Department of Veterans Affairs
Office of Inspector General

Office of Healthcare Inspections

Report No. 14-01072-140

Combined Assessment Program Summary Report

Evaluation of Nurse Staffing in Veterans Health Administration Facilities April–September 2013

May 12, 2014

Washington, DC 20420

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Executive Summary

The VA Office of Inspector General (OIG) Office of Healthcare Inspections evaluated nurse staffing in Veterans Health Administration (VHA) facilities. The purpose of the evaluation was to determine the extent to which VHA facilities implemented the staffing methodology for nursing personnel and to evaluate nurse staffing on an acute care unit, a long-term care unit, and a mental health unit.

Inspectors evaluated nurse staffing at 28 facilities during Combined Assessment Program reviews conducted from April 1 through September 30, 2013.

VHA required that all facilities implement the nurse staffing methodology by September 30, 2011. During the review period of April 1 through September 30, 2013, 8 of the 28 facilities reviewed had not fully implemented the methodology. This result is similar to our previous report.

A comparison of the actual staffing with the staffing targets indicated that most facilities met their targets. Three facilities' actual staffing for at least one (but not all) of the reviewed units was significantly below the target, and two facilities' actual staffing for all reviewed units was significantly above the target. Both of these results should drive reassessment and possible adjustment. Potential overstaffing could indicate that resources could be better used elsewhere. Potential understaffing could indicate that either actual staffing or workload needs to be adjusted to provide safe care.

We re-emphasize the need for all facilities to fully implement the methodology and accurately address patient needs with safe and adequate staffing. VHA submitted a detailed action plan that was still in progress at the time of this report. Therefore, we will not make repeat recommendations but will continue to review.

Comments

The Under Secretary for Health concurred with the report. (See Appendix A, pages 5–6, for the comments.) No further action is required.

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

Purpose

The VA Office of Inspector General (OIG) Office of Healthcare Inspections evaluated nurse staffing in Veterans Health Administration (VHA) facilities. The purpose of the evaluation was to determine the extent to which VHA facilities implemented the staffing methodology for nursing personnel and to evaluate nurse staffing on an acute care unit, a long-term care unit, and a mental health unit.

Background

VHA facilities are required to apply a nationally standardized methodology process to determine staffing for VA nursing personnel for all inpatient points of care.[1] The directive required a series of steps to be completed by September 30, 2011. These steps included:

- Soliciting input from nursing staff and interdisciplinary partners in determining required staffing levels and staff mix in alignment with the needs of all patient care areas.
- Developing a unit-based expert panel consisting of nursing staff who work on the unit and represent all nursing roles.
- Ensuring the unit-based expert panel:
    - Conducts a comparative analysis of staffing needs using measures appropriate for the care setting.
    - Makes recommendations for the target nursing hours per patient day (NHPPD)[2] as appropriate for the care setting.
    - Calculates projected and daily staffing requirements using the tools provided.
- Developing a facility expert panel to review unit recommendations for system impact.
- Reviewing the effectiveness of the staffing plans at least annually.

In 2013, the VA OIG published the results of the review it conducted from April through September 2012.[3] In that report, we recommended that all facilities fully implement the staffing methodology and improve processes to use the available data to manage and provide safe, cost-effective staffing. This report includes results from April–September 2013, with different randomly selected days, different facilities, and more units per facility.

Scope and Methodology

Inspectors evaluated nurse staffing at 28 facilities during Combined Assessment Program reviews conducted from April 1 through September 30, 2013. These facilities were a stratified random sample of all VHA facilities and represented a mix of facility

[1] VHA Directive 2010-034, *Staffing Methodology for VHA Nursing Personnel,* July 19, 2010.
[2] NHPPD refers to the number of direct care hours related to the patient workload.
[3] *Combined Assessment Program Summary Report – Evaluation of Nurse Staffing in Veterans Health Administration Facilities*, Report No. 13-01744-187, April 30, 2013.

size, affiliation, geographic location, and Veterans Integrated Service Networks. We reviewed facility policies and training records and conversed with staff. Additionally, we gathered and analyzed actual staffing data for one acute care unit, one mental health unit, and one long-term care unit at each facility, as applicable, and generated an individual Combined Assessment Program report for each facility. For this report, we analyzed the data collected from the individual facility Combined Assessment Program reviews.

For the review of actual staffing between October 1, 2012, and March 31, 2013, we first selected up to 3 units within each of the 20 facilities in our sample that had developed NHPPD targets. Eight facilities had not fully implemented the methodology. We selected units based on concerns about safe staffing that employees submitted to the OIG's employee survey. If employees did not indicate concerns about staffing on any particular units, we sampled the units for review randomly from among all acute care, mental health, and long-term care units in the facility.

For the sampled units at each of the remaining 20 facilities, we compared the actual staffing with the target NHPPD based on a stratified, randomly selected sample of 52 days. We divided the 182 days between October 1, 2012, and March 31, 2013, into three strata:

- Holidays (including related weekdays and weekend days)
- Weekdays
- Weekends

We included 9 holidays (and related days) and randomly sampled 12 (out of 48) weekend days and 31 (out of 125) weekdays for our review.

Based on the sampled actual staffing data, we estimated the percent of VHA facilities whose actual average staffing levels were at, above, or below their targeted NHPPDs. For the holidays, we counted the average of the actual staffing level as above the targeted NHPPD if it was at least 10 percent over the target or as below the target if it was at least 10 percent lower than the target value. We presented a 95 percent confidence interval (CI) for the true VHA value (parameter). A CI gives an estimated range of values (calculated from a given set of sample data) that is likely to include an unknown parameter. The 95 percent CI indicates that among all possible samples we could have selected of the same size and design, 95 percent of the time the population parameter would have been included in the computed intervals. To take into account the complexity of our multistage sample design, we used the Taylor expansion method to obtain the sampling errors for the estimates. We used Horvitz-Thompson sampling weights, which are the reciprocal of sampling probabilities, to account for our unequal probability sampling. All data analyses were performed using SAS statistical software (SAS Institute, Inc., Cary, NC), version 9.3 (TS1M0).

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

Inspection Results

Issue 1: Compliance with Requirements

We reviewed facility documents for compliance with requirements. Facilities generally complied with the following:

- Facility and unit-based expert panels generally had the required membership.
- Panel members were assigned to work on the unit of the expert panel on which they served.
- Expert panels performed reassessments at least annually.
- Units conducted comparative analyses and had a process to monitor the target NHPPD.

However, we found non-compliance in the following areas:

- Four of 25 facilities had not initiated facility expert panels.
- Eight of 62 units (13 percent) had not initiated unit-based expert panels.
- Facility panel members did not complete the required training at 9 of 21 facilities.
- For 16 of 54 units (30 percent), expert panel members did not complete the required training.

These results are similar to those in our previous report. VHA submitted a detailed action plan that was still in progress at the time of this report. Therefore, we will not make a repeat recommendation but will continue to review.

Issue 2: Comparison of Actual Staffing with Target Staffing

Fifty-two units at 20 facilities had developed NHPPD targets for use October 1, 2012, through March 30, 2013. Eighteen facilities had acute care units, 17 facilities had long-term care units, and 17 facilities had mental health units. Table 1 below provides the estimated percentages of facilities for which the actual average staffing levels were above, at, or below their specific targeted NHPPD for all days (weekdays, weekends, and holidays).

		Estimated Results		
	Sampled Facilities (total 20)	Percent (%)	95% Confidence Limits	
			Lower	Upper
All units above NHPPD target	2	9.1	2.27	30.33
All units above or not different (at least one not different) from target	15	74.6	57.91	86.18
At least one unit below target	3	16.3	10.29	24.88
All units below target	0			

Table 1

We estimated that for 74.6 percent (95 percent CI 57.91–86.18) of the facilities that had developed NHPPD targets, their actual unit staffing was statistically above or not different from their targets for all units. If the facility had more than one unit, this category included the possibility that one (or more) could be above target. At least one must have been not different from the target. Most of these facilities had followed the methodology to set targets and staffed to meet those targets.

We estimated that 16.3 percent (95 percent CI 10.29–24.88) of the facilities staffed at least 1 of the sampled units statistically significantly below their targets. One facility's acute care unit and two facilities' long-term care units had actual staffing below their targets, but none of the facilities' mental health units had actual staffing below their targets. We estimated that 9.1 percent (95 percent CI 2.27–30.33) of facilities staffed all the reviewed units statistically significantly above their NHPPD targets. There were no identifiable trends in the types of units or days with staffing above the targets.

Facilities with actual staffing that is statistically significantly above or below the target need to reassess both the targets and the actual staffing needed. Because we changed our review parameters and analysis methodology, the results cannot be compared with the results from the previous report. VHA submitted a detailed action plan that was still in progress at the time of this report. Therefore, we will not make a repeat recommendation but will continue to review.

Conclusions

VHA required that all facilities implement the nurse staffing methodology by September 30, 2011. During the review period of April 1 through September 30, 2013, 8 of the 28 facilities reviewed had not fully implemented the methodology. This result is similar to our previous report and indicates continued need for improvement.

A comparison of the actual staffing with the target NHPPD for all days indicated that three facilities' actual staffing for at least one (but not all) of the reviewed units was significantly below the target, and two facilities' actual staffing for all reviewed units was significantly above the target. Both of these results should drive reassessment and possible adjustment. Potential overstaffing could indicate that resources could be better used elsewhere. Potential understaffing could indicate that either actual staffing or workload needs to be adjusted to provide safe care.

We re-emphasize the need for all facilities to fully implement the methodology and to accurately address patient needs with safe and adequate staffing. VHA submitted a detailed action plan to our previous report that was still in progress at the time of this report. Therefore, we will not make repeat recommendations but will continue to review.

Appendix A

Under Secretary for Health Comments

Department of Veterans Affairs **Memorandum**

Date: April 22, 2014

From: Under Secretary for Health (10)

Subject: **OIG Draft Combined Assessment Program (CAP) Summary Report – Evaluation of Nurse Staffing in Veterans Health Administration Facilities April 1–September 30, 2013 (2014-01072-HI-0408) (VAIQ 7466177)**

To: Assistant Inspector General for Healthcare Inspections (54)

1. Thank you for the opportunity to review the draft CAP Summary Report, Evaluation of Nurse Staffing in Veterans Health Administration Facilities April 1–September 30, 2013. I have reviewed the draft report and agree with it as written.

2. The attachment is for general comments made in response to the draft report, including the interpretation of nursing hours per patient day and staffing methodology training requirements.

3. If you have any questions, please contact Karen M. Rasmussen, M.D., Director, Management Review Service (10AR), at (202) 461-6643 or email VHA10ARMRS2@va.gov.

Robert A. Petzel, M.D.

Attachment

VETERANS HEALTH ADMINISTRATION (VHA)
General Comments

OIG Draft Combined Assessment Program Report – Evaluation of Nurse Staffing in VHA Facilities April 1–September 30, 2013

Date of Draft Report: March 25, 2014

Overall, the VHA's Office of Nursing Services (ONS) would like to emphasize that the interpretation of variance between actual "nursing hours per patient day" (NHPPD) and target NHPPD is very complex. Based on the complexity of NHPPD interpretation, VHA respectfully requests the terms "understaffing" and "overstaffing" be used judiciously throughout the report.

Many factors influence adequacy of staffing and therefore, a thorough and multi-variant assessment should be done to determine whether understaffing or overstaffing actually exists and if nursing leadership can take action. For example, a higher NHPPD may be appropriate if the complexity of the patient population increases for a period of time. Construction in a patient care area may also require a temporary shift in NHPPD.

Union contracts, Human Resources policies, competency requirements, and clinical expertise in specialty areas of nursing practice all influence the ability to move nursing staff from one area to another to achieve target NHPPD. Therefore, if patient census drops on a unit creating a situation where the NHPPD is greater than target, nursing leadership may appropriately decide not to re-deploy the staff to areas that are below target. An example may be: an acute Mental Health (MH) unit is over target and the Intensive Care Unit (ICU) needs an extra nurse, re-deploying is most likely not appropriate unless the MH nurse has a background in ICU nursing and is competent in that area of practice. Finally, on days when the census or acuity is lower, the manager may use this opportunity to assign staff to complete required training, assist in reviewing quality data, or other professional nursing activities.

Similarly, units may have an actual NHPPD less than target but this variance is not necessarily indicative of short staffing. They may have a period where a significant number of patients are lower in complexity than what is normally experienced. For example, an ICU may have a large number of less acute patients due to medicine/surgery bed availability issues. Therefore, an adequate staffing ratio may be less than target and is a positive indication that nursing leadership is routinely matching resources with care needs.

In summary, a variance of actual NHPPD to target should be monitored and evaluated in light of all operational and care variables present at each point in time. VHA agrees that adjustments to staffing should be subsequently made if deemed appropriate, but caution that overstaffing or understaffing can be accurately determined only through a thorough analysis of these variables.

ONS also agrees with the observation that Staff Methodology training requirements were not often met. However, VHA had just finalized the criteria for meeting the training requirement in the early part of summer 2013. This OIG report gives VHA good data on implementation of the criteria.

OIG Contact and Staff Acknowledgments

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