of Minimum Nurse Staffing Regulations," *Policy, Politics, & Nursing Practice*, vol. 9 (Feb. 2008, first published on April 3, 2008), 15-21; and L.H. Aiken et al., "Hospital Nurse Staffing and Patient Mortality, Nurse Burnout, and Job Dissatisfaction," *The Journal of the American Medical Association*, vol. 288, issue 16 (October 2002), 1987-1993.

<sup>&</sup>lt;sup>28</sup>A.W. Stimpfel, D.M. Sloane, and L.H. Aiken, "The Longer the Shifts for Hospital Nurses, the Higher the Levels of Burnout and Patient Dissatisfaction," *Health Affairs*, vol. 31, issue 11 (November 2012), 2501-2509; J.P. Cimiotti et al., "Nurse Staffing, Burnout, and Health Care-Associated Infection," *American Journal of Infection Control*, vol. 40 (August 2012) 486-490; and D.C. Vahey et al., "Nurse Burnout and Patient Satisfaction," *Medical Care*, vol. 42, issue 2 (Feb. 2004), 57-66.

<sup>&</sup>lt;sup>29</sup>Fixed nurse-to-patient ratios assign a certain number of patients to each nurse (e.g., one nurse for every five patients) while adjustable, unit-specific, minimum staffing levels assign minimum ratios of nurses to patients for each unit and shift that reflects the needs of the patient population and matches the skills and experience of the staff.

<sup>&</sup>lt;sup>30</sup>These are illustrative examples of different approaches; we did not conduct a comprehensive review of all state requirements.

VAMCs in Our
Review Implemented
VHA's Nurse Staffing
Methodology,
Experienced
Problems Developing
and Executing
Staffing Plans, and
Some Reported
Improvements in
Nurse Staffing

All seven VAMCs in our review developed staffing plans using VHA's nurse staffing methodology and have taken steps to execute them. However, VAMCs experienced problems in both the development and execution of their staffing plans. Improvements in nurse staffing were reported by some of the VAMCs which had taken steps to execute the staffing plans.

VAMCs in Our Review
Have Implemented VHA's
Nurse Staffing
Methodology by
Developing Staffing Plans
and Taking Steps to
Execute Them

The seven VAMCs in our review have implemented VHA's nurse staffing methodology; specifically, each of these VAMCs has developed a facility-wide staffing plan, comprised of unit-level staffing plans for inpatient units, and has taken steps to execute it.<sup>31</sup> Although each of the seven VAMCs in our review developed a staffing plan for FY 2013, only one had developed a plan per VHA's directive—that is, used both expert panels and analysis of NHPPD—by September 30, 2011, the deadline specified in the directive. (See table 2.) Across all 151 VAMCs, according to ONS officials, VAMCs' implementation of the nurse staffing methodology varied, with, for example, some VAMCs completing the development of their staffing plans during FY 2013, and some only beginning the development process.

<sup>&</sup>lt;sup>31</sup>As previously described, VAMCs were required to implement the methodology in inpatient units (Phase I) no later than September 30, 2011. VAMCs were expected to implement the methodology in their operating rooms by October 1, 2014; requirements for implementation of Phase II in other units and Phase III of the methodology have not been set.

Table 2: VA Medical Center (VAMC) Status for Development of VAMC-Wide Staffing Plan

		Status	
VAMC	FY 2011	FY 2012	FY 2013
A	•	•	•
В	0	•	•
С	0	•	•
D	0	0	•
E	0	0	•
F	0	•	•
G	0	•	•

Source: Seven VAMCs in our review. I GAO-15-61

Note: VHA Directive 2010-034 required each VAMC to develop a VAMC-wide staffing plan for use in its inpatient units by September 30, 2011. The process for developing the staffing plans included the use of expert panels—at the unit level and at the facility level—and a data-driven analysis of nursing hours per patient day.

In addition to developing staffing plans, all seven VAMCs in our review had taken steps to execute their respective staffing plans. For example, VAMCs had taken steps to execute initiatives to increase the number of unit nurses or change the skill mix of nurses to address patient care needs. (See table 3 for examples of VAMCs' staffing plan initiatives.) VAMC officials told us there are many factors that could affect the execution of staffing plan initiatives, such as available resources, the amount of time needed, and other strategic priorities.

<sup>•</sup> VAMC-wide staffing plan complete per Veterans Health Administration (VHA) directive.

o VAMC-wide staffing plan not complete per VHA directive.

Initiative	Description
Number of nurses	Increase the total number of unit nurses—for example, registered nurses (RN), licensed practical nurses (LPN), or nursing assistants (NA)—to meet direct patient care needs.
Skill mix	Change skill mix of nurses to better meet patient needs—particularly having more RNs (rather than LPNs) to conduct timely patient assessments.
Contract nurse pool	Develop contracts to use temporary nursing staff from external employment organizations to meet short-term staffing needs.
Float pool	Develop designated group of nurses to float to units on an as-needed basis.
Sitter pool	Develop designated group of staff to provide one-on-one direct patient observation to allow nurses to better care for a broader group of patients.
Transport team	Develop designated group of staff to assist in transporting patients to and from appointments off the unit so that RNs are able to remain on the unit.
Staff reassignment	Reassign nursing staff from an overstaffed unit to an understaffed unit.
Patient census	Temporarily reduce patient census by closing beds because of inadequate staffing.

Source: Seven VAMCs in our review. I GAO-15-61

VAMCs Experienced
Problems Developing and
Executing Staffing Plans,
and Many of These
Problems Persist

Officials and nursing staff from the seven VAMCs in our review told us they experienced problems developing and executing staffing plans. (See table 4 for examples of problems.) Some VAMCs were able to devise solutions; however in many cases, the problems have persisted.

Table 4: Examples of Problems VA Medical Centers (VAMC) Experienced Developing and Executing Staffing Plans

	Problems developing staffing plans				Problems executing staffing plans		
VAMC	Lack of necessary data resources	Difficulty completing and understanding training	Time required	Lack of communication within VAMC	Difficulty integrating unit staff in expert panels	Hiring delays	Budget constraints
Α		Х	Х			Х	х
В	Х	Х	Х	Х	Х	Х	Х
С	Х		Х	х	X	Х	X
D	Х	Х	Х	Х		Х	Х
E	Х	Х	Х			Х	х
F	Х	Х	Х	Х	Х	Х	
G	Х	Х	Х				

Source: Seven VAMCs in our review. I GAO-15-61

<u>Problems Developing Staffing Plans</u>. Staff and officials from each of the seven VAMCs in our review reported facing problems developing staffing plans.

Lack of necessary data resources. Staff and officials at six of the seven VAMCs in our review said they did not have the appropriate data resources to effectively calculate NHPPD as required by VHA's staffing methodology directive. Specifically, the directive instructs VAMC staff to calculate NHPPD using a wide range of data, such as number of admissions, transfers, and discharges; hours used for planning and treatment; and human resources data. We found that staff and officials needed to use multiple sources to collect the necessary data, in some cases manually, a process they said was time-consuming and potentially error-prone, and required data expertise they did not always have. For example, at one VAMC, the staffing methodology coordinator—a VAMC official who assists with the administrative tasks associated with the implementation process told us she struggled with some data analysis techniques, such as creating a spreadsheet to help track staffing data, but the VAMC did not have the financial resources to hire additional data analysts to support the methodology. In contrast, officials from two VAMCs in our review told us staffing methodology coordinators were assigned in part based on their data analysis expertise.

- Difficulty completing and understanding training. Staff from six of the seven VAMCs in our review said the ONS training on the methodology was time consuming to complete, and difficult to understand. In 2011, ONS switched from instructor-led, group training to individual, computer-based PowerPoint training, Many unit staff reported that because the computer-based training took many hours to complete, it was difficult to find the time to complete it, while also carrying out their patient care responsibilities. They told us they often had to start and stop the training to attend to patients, which diminished its effectiveness. Further, the course's complex material was hard to absorb through an individual, computer-based course, with many staff suggesting their understanding would have been greatly improved with an instructor-led, group course where they could ask questions, ensure consistency of learning, and build camaraderie among unit expert panel members. To address the difficulties in completing and understanding the training, one VAMC developed its own instructor-led, group training provided to all its units.
- Time required. Staff and officials at all seven of the VAMCs in our review reported that developing staffing plans required a lot of staff time due to the complexity of the process. In particular, they said gaining an understanding of the methodology, collecting the necessary data, convening the unit expert panels, and preparing presentations for the facility expert panel were time-intensive tasks that, in some circumstances, took time away from patient care. For example, members from one unit expert panel estimated they spent. in total, about 160 hours (4 weeks) developing the unit staffing plan during the first year the staffing methodology was implemented in their unit. Some VAMCs' staffing methodology coordinators developed specific processes designed to decrease the burden on nursing staff and improve efficiency. For example, they created templates for unit panel members to use in staffing plan development; such templates improved efficiency because unit panel members did not have to independently develop their presentation format. Further, facility expert panel members had to orient themselves to only one template. and were therefore able to more easily make facility-level comparisons and decisions.
- Lack of communication within VAMC. Unit expert panel members at four of the seven VAMCs in our review said there was a lack of communication between nurses and VAMC leadership regarding the status of the staffing plans, including plans for execution of the staffing plan initiatives. Staff at one of these VAMCs said they had not received any feedback on their FY 2012 or FY 2013 unit staffing

plans; they added that developing the 2013 staffing plan without getting any feedback on the prior year's plan felt "frustrating." In contrast, at another VAMC, officials told us that all unit staff—not just staff involved in the unit panel—received regular updates on the nurse staffing process at their monthly unit staff meetings.

Difficulty integrating unit staff into expert panels. Staff and officials at three VAMCs described challenges in integrating unit staff into expert panels. Some unit panel members told us that although they were considered members of their respective unit panels, they were not significantly involved in the development of their units' staffing plans. For example, a unit panel member said the VAMC's staffing methodology coordinator calculated the unit's NHPPD, developed the corresponding unit staffing plan, and presented the unit staffing plan to the respective facility expert panel almost entirely without her unit's input. As a result, there was limited involvement of the unit panel members in the expert panel and, consequently, limited shared governance. Officials at these VAMCs said that from their perspectives, there was interest in the methodology among unit panel members, but sometimes it was difficult for these staff to attend relevant meetings because of patient needs. In contrast, unit panel members at other VAMCs in our review described how they were fully integrated into the unit panels. They described in detail the data analyses they prepared, the meetings they participated in, and their experiences presenting their unit staffing plans to the facility expert panel. Members from one unit panel told us it was helpful to be able to use data to validate the unit's staffing and share this data with the facility expert panel—VAMC staff "beyond the typical chain of command." Officials at this VAMC noted that unit panel members felt "empowered" to present their work to the facility expert panels.

<u>Problems Executing Staffing Plans</u>. Staff and officials from six of the seven VAMCs in our review noted problems executing staffing plans once approved by the VAMC director.

Hiring delays. Staff and officials from six of the seven VAMCs in our review said they often faced hiring delays that impacted their ability to execute staffing plan initiatives. Some VAMC staff noted it could take more than 6 months to fill unit vacancies. Although staff from one VAMC said hiring was slowed by the dearth of qualified nurses in their community, staff from other VAMCs in our review said the supply of nurses was not the problem, but rather the problem was the VHA hiring process, which took months to complete for each candidate. Additionally, VAMC staff noted that new hires also needed to

complete necessary internal trainings before joining a unit full time, which added to the delays, and that some new hires were hurried through this training process because their units were so desperate to have them on staff.

 Budget constraints. Staff and officials from five of the seven VAMCs in our review said their VAMCs were not able to fully execute their staffing plans due to budget constraints. For example, at one VAMC, one of the approved staffing plan initiatives was the hiring of a large number of nurses for its units, in part, to address the VAMC's inability to increase their nursing staff over a period of years. The official told us that, due to budget constraints, the VAMC was going to phase in this hiring initiative over the next few years.

Improvements in Nurse Staffing Were Reported When VAMCs Executed Staffing Plan Initiatives

Some VAMC staff reported improvements in the adequacy and qualifications of their units' nursing staff when nurse staffing plan initiatives were executed. For example, at two VAMCs at which the number of nurses was increased or support services for nurses, such as patient transporters or sitters, were put in place, 32 unit staff said the adequacy of the nursing staff had improved. Furthermore, improvements in the qualifications of unit nursing staff were noted by staff in VAMC units where, for example, skill-mix changes were made or the amount of floating of nurses from their home unit to an unfamiliar unit was decreased. Both VAMC officials and unit staff noted improvements in staffing when nurses' qualifications were more appropriately matched to the right level of work (for example, having RNs rather than LPNs available to provide more complex patient care) and to the right units (for example, the units for which they were hired and trained).

Some VAMC staff said they also had seen improvements in patient outcomes and nurse job satisfaction. For example, nursing staff at one VAMC said that after creating sitter positions—as indicated by their VAMC's staffing plan—they saw a decrease in patient falls. The staff said sitters were able to monitor patients more closely, and as a result, patients were less likely to fall during walks to the bathroom, for example. Similarly, nursing staff in a mental health unit at another VAMC said that by having more staff they had decreased their restraint use because there

 $<sup>^{32}</sup>$ Transport teams are staff who assist in transporting patients to and from appointments off the unit. Sitters are staff who provide one-on-one direct patient observation.

were more staff available to meet veterans' needs. Additionally, nursing staff we interviewed at one VAMC that had made staffing changes based on staffing plans said they were better able to provide the type of nursing care "veterans deserve," and this made them feel more positive about their work. Some nurses at this VAMC also said the shared governance aspect of the methodology was empowering, which, combined with their enhanced understanding of staffing at their VAMC, helped improve their overall job satisfaction.

However, some VAMC unit staff reported that unit nurse staffing continued to be inadequate and that nurse unit assignments and job duties were not always appropriate for their qualifications. For six of the VAMCs in our review, staff from at least one unit interviewed said their unit staffing levels were inadequate. Staff said ensuring adequate staffing was particularly challenging when there were unplanned staff absences and they had to "scramble" to provide coverage. Some unit staff noted that this situation often resulted in units forcing nurses to work overtime or nurses floating to other units where they did not always have the qualifications to provide care. At some VAMCs, staff said there were increased staff injuries due to inadequate staffing. Furthermore, staff at one VAMC reported that where there had not been any changes made based on the unit staffing plans, their units continued to be understaffed to the detriment of both patient care and their job satisfaction.

VHA's Oversight to
Ensure Its Nurse
Staffing Methodology
Is Implemented,
Administered
Appropriately, and
Contributes to an
Adequate and
Qualified Nurse
Workforce Is Limited

Our review of VHA's oversight of its nurse staffing methodology found that some internal controls—those related to environmental assessment, a plan for monitoring compliance, evaluation, timeliness of communication, and organizational accountability—are limited. The implementation of internal controls is necessary for ensuring initiatives achieve intended outcomes and for minimizing operational problems. Without these internal controls in place, VHA cannot ensure that its methodology meets department goals, such as establishing a standardized methodology for determining adequate and qualified nurse staffing at all VAMCs, and ultimately, having nurse staffing that is adequate to meet veterans' health care needs.

Environmental Assessment. VHA did not comprehensively assess each VAMC to ensure preparedness for implementing its methodology, including having the necessary technical support and resources, prior to the issuance of the methodology directive in 2010. Furthermore, as of August 2014, VHA did not have a plan for assessing whether VAMCs have the necessary resources to execute their approved nurse staffing

plans. Under federal internal control standards, successful organizations monitor their internal and external environments continuously and systematically, and by building environmental assessments into the strategic planning process, are able to stay focused on long-term goals even as they make changes to achieve them.

VHA did not assess VAMCs' technical resources to determine if all VAMCs would be able to successfully implement the methodology. For example, the directive recommended that VAMCs use comparative data from external sources, such as the National Database of Nursing Quality Indicators (NDNQI) when analyzing unit-level staffing data. According to some VAMC officials, due to the costs and complexity of contracting, 33 not all VAMCs had access to this data source.34 Each VAMC was responsible for establishing its own contract to purchase access to NDNQI data, which some VAMC officials said was expensive and timeconsuming to set up, noting that it would have been helpful to have assistance in coordinating the contracting process. Officials from ONS reported that they are discussing the possibility of having a VHA-wide contract so that all VAMCs would have access to NDNQI data. In addition to access to comparative data, according to the directive. VAMCs need appropriate data system capabilities—in particular an automated staffing system for information such as patient admission, transfer and discharge data, and human resources data—to facilitate implementation of the datadriven methodology and calculation of NHPPD. However, not all VAMCs in our review had an automated staffing system in place even 3 years after the release of the directive. Officials at a VAMC without an automated staffing system told us staff were collecting and inputting data, in many cases manually, into a spreadsheet to calculate NHPPD, and that this process was extremely time-consuming and potentially errorprone. ONS officials said they knew VAMCs needed automated staffing

<sup>&</sup>lt;sup>33</sup>NDNQI was created as part of the American Nurses Association's Patient Safety and Quality Initiative to identify the linkages between staffing and patient outcomes. The database contains data on quality indicators and staff levels collected from approximately 2,000 hospitals that submit data on nursing-sensitive indicators, such as pressure ulcers and patient falls. According to the American Nurses Association, 98 percent of all Magnet facilities use some aspect of NDNQI data.

<sup>&</sup>lt;sup>34</sup>According to the staffing methodology directive, a comparative analysis of NHPPD data from other resources is also recommended, such as from the Labor Management Institute and NDNQI. Labor Management Institute data compare direct, indirect, and total worked hours of care by hospital and unit type, and NDNQI data contain information on quality indicators and staff levels.

systems when the directive was published in 2010. However, they thought Phase III—a national automated staffing system—would be forthcoming, and did not fully review whether VAMCs had alternative data capabilities to assist them in the interim.

When we asked how they assessed the readiness of VAMCs for implementation of the methodology, ONS officials told us that they did not do this as well as they should have for Phase I implementation in inpatient units, despite its 2009 Phase I pilot evaluation to better understand the potential capabilities and weaknesses of VAMCs. According to ONS, it still has not conducted such an assessment of all VAMCs even though it has moved forward with planning the national rollout of Phase II in operating room, emergency department, and spinal cord injury units. ONS, however, has assessed some of the available resources of the sites that have participated in the pilots for Phase II in spinal cord injury units. For example, ONS officials told us that they asked these participating sites questions about their access to data and nurse turnover within the pilot units to determine their ability to fully and successfully participate in the pilot. According to ONS officials, all sites reported that they were able to fully participate in the pilot. By not comprehensively assessing the VAMCs' technical support and resources to determine if they were prepared to implement the methodology, VHA had no assurance that the VAMCs would be successful.

<u>Plan for Monitoring Compliance</u>. ONS did not develop a plan for monitoring VAMCs to ensure they were in compliance with the implementation and ongoing administration of Phase I of the methodology. Under federal internal control standards, plans should be designed to ensure that ongoing monitoring occurs in the course of normal program operations, and managers should identify performance gaps in compliance with program policies and procedures.

ONS reported implementing two mechanisms for obtaining information from VAMCs—a 2013 questionnaire sent to all VAMCs and monthly methodology conference calls with VAMCs—but neither was an adequate mechanism for comprehensively assessing the compliance of each VAMC. The questionnaire, sent nearly 2 years after the deadline for implementation of Phase I of the methodology, asked VAMCs to report their status of staffing plan development, but because of lack of clarity in the questions asked, inconsistency in medical center responses, and lack of validation of the self-reported responses, it was not reliable for determining the extent to which VAMCs had developed staffing plans. ONS officials reported that they have no plans to survey VAMCs again on

their status of developing staffing plans. Furthermore, the monthly methodology conference calls that started when the directive was published in 2010 did not provide an adequate mechanism for monitoring compliance because they too relied on VAMCs to self-report problems. A VAMC official told us that participants were reluctant to raise problems, such as not developing staffing plans on time, during these monthly calls.

In addition, the directive requires VAMCs to evaluate their staffing plans for Phase I annually, or more frequently if needed, but ONS officials told us that they did not have a systematic plan for monitoring compliance with this evaluation beyond the 2013 questionnaire and the monthly methodology conference calls. Moving forward, ONS officials said they plan to review whether all VAMCs implemented both the unit and facility expert panels, but, as of August 2014, had no detailed plan or timeline for conducting this review or for monitoring VAMCs' ongoing evaluation of their staffing plans. The lack of a plan for monitoring VAMCs' compliance with the implementation and ongoing administration of the methodology hinders VHA from being able to ensure that all VAMCs are staffing their nurses using the same, standardized methodology.

**Evaluation**. There have been limited evaluations of the methodology, and one of these evaluations has been significantly delayed. Under federal internal control standards, measuring performance allows organizations to track the progress they are making towards program goals and objectives, and provides managers important information on which to make management decisions and resolve any problems or program weaknesses.

- Evaluation of Phase I pilot (conducted in September 2009)—ONS identified VAMC challenges with implementing the methodology—such as difficulties accessing data, and staff nurses having an overall lack of knowledge of the methodology process. The evaluation contained recommendations, such as developing a training guidebook and providing guidelines on the role of the expert panels, to improve the methodology process. According to ONS, most of the recommendations from this 2009 evaluation have been addressed; however, we found that weaknesses identified in the 2009 evaluation still existed for all of the seven VAMCs included in our review.
- Evaluations of Phase I national implementation and training (began early 2014, preliminary results were expected August 2014). Similarly, ONS did not begin an evaluation of the national implementation of the methodology until January 2014, more than 2 years after VAMCs were required to have implemented it, and, as of August 2014, had

still not been completed. According to ONS officials, the Phase I national evaluation was to review VAMCs' experiences during implementation, including a review of the training provided to VAMCs during that phase. The lengthy delay in the evaluation of Phase I was potentially problematic because the ongoing difficulties that VAMCs have experienced during implementation may have been avoided or resolved more quickly if the evaluation results had been available and corrective actions put into place. VAMC staff we interviewed told us they have been struggling with components of the methodology since the directive was issued. For example, some VAMC staff expressed difficulty completing and understanding the data analysis process for calculating NHPPD. An earlier evaluation of the methodology could have helped identify this problem, as well as potential solutions to address it. Furthermore, the delay limited ONS's time to apply lessons learned from Phase I evaluations to the implementation of Phase II. portions of which are already nearly complete.

• Phase II pilot training evaluation (began in early 2014 with results expected November 2014)—ONS is conducting an evaluation of the training that was provided to the VAMCs involved in the Phase II pilots in operating room, emergency department, and spinal cord injury units to determine if the training provided to these units needs to be changed in preparation for the national rollout. ONS officials told us that they have completed the operating room pilot; the national rollout of the methodology in operating room units in all VAMCs began in February 2014 and is expected to be completed by October 1, 2014. ONS officials said that it has completed the pilot for the emergency department units, but has not completed the pilot for spinal cord injury units; ONS has not scheduled deadlines for their national implementation.

VHA's delays in completing evaluations of the methodology limit its ability to identify and resolve VAMC implementation and administration problems, and thus help to ensure successful rollouts of subsequent phases of the methodology.

Timeliness of Implementation and Communication. The long timeline for implementing the pilots and national rollouts of Phases I and II, as well as evaluating Phase I of the staffing methodology—more than 7 years—and for communicating methodology-related information to VAMCs may have hindered the ability of VAMCs to develop their staffing plans and to execute the initiatives contained in those plans. Under federal internal control standards, timeliness in the development of a program or implementation of a policy is needed to maintain relevance and value in

managing operations and making decisions. When information regarding a policy or program is not provided in a timely manner, there can be a loss of stakeholder support, which can affect how stakeholders make decisions. For example, staff from some VAMCs involved in the Phase II pilot stated that they believed the data and reports generated from the methodology were only a paper exercise because they had not gotten any feedback from ONS on next steps. ONS officials told us they have communicated information on the Phase II pilot, such as the status of the pilot and feedback obtained from the training sessions, through their monthly conference calls with VAMCs; however, based on our interviews, this information did not reach many staff at the VAMCs in our review that participated in the Phase II pilot.

Furthermore, ONS officials have not adequately communicated to VAMCs the status of Phase III of the methodology—development of a national automated staffing system. According to the directive, a national automated staffing system was to be developed to support VAMCs in the implementation of the methodology. Because this automated staffing system has yet to be developed as per the directive, officials from two VAMCs told us they bought their own systems, which helped to effectively administer the methodology. ONS officials told us at the time the directive was published in 2010, Phase III implementation was an aspirational goal. ONS officials said they had expected VHA data system teams to begin the process of developing a national automated system; however, it was not made a department goal, and is not currently on the list of projects under consideration for funding. Having a variety of staffing systems, and thus inconsistent data variables across VAMCs, inhibits ONS's ability to adequately evaluate the effectiveness of the staffing methodology. If an automated staffing system is eventually developed under Phase III, VAMCs likely will have to dismantle the staffing systems they have created and restructure their data analysis processes, which likely will be time-consuming and costly. VHA's long timelines for the implementation and communication of methodology-related information put stakeholder support of the methodology at risk and increase the potential for duplication of efforts.

<u>Organizational Accountability</u>. VHA did not define areas of responsibility or establish the appropriate line of reporting within the framework of VA's management structure for the ongoing administration and oversight of the methodology. Under federal internal control standards, an agency's organizational structure should provide management with a framework for planning, directing, and controlling operations to achieve agency objectives; a good internal control

environment requires that the agency clearly defines key areas of authority and responsibility. VHA does not require VAMCs to submit any information or reports on the implementation and ongoing administration of the methodology to ONS or the VISNs. Such information, if it were shared, may have been used to inform ONS of any systematic problems that necessitate changes to help ensure the continued viability of its methodology, as well as identify any best practices that have been implemented by VAMCs across the country. ONS officials told us that they did not require the VAMCs to submit any such documentation to ONS, because they made a conscious decision to not "micro-manage" the local process of nurse staffing.

Furthermore, VHA has not sufficiently utilized the VISN-level management structure in the implementation or ongoing administration of the methodology. While the methodology directive described a role for the VISNs, that role was limited to ensuring that resources are available to VAMCs as they try to staff their units; the directive did not mention a role in the implementation or ongoing administration of the actual methodology. As a result, VISNs have not been consistently aware of problems experienced by VAMCs in their region, and have not provided support or education. In our interviews with VISN officials representing each of the seven VAMCs in our review, we found that three of the VISNs were not substantively involved in the implementation and ongoing administration of the methodology. According to ONS, in many VISNs, discussions of staffing methodology implementation were minimal, and rather than VISN leadership, the nurse executives, in addition to their responsibilities within their individual VAMCs, had the responsibility of disseminating staffing methodology-related information to the VAMCs within the VISN.

Staff from three VISNs that were more substantially involved in the implementation of the methodology provided oversight for the nurse staffing methodology and acted as liaisons for VAMC nurse executives for network-level issues. One VISN official we interviewed was developing oversight mechanisms for VAMCs in the region, including a requirement for nurse executives to submit a quarterly staffing report. According to the official, having such a reporting requirement at the VISN level would give the right amount of emphasis to the process and provide support to nurse executives implementing the methodology in the VAMCs. The quarterly report could also help inform VISN officials about issues with the methodology. This official was developing these mechanisms independently of ONS, but they could be considered potential best practices to be shared across all VISNs.

ONS officials told us they thought ideas or problems across VAMCs related to the methodology would be shared through the VAMC nurse executives. They also hoped that VISN leadership would be interested in the methodology and, as a result, schedule VISN-level briefings to aid in its implementation. VHA, however, did not specify either of these roles in the directive or take steps to ensure that they were occurring. Moving forward, ONS officials said they are considering developing a VISN-level staff position that would specifically focus on educating VAMCs within the region about the methodology, and assisting them with implementing it. Without clearly defined roles and responsibilities within VA's organizational structure, VHA's ability to improve its oversight of the implementation and administration of the staffing methodology and provide VAMCs with additional resources to assist with problems is compromised.

#### Conclusions

As the number of veterans requiring care in VAMCs and the complexity of services needed by many of these veterans increase, the need for an adequate and qualified nurse workforce is increasingly critical. Although VHA's nurse staffing methodology was intended to provide a nationally standardized methodology for determining and ensuring adequate and qualified nurse staffing at VAMCs, its ability to do so across all 151 VAMCs is not likely to be realized unless existing weaknesses are addressed. Although some improvements in nurse staffing were reported with the implementation of the staffing methodology, the seven VAMCs in our review experienced problems developing and executing the related staffing plans, including problems pertaining to data resources, training, and communication. Many of these problems persist as the seven VAMCs continue to administer the methodology.

We also found that VHA's oversight of the staffing methodology is limited and in many cases lacks sufficient internal controls, which could diminish VHA's ability to ensure an adequate and qualified nurse workforce. In particular, VHA has not adequately assessed the needs or preparedness of VAMCs to effectively implement the methodology, does not have a formal mechanism to ensure VAMCs' ongoing compliance with the methodology, has not clearly defined a role in oversight for VISNs, and does not regularly communicate with VAMCs or VISNs to cull and share best practices system-wide. Furthermore, delays in VHA's evaluations of early phases of the staffing methodology have made them too late to be useful in designing future phases or helping VAMCs with implementation. Because the implementation and administration of the nurse staffing methodology is ongoing, it is critical that VHA improve its oversight to

help ensure an adequate and qualified nurse workforce across all VAMCs.

## Recommendations for Executive Action

To help ensure adequate and qualified nurse staffing at VAMCs, we recommend that the Secretary of Veterans Affairs direct the Interim Under Secretary for Health to enhance VHA's internal controls through the following five actions:

- 1. Provide support to all VAMCs to meet the objectives of the VHA directive, including:
  - a. training that more clearly aligns with the needs of VAMC staff and
  - a systematic process for collecting and disseminating staffing methodology best practices;
- Conduct an environmental assessment of all VAMCs, including an
  assessment of their data analysis needs, to determine their
  preparedness to implement the remaining phases of the methodology,
  and use that information to help guide and provide the necessary
  support for the implementation of the remaining phases and for the
  ongoing administration of the methodology;
- Develop and implement a documented process to assess VAMCs' ongoing compliance with the staffing methodology, including assessing VAMCs' execution of staffing plans and more clearly defining the role and responsibilities of all organizational components, including VISNs, in the oversight and administration of the methodology;
- Complete evaluations of Phase I and Phase II and make any necessary changes to policies and procedures before national implementation of Phase II in all VAMCs; and
- 5. Improve the timeliness and regularity of communication with VAMCs, including unit-level staff, regarding the status of the various phases of the methodology.

#### **Agency Comments**

We provided a draft of this report to VA for its review and comment. VA provided written comments, which are reprinted in appendix I. In its written comments, VA generally agreed with our conclusions and concurred with all five of the report's recommendations. To address the recommendations, VA indicated that VHA will take a number of actions, such as developing a written document specifying its process for assessing ongoing compliance with the staffing methodology and

improving the timeliness and regularity of communication with VAMCs through face-to-face regional training sessions. VA indicated that target completion dates for implementing these recommendations range from September 2015 through September 2016. Regarding the recommendation that VA complete evaluations of Phase I and Phase II before national implementation of Phase II in all VAMCs, VA indicated that, by September 2016, it would complete its evaluations and determine what opportunities exist to modify policies and procedures, but did not explicitly state that the evaluations would be completed before national implementation. We continue to emphasize the importance of completing the evaluations before national implementation of Phase II in all VAMCs.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to appropriate congressional committees, the Secretary of Veterans Affairs, and other interested parties. In addition, the report will be available at no charge on the GAO Web site at <a href="http://www.gao.gov">http://www.gao.gov</a>.

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

Sincerely yours,

Debra A. Draper Director, Health Care

MXIN

## Appendix I: Comments from the Department of Veterans Affairs

Subsequent to receiving VA's letter, the report number, GAO-14-838, was revised to GAO-15-61.



#### DEPARTMENT OF VETERANS AFFAIRS WASHINGTON DC 20420

September 29, 2014

Ms. Debra 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, "VA HEALTH CARE: Actions Needed to Ensure Adequate and Qualified Nurse Staffing" (GAO-14-838). VA generally agrees with GAO's conclusions and concurs with GAO's recommendations to the Department.

The enclosure specifically addresses GAO's recommendations and provides an action plan for each. VA appreciates the opportunity to comment on your draft report.

Sincerely,

Jose D. Riojàs Chief of Staff

Enclosure

Department of Veterans Affairs (VA) Response to Government Accountability Office (GAO) Draft Report "VA HEALTH CARE: Actions Needed to Ensure Adequate and Qualified Nurse Staffing" (GAO-14-838)

<u>GAO Recommendation</u>: To help ensure adequate and qualified nurse staffing at VAMCs, GAO recommends that the Secretary of Veterans Affairs direct the Interim Under Secretary for Health to enhance VHA's internal controls through the following five actions:

<u>Recommendation 1</u>: Provide support to all VAMCs to meet the objectives of the VHA directive, including:

- a. training that more clearly aligns with the needs of VAMC staff and
- b. a systematic process for collecting and disseminating staffing methodology best practices;

<u>VA Comment:</u> Concur. In fiscal year (FY) 2014, the Office of Nursing Services (ONS) identified the need to enhance support to all Department of Veterans Affairs (VA) medical centers (VAMC) to meet the objectives in the Veterans Health Administration (VHA) Directive 2010-034, *Staffing Methodology for VHA Nursing Personnel*. ONS is VHA's staff proponent for execution of the nurse staffing methodology.

One aspect of the enhanced support was the need to evaluate the training associated with staffing methodology implementation to ensure it more clearly aligns with the needs of VAMC staff. An external evaluation team was selected to assess the training conducted for the staffing methodology. Results from the evaluation of field staff expertise will inform follow-on training.

To develop the infrastructure to support staffing methodology, ONS will use a model that has been successful for the Nursing Professional Standards Board (NPSB) training. Similar to NPSB, the staffing methodology regional consultants will be trained to perform standardized staffing methodology consultations. Beginning FY 2015, the regional consultant program will be developed, and regional consultants will be identified. A face-to-face meeting will take place the 3<sup>rd</sup> quarter of FY 2015 to provide regional consultant training.

ONS has a Staffing Methodology Steering Committee (SMSC) that has been in place since 2007. The SMSC provides advice and guidance to ONS regarding staffing methodology implementation in the field. Since 2010, ONS in collaboration with the SMSC, has facilitated a monthly National Staffing Methodology Call (NSMC) with facility staffing methodology representatives. They have also created a staffing methodology coordinators email distribution group.

The NSMC and the staffing methodology coordinators email distribution group will be used to solicit best practices from the field. Additionally, input from the field will be requested, which will inform Frequently Asked Questions (FAQs). Field input on best

Department of Veterans Affairs (VA) Response to Government Accountability Office (GAO) Draft Report "VA HEALTH CARE: Actions Needed to Ensure Adequate and Qualified Nurse Staffing" (GAO-14-838)

practices and FAQs will be submitted to the SMSC for consideration and development of national responses. Approved content will be disseminated back to the field. FAQs and approved responses will be posted on the established ONS staffing methodology Web page. This input will be used to inform policy and procedure modifications, if necessary. Target Completion Date: September 2015.

Recommendation 2: Conduct an environmental assessment of all VAMCs, including an assessment of their data analysis needs, to determine their preparedness to implement the remaining phases of the methodology, and use that information to help guide and provide the necessary support for the implementation of the remaining phases and for the ongoing administration of the methodology;

<u>VA Comment</u>: Concur. Sources of Nursing Hours Per Patient Day (NHPPD) comparison data for setting target NHPPD will be explored. VAMCs will be provided with Annual Nursing Survey Reports. The reports list comparison data relevant to a specific unit type. The data are necessary to develop a baseline approach to linking NHPPD.

ONS acknowledges VHA's need to conduct a formal external evaluation on the current implementation of the staffing methodology Directive. The evaluation is underway, and VHA expects it will be completed during the first quarter of FY 2015. The evaluation collects facility-level quantitative and qualitative data through focused interviews with facility representatives and all VAMC Nurse Executives. The survey results will provide ONS with data on preparedness and recommendations related to implementation of the remaining phases of the nurse staffing methodology. ONS will use data from the evaluation to develop guidance that best supports the field during implementation of the staffing methodology going forward.

An additional survey focused on training effectiveness is also underway. This evaluation will provide data that will enhance the current training techniques provided to the field. Both evaluations will provide ONS information to help guide and provide the necessary support for the implementation and for the ongoing administration of the staffing methodology. Target Completion Date: September 2015.

Recommendation 3: Develop and implement a documented process to assess VAMCs' ongoing compliance with the staffing methodology, including assessing VAMCs' execution of staffing plans, and more clearly defining the role and responsibilities of all organizational components, including VISNs, in the oversight and administration of the methodology;

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Department of Veterans Affairs (VA) Response to Government Accountability Office (GAO) Draft Report "VA HEALTH CARE: Actions Needed to Ensure Adequate and Qualified Nurse Staffing" (GAO-14-838)

<u>VA Comment</u>: Concur. ONS will develop a written document that specifies the VHA's process for assessing ongoing compliance with the staffing methodology at the facility level. This written process will include how each facility assesses execution of staffing plans and clear definitions of the roles and responsibilities in the oversight and administration of the staffing methodology for all organizational components (i.e., ONS, Veterans Integrated Service Network, facility, service line).

Implementation of the process will include on-site, in-depth consultations, consistent with those that have been underway during FY 2014. The consultations are conducted with members of unit-based and facility-based expert panels.

In addition, a staffing methodology implementation checklist will be developed which facilities will use as a measurement of full staffing methodology Directive compliance. The checklist will serve as a staffing methodology self-assessment, which will be distributed to the field in collaboration with the Office of the Deputy Under Secretary for Health for Operations and Management. Lastly, a consultation session (virtual or on-site) will be conducted with all non-compliant sites. The combined checklist, self-assessment, and consultation will assess facility compliance with the staffing methodology. Target Completion Date: September 2016.

Recommendation 4: Complete evaluations of Phase I and Phase II, and make any necessary changes to policies and procedures before national implementation of Phase II in all VAMCs; and

<u>VA Comment</u>: Concur. ONS will complete evaluations of Phase I and Phase II to assess the existing staffing methodology initiative and current staffing methodology policies and procedures for possible opportunities for improvement. The evaluation will include current approaches to training and will provide recommendations to optimize training for remaining Phase I and Phase II rollouts.

Once the evaluation is completed, the results shall be analyzed to determine what opportunities exist, if any, to modify policies and procedures. Target Completion Date: September 2016.

Recommendation 5: Improve the timeliness and regularity of communication with VAMCs, including unit-level staff, regarding the status of the various phases of the methodology.

<u>VA Comment:</u> Concur. ONS has already established a monthly National Staffing Methodology Call (NSMC) and staffing methodology coordinators email distribution group available to all VHA employees who desire to be on the call and distribution

Department of Veterans Affairs (VA) Response to Government Accountability Office (GAO) Draft Report "VA HEALTH CARE: Actions Needed to Ensure Adequate and Qualified Nurse Staffing" (GAO-14-838)

group. ONS will continue to utilize the NSMC distribution group for field-level communication.

Timeliness and regularity of communication will be improved by utilizing face-to-face Regional Staffing Methodology Training Sessions (RSMTS), the ONS intranet Web site, the staffing methodology coordinators email distribution group, and the ONS Bulletin.

A request to conduct four RSMTS during FY 2015 was made through the Employee Education System. The training will provide staffing methodology training to roughly 80-90 attendees at each session. In addition, it will provide facilities an opportunity to send a facility staffing methodology representative to learn the staffing methodology in a classroom setting. This training is pending VHA approval.

A timeline section will be developed on the ONS staffing methodology Web page. The timeline will provide the status of all phases of national implementation. This will include all areas that have been implemented, the implementation dates of all pilot roll-outs, status of all current pilots, and possible future pilots.

Regular status updates will be provided to the staffing methodology coordinators email distribution group on a monthly basis and on the monthly NSMC agenda.

Status updates will be included in the monthly ONS Bulletin. Target Completion Date: September 2015.

# Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact	Debra A. Draper, (202) 512-7114 or draperd@gao.gov
Staff Acknowledgments	In addition to the contact named above, Janina Austin, Assistant Director; Jennie Apter; Kathryn Black; Jacquelyn Hamilton; Kelli Jones; Vikki L. Porter; and Karin Wallestad made key contributions to this report.

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