



Department of Veterans Affairs Office of Inspector General

Combined Assessment Program Summary Report

Evaluation of Nurse Staffing in Veterans Health Administration Facilities

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Executive Summary

The VA Office of Inspector General Office of Healthcare Inspections completed an evaluation of nurse staffing in Veterans Health Administration facilities. The purpose of the evaluation was to determine the extent to which Veterans Health Administration facilities implemented the staffing methodology for nursing personnel and to evaluate nurse staffing on one selected acute care unit.

Inspectors evaluated nurse staffing at 27 facilities during Combined Assessment Program reviews conducted from April 1 through September 30, 2012.

We identified two areas where Veterans Health Administration facilities needed to improve compliance. We recommended that the Under Secretary for Health ensures that all facilities:

- Fully implement the staffing methodology, and complete all required steps.
- Improve processes to use the available data to manage and provide safe, cost-effective staffing.



DEPARTMENT OF VETERANS AFFAIRS
Office of Inspector General
Washington, DC 20420

TO: Under Secretary for Health (10)

SUBJECT: Combined Assessment Program Summary Report – Evaluation of Nurse Staffing in Veterans Health Administration Facilities

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 one selected acute care 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.

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.

- Developing a facility expert panel to review unit recommendations for system impact.
- Reviewing the effectiveness of the staffing plans at least annually.

In 2004, the VA OIG conducted an evaluation of nurse staffing³ and recommended that VHA:

1. Develop and oversee the implementation of a national nurse staffing policy that applies a single staffing methodology to generate consistent facility staffing standards.
 - a. Identify specific data elements and systems that will be used.
 - b. Ensure appropriate data validation and database maintenance.
 - c. Ensure that data systems, such as the Decision Support System and the nursing computer package, are complimentary, consistent, and used by nurse managers in making decisions regarding staffing levels and staffing mix.
2. Design a process to ensure the efficient and appropriate management of nurse staffing resources.

Scope and Methodology

Inspectors evaluated nurse staffing at 27 facilities during Combined Assessment Program reviews conducted from April 1 through September 30, 2012. These facilities were a stratified random sample of all VHA facilities. The selected facilities represented a mix of size, affiliation, geographic location, and Veterans Integrated Service Networks (VISNs). We reviewed facility policies and training records and interviewed staff. We gathered and analyzed actual staffing data for one acute care unit at each facility and generated an individual Combined Assessment Program report for each facility. For this report, we summarized the data collected from the individual facility Combined Assessment Program reviews.

For the review of actual staffing between October 1, 2011, and March 31, 2012, we first selected a unit within each of the 24 facilities in our sample that had developed NHPPD targets. We randomly selected the one unit 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 unit for review randomly from among all acute care units in the facility.

³ *Healthcare Inspection – Evaluation of Nurse Staffing in Veterans Health Administration Facilities*, Report No. 03-00079-183, August 13, 2004.

For the sampled unit at each of the 24 facilities, we compared the actual staffing with the target NHPPD based on a stratified, randomly selected 30 days. We divided the 184 days between October 1, 2011, and March 31, 2012, into three strata:

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

We included all 10 holidays and randomly sampled 8 (out of 48) weekend days and 12 (out of 126) 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 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:

- Panel members were assigned to work on the unit of the expert panel on which they served.
- Expert panels conducted comparative analyses of staffing needs.
- When significant changes to the units occurred, the staffing plans were modified.

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

- Five of 27 facilities had not initiated unit-based expert panels.
 - Of the remaining 22 facilities, 3 unit-based expert panels did not have all required members.
- Four of 27 facilities had not initiated facility expert panels.
 - Of the remaining 23 facilities, 6 facility expert panels did not have all required members.
 - At 7 of 23 facilities, expert panel members did not complete the expected training.
- Six of 27 facilities' units did not have a process to monitor the target NHPPD.
- Six of 27 facilities' units did not use the required calculator spreadsheet.

We recommended that all facilities fully implement and comply with the required staffing methodology.

Issue 2: Comparison of Actual Staffing with Target Staffing

Twenty-four of the 27 facilities had developed NHPPD targets for use during the first half of fiscal year 2012. For those 24, Table 1 on the next page provides the estimated percentages of facilities whose actual average staffing levels were at, above, or below their specific targeted NHPPD by weekdays, weekends, and holidays separately and combined.

		Estimated Results		
		Percent (%)	95% Confidence Limits	
Sampled Facilities (total 24)			Lower	Upper
Weekdays				
At or above NHPPD	18	75.5	57.02	87.72
Above	5	17.2	8.08	32.89
No difference	13	58.3	39.25	75.16
Below	6	24.5	12.28	42.98
Weekend days				
At or above NHPPD	17	74.3	56.75	86.39
Above	5	16.0	7.58	30.54
No difference	12	58.3	39.27	75.14
Below	7	25.7	13.61	43.25
Holidays				
At or above NHPPD	16	70.1	51.90	83.62
Above	9	34.1	19.54	52.50
No difference	7	36.0	19.41	56.75
Below	8	29.9	16.38	48.10
All Days				
At or above NHPPD	17	73.4	54.96	86.21
Above	8	24.2	13.17	40.11
No difference	9	49.2	30.72	67.97
Below	7	26.6	13.79	45.04

Table 1

We estimated that 26.6 percent of the facilities that had developed NHPPD targets were staffed statistically significantly below their NHPPD targets during the time period October 1, 2011, through March 31, 2012. We are 95 percent confident that the true percentage of the facilities that staffed below their NHPPD targets is somewhere between 13.79 and 45.04. We estimated that 24.2 (95 percent CI: 13.17, 40.11) percent of facilities staffed statistically significantly above their NHPPD targets during this same time period.

The staffing levels separately by weekdays, weekends, and holidays show similar results with 24.5 (95 percent CI: 12.28, 42.98) percent of facilities staffed below their NHPPD targets during weekdays, 25.7 (95 percent CI: 13.61, 3.25) percent during weekends, and 29.9 (95 percent CI: 16.38, 48.10) during holidays.

Facilities with actual staffing that is statistically significantly above or below the target need to re-assess both the targets and the actual staffing needed. We recommended that facilities use the available data to manage and provide safe, cost-effective staffing.

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, 2012, 15 of the 27 facilities reviewed had either not fully implemented the methodology or did not complete all required steps.

A comparison of the actual staffing with the target NHPPD for all days indicated that eight facilities' actual staffing was significantly above the target, and seven facilities' actual staffing was significantly below 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.

Recommendations

Recommendation 1. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that all facilities fully implement the staffing methodology and complete all required steps.

Recommendation 2. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that facilities improve processes to use the available data to manage and provide safe, cost-effective staffing.

Comments

The Under Secretary for Health concurred with the findings and recommendations. The implementation plan is acceptable, and we will follow up until all actions are completed.



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

Under Secretary for Health Comments

**Department of
Veterans Affairs**

Memorandum

Date: April 17, 2013

From: Under Secretary for Health (10)

Subject: **Combined Assessment Program Summary Report –
Evaluation of Nurse Staffing in VHA Facilities
(2013-01744-HI-0401) (VAIQ 7349029)**

To: Assistant Inspector General for Healthcare Inspections (54)

1. I have reviewed the draft report and concur with the report's recommendations. Attached are corrective action plans.
2. Should you have additional questions, please contact Karen Rasmussen, M.D., Director, Management Review Service, at (202) 461-6643, or by e-mail at karen.rasmussen@va.gov.



Robert A. Petzel, M.D.

Attachment

VHA Action Plan

OIG, Draft Report, CAP Summary Report – Evaluation of Nurse Staffing in Veterans Health Administration Facilities (VAIQ 7349029)

Date of Draft Report: April 2, 2013

Recommendations/ Actions	Status	Completion Date
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OIG Recommendations

Recommendation 1. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that all facilities fully implement the staffing methodology and complete all required steps.

VHA Comments

Concur

VHA concurs with the recommendation to ensure all facilities fully implement the staffing methodology and complete all required steps. VHA will:

- Identify sites not fully implementing the staffing methodology directive
- Follow-up with non-compliant sites
- Deliver focused education sessions
- Place resource materials on the Office of Nursing Services intranet website
- Evaluate the feasibility of establishing the Staffing Methodology Veterans Integrated Service Network consultant role
- Evaluate the Staffing Methodology Directive

A detailed action plan, including milestones and completion dates, will be developed and implemented.

In progress

October 1, 2013

Recommendation 2. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that facilities improve processes to use the available data to manage and provide safe, cost-effective staffing.

VHA Comments

Concur

VHA concurs with the recommendation to ensure all facilities improve processes to use the available data to manage and provide safe, cost-effective staffing. VHA will:

- Identify a process VHA facility can use to monitor nursing hours per patient day (NHPPD) on a daily basis
- Create a resource guide
- Evaluate the Staffing Methodology Directive

A detailed action plan, including milestones and completion dates, will be developed and implemented.

In progress

October 1, 2013

OIG Contact and Staff Acknowledgments

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